National Nuclear Security Administration
Nevada Field Office

NEVADA NATIONAL NNSS SECURITY SITE

NNSS Prime Contract
DE-NA0003624
Effective December 1, 2017
Updated to include
Modifications through 0213

(Period of Performance 06/07/2017 – 11/30/2027 – Mod 0152)

MSTS
MISSION SUPPORT AND TEST SERVICES LLC

National Nuclear Security Administration

Note: The page numbers listed in SF 33 do not match the page numbers of this contract.

SOLICITATION, OFFER AND AWARD

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	RATING	PAGE OF PAGES
	DO-E2 & DX-E2 (Mod 0190)	1 2

2 CONTRACT NUMBER	3 SOLICITATION NUMBER	4 TYPE OF SOLICITATION	5 DATE ISSUED	6 REQUISITION/PURCHASE NUMBER
DE-NA0003624	DE-SOL-0008418	☐ SEALED B D (FB) ☐ NEGOTIATED (RFP)	11/04/2015	17NA001024

7. ISSUED BY	CODE	8. ADDRESS OFFER TO (If other than Item 7)
NNSA M&O Contracting Operations Div NA-APM-13 Forrestal Building 1000 Independence Avenue, S.W. Washington DC 20585	05114	

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

SOLICITATION

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

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

10. FOR INFORMATION CALL:	A. NAME	B. TELEPHONE (NO COLLECT CALLS) AREA CODE	NUMBER	EXT.	C. E-MAIL ADDRESS
	Sandra C. Caesar	202	586-2346		sandra.caesar@nnsa.doe.gov

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OFFER (Must be fully completed by offeror)

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

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

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232.8)	10 CALENDAR DAYS (%)	20 CALENDAR DAYS (%)	30 CALENDAR DAYS (%)	CALENDAR DAYS (%)
	NET 30			

14. ACKNOWLEDGEMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated):	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)
MISSION SUPPORT AND TEST SERVICES LLC Attn: JOHN MURRAY 23500 W 105TH ST MD 300 OLATHE KS 660618425	080083514		

15B. TELEPHONE NUMBER AREA CODE	NUMBER	EXT.	15C. CHECK IF REMITTANCE ADDRESS ☐ IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE	17. SIGNATURE	18. OFFER DATE

AWARD (To be completed by government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION
	$2,652,331,395.00	See schedule

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION	23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	ITEM
☐ 10 U.S.C. 2304 (c) ( ) ☐ 41 U.S.C. 253 (c) ( )		

24. ADMINISTERED BY (If other than Item 7)	CODE	25. PAYMENT WILL BE MADE BY	CODE
See Schedule G	05002	See Schedule G	00503

26. NAME OF CONTRACTING OFFICER (Type or print)	27. UNITED STATES OF AMERICA (Signature of Contracting Officer)	28. AWARD DATE
Ariane S. Kaminsky	Signature on File	05/12/2017

IMPORTANT - Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

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Previous edition is unusable

STANDARD FORM 33 (Rev. 9-97)
Prescribed by GSA - FAR (48 CFR) 53.214(c)

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-NA0003624	PAGE 2	OF 2

NAME OF OFFEROR OR CONTRACTOR
MISSION SUPPORT AND TEST SERVICES LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Contract Award DE-NA0003624 to the Mission Support and Test Services LLC (MSTS) for the Management and Operation of the Department of Energy National Nuclear Security Administration's Nevada National Security Site. Delivery Location Code: 05002 NNSA/Nevada Site Office U.S. Department of Energy NNSA/Nevada Site Office P.O. Box 98518 Las Vegas NV 89193-8518 Payment: OR for NNSA U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 5807 Oak Ridge TN 37831 FOB: Destination Period of Performance: 06/07/2017 to 09/30/2022				

NSN 7540-01-152-8067

OPTIONAL FORM 336 (4-86)
Sponsored by GSA
FAR (48 CFR) 53.110

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SECTION B: SUPPLIES OR SERVICES AND PRICES/COSTS

B-1 SERVICES BEING ACQUIRED (MOD 0009, 0033, 0042, 0062, 0069, 0089)

CLIN 0001 MANAGEMENT AND OPERATION OF THE NEVADA NATIONAL SECURITY SITE (MOD 0009, 0033, 0042)

In accordance with the terms and conditions of this Contract, the Contractor shall provide the personnel, equipment, materials, supplies, and services (except as may be furnished by the Government) and otherwise do all things necessary for, or incidental to, the efficient, effective, and safe management and operation of the Nevada National Security Site (NNSS) and at satellite facilities located in North Las Vegas, Nevada; Nellis Air Force Base, Nevada; Andrews Air Force Base Suitland, Maryland; Santa Barbara, California; support offices for Lawrence Livermore National Laboratory in Livermore, California; Los Alamos National Laboratory in Los Alamos, New Mexico, and other locations as required. *This CLIN includes design and/or construction projects other than a Capital Asset Project(s) for which the parties have agreed to perform under a different fee structure pursuant to CLIN 0003* (Mod 0042 as corrected by Mod 0062).

CLIN 0001A TRANSITION TERM (MOD 0009, 0033)

The Transition Term will be four months, on a cost reimbursement (no fee) basis, with a not to exceed price and ceiling amount of $10,000,000.00.

CLIN 0001B BASE TERM (MOD 0033)

The Base Term is five years of performance on a cost-plus-award-fee basis.

CLIN 0001C OPTION TERM 1 (MOD 0009, 0033)

Option Term 1 is ten months of performance on a cost-plus-award-fee basis.

CLIN 0001D OPTION TERM 2 (MOD 0033)

Option Term 2 is one year of performance on a cost-plus-award-fee basis.

CLIN 0001E OPTION TERM 3 (MOD 0033)

Option Term 3 is one year of performance on a cost-plus-award-fee basis.

CLIN 0001F OPTION TERM 4 (MOD 0033)

Option Term 4 is one year of performance on a cost-plus-award-fee basis.

CLIN 0001G OPTION TERM 5 (MOD 0009, 0033)

Option Term 5 is one year two months of performance on a cost-plus-award-fee basis.

CLIN 0002 STRATEGIC PARTNERSHIP PROJECTS (MOD 0009, 0033, 0069)

The Contractor shall, in accordance with Section J, Appendix A, Chapter II, paragraph 11.1 Strategic Partnership Projects (formerly known as Work for Others (WFO) Program), and all other the terms and conditions of this Contract, provide the personnel, equipment, materials, supplies, and services, (except as may be furnished by the Government) and otherwise do all things necessary for, or incident to the effective, efficient, and safe performance all SPP efforts as directed by the Contracting Officer.

CLIN 0002A BASE TERM (MOD 0033)

The Base Term is five years of performance on a cost-plus-fixed-fee basis.

CLIN 0002B OPTION TERM 1 (MOD 0009, 0033)

Option Term 1 is ten months of performance on a cost-plus-award-fee basis.

CLIN 0002C OPTION TERM 2 (MOD 0033)

Option Term 2 is one year of performance on a cost-plus-fixed-fee basis.

CLIN 0002D OPTION TERM 3 (MOD 0033)

Option Term 3 is one year of performance on a cost-plus-fixed-fee basis.

CLIN 0002E OPTION TERM 4 (MOD 0033)

Option Term 4 is one year of performance on a cost-plus-fixed-fee basis.

CLIN 0002F OPTION TERM 5 (MOD 0009)

Option Term 5 is one year two months of performance on a cost-plus-fixed-fee basis.

CLIN 0003 CAPITAL ASSET PROJECTS (MOD 0042 AS CORRECTED BY MOD 0062)

(a) When the parties agree that a Capital Asset Project, as defined in the Contract's DOE Order 413.3B "CLIN" (DOE O 413.3B) and having an estimated Total Project Cost greater than $50 Million, will be performed pursuant to this CLIN, the Contractor shall, in accordance with the Statement of Work and all other applicable terms and conditions of this Contract, provide the personnel, equipment, materials, supplies, and services (except as may be furnished by the Government) and otherwise do all things necessary for, or incident to, effectively, efficiently, and safely, designing, executing and completing authorized design and/or construction of capital projects.

(b) If the parties do not agree that a Capital Asset Project will be performed pursuant to this CLIN 0003, such projects will be performed under CLIN 0001 terms and conditions.

(c) All authorized CLIN 0003 projects will be individually identified as SUB-CLINs. Such projects shall be bilaterally negotiated and added as SUB-CLINs via bilateral contract modifications which will consist of, without limitation, a detailed description of work, total project cost, delivery schedule (to include major milestones and/or completion date), utilizing an incentive fee(s) or firm-fixed price type conditions; and, appropriate clauses prescribed in the Federal Acquisition Regulation and/or the Department of Energy Acquisition Regulation in effect at the time the both Parties agree on each SUB-CLIN.

(1) Each SUB-CLIN under CLIN 0003 will be negotiated separately and will not be duplicative of the CLIN 0001 Fee (Base Fee and Award Fee) and Fixed Fee contained elsewhere within this Contract.

(2) Appropriate architect/engineering and construction terms and conditions necessary for the completion of a Capital Asset Project, and not otherwise contained elsewhere under the Contract, will be incorporated and specified in the applicable bilateral contract modification for each SUB-CLIN. Such conditions added via the bilateral contract modification for each SUB-CLIN shall be applicable only to the specified SUB-CLIN(s).

(3) Capital Asset Projects may be considered for inclusion as a SUB-CLIN under CLIN 0003 at any Critical Decision point (as defined in DOE O 413.3B) as the Parties may agree. If the Parties agree to consider the inclusion of a Capital Asset Project as a SUB-CLIN under CLIN 0003, the Parties agree to attempt to negotiate mutually acceptable pricing and other terms and conditions in good faith. If the Parties do not reach agreement after reasonable good faith negotiations for a particular Capital Asset Project, the Capital Asset Project shall remain under CLIN 0001 and shall continue to be subject to the existing terms and conditions of the Contract. The Parties may agree to reopen negotiations for a particular Capital Asset Project at any time prior to its completion.

(4) For Contractor performance evaluation purposes, the Contractor's performance directly associated with CLIN 0003 will NOT be considered in evaluating Contractor performance under CLIN 0001.

(5) The bilateral contract modification for each SUB-CLIN shall address specific work requirements, if any, contained in requirements set-forth in applicable DOE Orders and Work Authorization(s) issued pursuant to the Contract's Section I Clause entitled "DEAR 970.5211-1, *Work Authorization*."

SECTION B-1 SUPPLIES OR SERVICES AND PRICES/COSTS, is revised to add a new SubCLIN 0003A under CLIN 0003, Capital Asset Projects as follows: (Mod 0089)

SubCLIN0003A 138kV Power Transmission System Replacement (PTSR) as follows: (Mod 0089)

The Contractor shall, in accordance with Section J, Appendix 0, 138kV Project Detail, and all other the terms and conditions of this Contract, provide the personnel, equipment, materials, supplies, and services, (except as may be furnished by the Government) and otherwise do all things necessary for, or incident to the effective, efficient, and safe performance all 138kV efforts as directed by the Contracting Officer and mutually agreed upon Terms and Conditions outlined in Section J Appendix 0, 138kV Project Detail. (Mod 0089)

B-2 CONTRACT TYPE AND VALUE (MOD 0009, 0037, 0042, 0044, 0062, 0066, 0069, 0085, 0089, 0096, 0120, 0123, 0144, 0160, 0167)

(a) This is a performance-based Management and Operating (M&O) Contract with cost-plus-award-fee and cost-plus-fixed fee provisions.

(b) The estimated cost, award fee available, and award fee earned for CLIN 0001 (DOE and NNSA work is set forth in Table 1 below). The first period of the base term is 10 months to allow succeeding years of the base term to align with the Government's Fiscal Year. The remaining periods of the base term are one year each with a final base period of two months. CLIN 0002 in Table Two is set up identically. Option Term 1 is 10 months; Option Terms 2 through 4 are each one year in length, and the final Option Term 5 is 14 months. (Mod 0009).

Table 1 -- CLIN 0001 -- Management and Operation of NNSS (Mod 0009, 0037, 0042, 0044, 0062, 0066, 0089, 0096, 0123, 0144, 0160, 0167. 0200)

Contract Period	Estimated Cost	Actual Cost	Available Award Fee**	Earned Award Fee***	Actual Cost Plus Earned Fee
Base Term (December 1, 2017 - September 30, 2018)	$345,083,333	$384,181,999 (Mod 0044)	$15,183,667	$13,604,566 (Mod 0044)	$397,786,565 (Mod 0044)
Base Term (October 1, 2018 - September 30, 2019)	$418,241,000	$569,920,581 (Mod 0066)	$18,402,600	$17,811,323	$587,731,904
Base Term (October 1, 2019 - September 30, 2020)	$422,423,410	$604,311,966.03 (Mod 0096)	$25,702,989 (Mod 0096)	$22,644,333 (Mod 0096)	$626,956,299.03 (Mod 0096)
Base Term (12 Months October 1, 2020 - September 30, 2021)	$426,647,644	$634,466,746 (Mod 0123)	$18,772,500*	$21,303,108 (Mod 0144)	$655,769,854 (FINAL) (Mod 0144)
Base Term (October 1, 2021 - September 30, 2022)	$425,685,951	$687,026,572 (Mod 0167)	$18,730,180	$23,220,097 (Mod 0167)	$710,246,669 (FINAL) (Mod 0167)
Base Term (October 1, 2022 - November 30, 2022)	$69,016,667	$TBD	$3,036,734	$TBD	$TBD
Option Term 1 (December 1, 2022 - September 30, 2023)	$376,329,690	$TBD	$16,558,506	$TBD	$TBD
Option Term 2 (October 1, 2023 - September 30, 2024)	$493,689,662	$TBD	$21,722,345	$TBD	$TBD
Option Term 3 (October 1, 2024 - September 30, 2025)	$499,221,815	$TBD	$21,965,760	$TBD	$TBD
Option Term 4 (October 1, 2025 -September 30, 2026)	$504,821,789	$TBD	$22,212,159	$TBD	$TBD
Option Term 5 (October 1, 2026 - November 30, 2027)	$587,131,742	$TBD	$25,833,797	$TBD	$TBD
TOTAL	$4,568,292,703	$TBD	$208,121,237	$TBD	$TBD

***The amounts in this column represent the Available Award Fee that was established at contract award, with the exception of Fiscal Year 2020, which was mutually agreed upon by the parties in modification 0096, and a change from the Fee Determining Official's (FDO) letter dated November 25, 2020. Any future adjustments made pursuant to Clause B-8 of the contract will not be reflected in this table.*

****Earned Award Fee may exceed the Available Award Fee expressed in this table pursuant to fee adjustments resulting from Clause B-8, Establishment of Annual Controlled Baseline (ACB). (Mod 0096)*

**In the event Option 1 is exercised then the PER will cover OCT 1, 2022 through SEPT 30, 2023 (Base Term 10/1/22 – 11/30/22 + Option 1 12/1/22 – 9/30/23)*

(c) The estimated cost and fixed fee for CLIN 0002 (Strategic Partnership Projects -- Section J, Appendix A, Chapter II, paragraph 11.1) are set forth in Table 2 below. The estimated cost and the fixed fee for the Strategic Partnership Projects during the Base Term of the Contract and for each Option Term will be established by the NNSA prior to the commencement of the applicable fiscal year and will be revised and incorporated into the Table below through a modification to this clause. The Fixed-Fee for Strategic Partnership Projects will be up to **4.25%** of the estimated cost of all projects anticipated for the applicable fiscalyear.

Table 2 -- CLIN 0002 – Strategic Partnership Projects (SPP) (Mod 0037, 0044, 0069, 0085, 0120, 0167, 0200)

Contract Period	**Estimated Cost**	**Fixed Fee**	**Estimated Cost + Fixed Fee**
Base Term (10 Months December 1, 2017 - September 30 2018)	$67,163,568 (Mod 0069)	$3,128,834	$70,292,402 (Final) (Mod 0044)
Base Term (October 1, 2018 - September 30 2019)	$53,199,509 (Mod 0069)	$ 3,139,089 (Mod 0044)	$56,338,598 (Mod 0069)
Base Term (October 1, 2019 - September 30 2020)	$45,184,297 (Mod 0120)	$2,282,974 (Mod 0069)	$47,467,271 (FINAL) (Mod 0120)
Base Term (October 1, 2020 - September 30 2021)	$50,878,058 (Mod 0120)	$2,201,439 (Mod 0085)	$53,079,497 (FINAL) (Mod 0120)
Base Term (October 1, 2021 - September 30 2022)	$54,675,946 (Mod 0120) (Mod 0167)	$2,262,590 (Mod 0120)	$56,938,536 (FINAL) (Mod 0120) (Mod 0167)
Base Term (October 1, 2022 – November 30, 2022) AND Option Term 1 (December 1, 2022 – September 30, 2023)	$63,522,196 (FINAL) (0200)	$2,772,182 (0167)	$66,294,378 (FINAL) (0200)
Option Term 1 (December 1, 2022 - September 30, 2023)*	$TBD	$TBD	$TBD
Option Term 2 (October 1, 2023 - September 30, 2024)	$71,372,000 (0200)	$2,600,000 (0200)	$73,972,000 (0200)
Option Term 3 (October 1, 2024 - September 30, 2025)	$TBD	$TBD	$TBD
Option Term 4 (October 1, 2025 - September 30, 2026)	$TBD	$TBD	$TBD
Option Term 5 (October 1, 2026 - November 30, 2027)	$TBD	$TBD	$TBD
Contract Period	**Estimated Cost** $147,480,543 (Mod 0037)	**Fixed Fee** $ 6,267,923 (Mod 0037)	**Estimated Cost + Fixed Fee** $152,748,466 (Mod 0037)

**In the event Option 1 is exercised then the PER will cover OCT 1, 2022 through SEPT 30, 2023 (Base Term 10/1/22 – 11/30/22 + Option 1 12/1/22 – 9/30/23)*

(d) The total estimated cost and fee (fixed – SPP Program) for the Transition Term (CLIN 0001A), Base Term (CLINs 0001B and 0002A), including DOE, NNSA and SPP is $TBD.

(e) The award fee percentage for CLIN 0001 will not be negotiated on an annual basis and are established at contract award. The Fixed Fee percentage for CLIN 0002 will not be negotiated on an annual basis and is established at contract award. (Mod 0096)

(f) For CLIN 0003 CAPITAL ASSET PROJECTS, the contract type for each authorized CLIN 0003 SUB-CLIN will be separately identified based on the contract type negotiated, such as Cost-Plus-Incentive-Fee (CPIF), Firm-Fixed Price (FFP), Fixed-Price-Incentive-Fee (FPIF) and Fixed-Price with Economic Price Adjustment (FP-EPA). The values of each CLIN 0003 SUB-CLIN project shall be separately identified. Each CLIN 0003 SUB-CLIN shall be sequentially numbered (e.g., SUB-CLIN 0001) and added to this Section via bilateral contract modification which shall specify the negotiated terms and conditions to include Project title, contract type, value, description of work, delivery schedule (to include major milestones and/or completion date), Programmatic Technical

Requirements, and, associated terms and conditions necessary for the completion of the project and not otherwise contained in the Contract. (Mod 0042 as corrected by Mod 0062)

(g) CLIN0003A: The total Firm Fixed Price for CLIN0003A is $38,900,000 inclusive of Option 1 and a II cost and profit associated with the 138kV PTSR project. The period of performance shall be 941 calendar days from the issuance of the Notice to Proceed.

B-3 CONTRACT FEE STRUCTURES (MOD 0037, 0042, 0062, 0096, 0089)

(a) CLIN 0001: The available award fee for the Base Term and each Option Term, if exercised by DOE/NNSA, are shown in the tables in paragraph B-2 (b), Contract Type and Value. The Contractor shall be eligible to earn award fee during the Base Term (CLIN 0001B), in accordance with (c)(ii) of this clause and B-5, Performance Evaluation. (Mod 0096)

(b) CLIN 0002: The fixed fee for SPP for the Base Term and each Option, if exercised by DOE/NNSA, are shown in the tables in paragraph B-2 (c), *Contract Type and Value*.

(c) Payment of Fixed Fee (SPP) and Provisional Payment of Award Fee

(i) The fixed fee (SPP) for the Base Term of the Contract shall be paid monthly on a pro-rata basis for the applicable fee period for CLIN 0002. Such payment amounts are to be drawn down by the Contractor from the Contract's special financial institution account in monthly installments on the last day of each month.

(ii) The award fee is authorized for draw down by the Contractor from the Contract's special financial institution account as follows:

(A) In monthly provisional fee payments equivalent to 3% of the available award fee; or

(B) Upon completion of milestones or any other methodology as set forth in the Award Fee Plan and its supporting documentation; and

(C) The balance, if any, upon issuance of the Contracting Officer's notification in accordance with Section B, B-5, Performance Evaluation.

(D) If the provisional payments made above exceed the Award Fee earned or the Contractor fails to fully accomplish the objective/incentive for which it has received milestone completion or provisional payments, the Contracting Officer will determine if the Contractor is to refund all or part of the provisional fee it has received. Any refund made shall include interest. Interest will be paid at the published prime rate of the financial institution (depository) in which the special account is established or at the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), whichever is higher, which is applicable to the period in which any unearned payments were made. Interest paid resulting from this clause is an unallowable cost.

(E) The Contractor shall remit any balance due payable to the Government in accordance with directions to be provided by the Contracting Officer.

(d) Deleted (Mod 0037).

(e) For CLIN CAPITAL ASSET PROJECTS, authorized CLIN 0003 SUB-CLINS which are Firm Fixed Price type projects (which include a profit component), the associated payment conditions shall be separately identifiable. (Mod 0042 as corrected by Mod 0062)

(f) CLIN0003A: Specifically for CLIN0003A as a Firm Fixed Price agreement: The Contractor may draw down on the special financial institution account (i.e. "Letter of Credit") for allowable costs in accordance with DEAR clause 970.5232-2(Payments and Advances (DEC 2000) Alternate II (DEC 2000) Alternate III (DEC 2000) (NNSA Class Deviation OCT 2011))as costs are incurred, plus profit at the rate of 9.2% up to the total FFP established in paragraph (a) for the completion of SUBCLIN-0003A. In the event that incurred costs plus profit are less than the total FFP at project completion, MSTS may drawdown the remaining funds up to the total FFP. In the event that the incurred costs plus profit exceed the total FFP, MSTS shall use its own funds for the remaining costs of the project, and MSTS shall not be authorized to draw down amounts which exceed the FFP. If MSTS draws down amounts exceeding the FFP, MSTS shall repay DOE/NNSA those amounts within 30 calendar days of receipt of notification from NNSA or within 30 calendar days of MSTS' discovery of the overpayment (whichever is sooner). If the overpayment is not reimbursed to DOE/NNSA within 30 calendar days, the overpayment shall be subject to collection in accordance with FAR Subpart 32.6. (Mod 0089)

B-4 KEY PERSONNEL REPLACEMENT

Unless approved in advance, in writing, by the Contracting Officer, should any Key Personnel be removed, replaced, or diverted by the Contractor for reasons under the Contractor's control (other than to maintain satisfactory standards of employee competency, conduct and integrity under the Contract's Section I clause entitled "DEAR 970.5203-3, Contractor's Organization (DEC 2000)"), within the first two years of the period of performance; or for a replacement Key Person within two years of being placed in the position, the Contractor shall forfeit two years of the DOE/NNSA reimbursable annual salary, bonuses and relocation costs as well as associated burdens, for that position for each occurrence.

B-5 PERFORMANCE EVALUATION (MOD 0037)

(a) Performance Evaluation and Measurement Plan (PEMP). A PEMP will be developed by NNSA for this Contract which will document strategic performance expectations and the process by which the Contractor's performance will be evaluated. The Parties will strive to reach mutual agreement on expected performance and will work together to establish the PEMP. In the event the parties cannot come to agreement, NNSA reserves the right to make the final decision and issue the PEMP unilaterally. The PEMP once finalized, whether bilaterally or unilaterally, will be incorporated into the Contract at Section J, Appendix B, by a formal contract modification. The Contracting Officer may revise the PEMP, consistent with Section J, Appendix A, Statement of Work (SOW), during an evaluation period of performance and will incorporate any revisions through a contract modification. No changes will be made with less than 60 days remaining in the evaluation period.

(b) Contractor Evaluation Self-Assessment Report. A periodic self-assessment shall be prepared by the Contractor for consideration by the Government no later than seven calendar days after the end of an evaluation period.

(c) Schedule

(1) Award Fee Determination. The amount of Award Fee (AF) earned will be based on the Contractor's performance as evaluated against the PEMP. This amount of AF earned will be unilaterally determined by NNSA's Fee Determining Official (FDO), who will document his or her AF determination in a Fee Determination Letter.

(2) Contractor Notification. Each year, no later than December 15 (or the first business day thereafter, if December 15 is a Saturday, Sunday, or Federal Holiday), the Contracting Officer will notify the Contractor of the amount of Award Fee earned and provide the Fee Determination Letter.

(3) Award Fee Delay. If the Contracting Officer does not notify the Contractor of the amount of AF earned by the date specified in (2), the Contractor shall be entitled to interest on the AF earned, following the procedures outlined at 5 C.F.R. § 1315.10. For purposes of this calculation, the payment due date is considered to be the day after the date specified in (2).

(d) No Allocation to Future Periods. AF not earned during the evaluation period shall not be allocated to future evaluation periods.

B-6 OBLIGATION OF FUNDS (MOD 0002, 0003, 0004, 0005, 0006, 0010, 0011, 0012, 0013, 0015, 0016, 0017, 0018, 0020, 0023, 0024, 0025, 0026, 0027, 0028, 0029, 0034, 0035, 0036, 0038, 0039, 0040, 0041, 0043, 0045, 0046, 0047, 0048, 0049, 0051, 0053, 0054, 0055, 0057, 0058, 0061, 0063, 0065, 0067, 0068, 0070, 0073, 0074, 0077, 0078, 0079, 0080, 0081, 0082, 0083, 0086, 0087, 0088, 0090, 0092, 0093, 0094, 0095, 0096, 0097, 0098, 0100, 0101, 0102, 0103, 0104, 0105, 0106, 0107, 0110, 0111, 0112, 0113, 0114, 0115, 0117, 0118, 0121, 0122, 0124, 0126, 0128, 0129, 0130, 0133, 0134, 0135, 0136, 0137, 0139, 0141, 0145, 0146, 0147, 0148, 0149, 0150, 0153, 0154, 0156, 0157, 0158, 0162, 0163, 0165, 0166, 0169, 0171, 0172, 0173, 0174, 0175, 0176, 0177, 0178, 0179, 0182, 0183, 0185, 0186, 0188, 0189, 191, 0192, 0196, 0197, 0199, 0201, 0202, 0204, 0205, 0206, 0207, 0208, 0209, 0210, 0211, 0212, 213)

Pursuant to this Section I clause entitled "DEAR 970.5232-4, Obligation of Funds, (DEC 2000)" the total amount obligated by the Government with respect to this Contract is **$5,077,925,965.69 (Mod 0213)**.

(Mod 0213)

Additional information noted below; Table provides Detail of Total Funds Obligated to Contract Line Item Number (CLIN) 0001A, 0001B, 0001C, 0001D, 0002A, 0002B, 0002C & 0003A:

The DOE/NNSA HEREBY REVISED Clause B-6, OBLIGATION OF FUNDS, as follows:			
	Funds Obligated Through Modification No. 0212	**Funding Changed by This Modification No. 0213**	**Total Funds Obligated Through Modification No. 0213**
M&O CLIN 0001A	**$8,120,016.69**		**$8,120,016.69**
M&O CLIN 0001B	**$3,546,521,645.36**		**$3,546,521,645.36**
M&O CLIN 0001C	**$619,092,541.57**		**$619,092,541.57**
M&O CLIN 0001D	**$444,842,834.84**		**$444,842,834.84**
M&O CLIN 0003A	**$40,882,335.00**		**$40,882,335.00**
SPP CLIN 0002A	**$342,635,524.27**		**$342,635,524.27**
SPP CLIN 0002B	**$60,941,570.95**		**$60,941,570.95**
SPP CLIN 0002C	**$11,970,467.88**	**$2,919,029.13**	**$14,889,497.01**
Total Funds Obligated	**$5,075,006,936.56**	**$2,919,029.13**	**$5,077,925,965.69**

**This modification records a de-obligation of Fiscal Year 2019 Unearned Fee in the amount of $1,961,361.76, previously captured in the February 2020 AFP 59/60, Mod 0068 signed 2/26/2020, ($1,958,603.58) and March 2020 AFP 61/62, Mod 0079 signed 3/31/2020 ($2,758.18). (Mod 0081)*

B-7 AVAILABILITY OF APPROPRIATED FUNDS

Except as may be specifically provided to the contrary to Section I clause DEAR 952.250-70, *Nuclear Hazards Indemnity Agreement*, the duties and obligations of the Government hereunder calling for the expenditure of appropriated funds shall be subject to the availability of funds appropriated by the Congress, which DOE/NNSA may legally spend for such purposes.

B-8 ESTABLISHMENT OF ANNUAL CONTROLLED BASELINE (ACB) (MOD 0096, 0123, 0167, 0193, 0200)

The Contractor shall develop an ACB for all Contractor direct programs and indirect support costs, aligned with the Work Breakdown Structure (WBS) for further granularity in accordance with Section J-Appendix A, Statement of Work, Chapter I, Section 3.3. This clause applies to CLIN 0001 only. (Mod 0096)

Award Fee Pool Adjustments:

(a) The maximum available Award Fee (AF) for the contract Base Term commencing on October 1, 2020, and for each Base or Option Term thereafter (Term), shall be adjusted using one of the following formulas, which shall not be changed unless the Parties mutually agree via a written modification to the Contract:

If the ACB is greater than the CLIN 0001 Table 1 Estimated Cost for the applicable Term the following formula shall be used:

(ACB – CLIN 0001 Table 1 Original Estimated Costs) * (1-0.13) * 0.044 + CLIN 0001 Table 1 Available AF = Adjusted AF

If the ACB is less than the CLIN 0001 Table 1 Estimated Cost for the applicable Term the following formula shall be used:

ACB * 0.044 = Adjusted AF

(b) The (ACB) shall be established by mutual agreement of the Parties at the beginning of each Term and shall consist of the following:

(1) The enacted budget amounts corresponding to the work to be performed by the Contractor during the Term; and

(2) Estimated funding obligated for any additional DOE/NNSA work scope to be performed by the Contractor during the Term (to the extent not already included in the enacted budget or excluded by paragraph (c)).

(c) The ACB shall exclude:

(1) Carryover, which is defined as the estimated costs of any work which was included in the fee base or ACB of a previous Term of the Contract or of the predecessor contract;

(2) Estimated costs included in the enacted budget for any work to be performed by a DOE/NNSA prime contractor other than MSTS;

(3) Estimated costs included in the enacted budget for work which the Parties have agreed via a written Contract modification to perform under CLIN 0003; and

(4) Estimated costs of Inter-Contractor Purchases placed with MSTS by other DOE or NNSA M&O contractors.

(d) In the event there is no enacted budget at the beginning of the Term, the President's Budget Request (PBR) shall be used in its place, and the established ACB shall be adjusted unilaterally by NNSA to reflect the enacted budget when it becomes available. At the time the ACB is adjusted to reflect the enacted budget, the resultant adjustment to fee shall be made in accordance with the formula prescribed in paragraph (a). In the event a budget is not enacted during the Term, the cumulative budget approved through a Continuing Resolution or series of Continuing Resolutions shall control in its place. No other adjustments shall be made to the maximum available AF unless NNSA-approved

changes to the ACB result in an approved September 30th ACB[1] reflecting a plus or minus 10 percent change from the established ACB. The 10 percent change threshold shall apply only to scope changes and not to changes caused by cost overruns, changes in the cost of labor, changes in the cost of materials, or other cost changes without a direct nexus to NNSA-approved changes in scope.

(e) The table below shall be updated to reflect prospective fee adjustments made pursuant to this clause: **(Mod 0123, 0167, 0193)**

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[1]The September 30th ACB shall represent the established ACB plus or minus the cost impact of all NNSA-approved scope changes made throughout the Term.

Contract Period	**Estimated Cost**	**Adjusted Fee Base**	**Available Award Fee**	**Final Award Fee**
Base Term (October 1, 2018 - September 30, 2019	$418,241,000	$461,050,930	$20,286,241	$17,811,323.00
Base Term (October 1, 2019 - September 30, 2020)	$422,423,410	$584,158,840	$25,702,989	$22,644,333
Base Term (October 1, 2020- September 30, 2021)	$426,647,644	$554,595,027	$24,402,185	$21,303,195
Base Term (October 1, 2021-September 30, 2022)	$425,685,951 (Mod 0167)	$594,960,007 (Mod 0167)	$26,178,238 (Mod 0167)	$23,220,097 (Mod 0167)
Base Term (October 1, 2022-November 30, 2022) AND Option Term 1 (December 1, 2022, September 30, 2023)	$445,346,357 (Mod 0193)	$758,861,111 (Mod 0193)	$31,596,585 (Mod 0193)	
Option Term 2 (October 1, 2023 - September 30, 2024)	$493,689,662 (Mod 0200)	$975,643,000 (Mod 0200)	$38,597,481 (Mod 0200)	

Note: Only contract terms where an adjustment to the fee is warranted will be shown here. (Mod 0096)

SECTION C: DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C-1 STATEMENT OF WORK

The work to be performed is set forth in Section J, Appendix A, *Statement of Work*.

SECTION D: PACKAGING AND MARKING

D-1 PACKAGING AND MARKING (MOD 0089)

Packaging and marking of items to be delivered shall be in accordance with work authorization requirements or other written direction of the Contracting Officer or the Contracting Officer's Representative (COR).

(a) The packaging and marking requirements for CLIN0003A are as follows:
Each package, report or other deliverable shall be accompanied by a letter or other document delivered to the Contracting Officer that:

(1) Identifies the Contract number, SubCLIN, Project Title, and topic of correspondence under which the item is being delivered.

(2) Identifies the deliverable item number or report requirement which requires the delivered item(s).

SECTION E: INSPECTION AND ACCEPTANCE

E-1 FAR 52.246-5 INSPECTION OF SERVICES – COST REIMBURSEMENT (APR 1984)

(a) *Definition.* "Services," as used in this clause, includes services performed, workmanship, and material furnished or used in performing services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all places and times during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If any of the services performed do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, for no additional fee. When the defects in services cannot be corrected by reperformance, the Government may --

(1) Require the Contractor to take necessary action to ensure that future performance conforms to contract requirements; and

(2) Reduce any fee payable under the contract to reflect the reduced value of the services performed.

(e) If the Contractor fails to promptly perform the services again or take the action necessary to ensure future performance in conformity with contract requirements, the Government may --

(1) By contract or otherwise, perform the services and reduce any fee payable by an amount that is equitable under the circumstances; or

(2) Terminate the contract for default.

E-2 INSPECTION AND ACCEPTANCE

Inspection of all activities and acceptance for all work and effort under this Contract shall be accomplished by the Contracting Officer or any other duly authorized representative.

SECTION F: DELIVERIES OR PERFORMANCE

F-1 FAR 52.242-15 STOP-WORK ORDER (AUG 1989) ALTERNATE I (APR1984)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. 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. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shalleither--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in theTermination clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, 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 the adjustment within 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 the claim submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled 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 canceled 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.

F-2 STOP WORK IN EVENT OF IMMINENT DANGER

The Contractor shall immediately cease any activity that is imminently dangerous to the life or health of the workers, the public, or the environment. In the event of imminent danger, any Federal or Contractor employee is authorized to instruct the Contractor to stop work. The Contracting Officer must be contacted immediately after the event such that a written stop-work order can be issued in accordance with Section F clause FAR 52.242-15, *Stop-Work Order, Alternate I*. Employees of the Contractor shall be apprised of their right to stop work pursuant to this clause. The Contractor shall include this clause in all subcontracts to be performed at the sites.

F-3 PERIOD OF PERFORMANCE (MOD 0009)

The period of performance of this Contract shall expire five years after completion of the Transition Term, unless sooner reduced, terminated or extended in accordance with this Contract. The period of performance may be extended in increments, or portions thereof, for up to an additional five years of performance. The Contract's maximum period of performance, including the Transition Term and Option Term(s), if exercised, shall not exceed ten years. The period of performance of this Contract consists of:

(1) Transition Term: A period of four months beginning on August 1, 2017. During the Transition Term, the Contractor shall perform the activities and provide the documents identified in Section F, F-6, *Deliverables During Transition* and Section J, Appendix C, *Transition Plan*. The Contractor's responsibility for management and operation of the Nevada National Security Site shall commence with the Base Term.

(2) Base Term: A period of five years beginning after completion of the Transition Term.

(3) Option Term(s): A period from one to five years beginning after completion of the Base Term, if the DOE/NNSA chooses to exercise one or more of the following options:

Option Term 1: If exercised, ten months from the end of the Base Term
Option Term 2: If exercised, one year from the end of Option Term 1
Option Term 3: If exercised, one year from the end of Option Term 2
Option Term 4: If exercised, one year from the end of Option Term 3
Option Term 5: If exercised, one year two months from the end of Option Term 4

F-4 PRINCIPAL PLACES OF PERFORMANCE

The work under this Contract is to be carried out at a variety of locations within the United States. The principal place of performance will be the NNSS in Nye County, Nevada. Work is also conducted at satellite facilities listed in clause B-1.

F-5 EVALUATION OF PERFORMANCE AND EXERCISE OF OPTION(S) (MOD 0037)

The decision to extend this Contract will be a unilateral decision made by DOE/NNSA. Exercise of any option shall be in accordance with Section I clause FAR 52.217-9, *Option to Extend the Term of the Contract*. At a minimum, the DOE/NNSA will consider the following in determining whether to extend the Contract:

(1) The Contractor's overall performance, taking into consideration performance evaluations pursuant to the Evaluation and Measurement Plan; (Mod 0037)

(2) The considerations under DEAR 970.1706-1(b) for exercising options under M&O contracts.

F-6 DELIVERABLES DURING TRANSITION

In addition to the transition deliverables identified elsewhere in this Contract, the following deliverables shall be submitted during the Transition Term:

(a) Transition Plan

The Contractor shall provide, for approval by the Contracting Officer, a Transition Plan 10 days after Contract award. The Transition Term is specified in paragraph F-3, *Period of Performance*. The Transition Plan is incorporated into Section J, Appendix C, *Transition Plan*.

(b) Transition Cost Estimate

(1) The Transition Cost Estimate shall include the costs associated with the Transition Plan and the costs necessary for the Contractor to meet the transition requirements during the Transition Term. A detailed schedule for accomplishment of these tasks during the Transition Term shall also be provided to support the requested cost estimate.

(2) The Contractor shall provide a cost summary for the Transition Plan that clearly identifies, by cost element, the portion of the cost proposal that pertains to each participant (if a teaming arrangement is proposed), including subcontractors. In addition, each participant and each subcontractor must provide separate exhibits, summary schedules, and supporting cost

information in the same format and level of detail as required below. A transition fee is not allowable.

(i) Labor: Identify proposed transition labor hours and unburdened labor rates by labor category and or/specific individual, including Key Personnel. Explain the basis for the proposed labor hour and labor rate estimates.

(ii) Indirects: Identify the cost elements included in each indirect rate cost pool and allocation base. Explain the basis of estimate for each indirect cost rate proposed and the methods used to derive the proposed rates.

(c) Conflict of Interest Compliance and Management Plan

The Contractor shall submit a Conflict of Interest Compliance and Management Plan (Plan) to the Contracting Officer for approval within 60 days after the effective date of this Contract. The Plan shall address the Contractor's approach for adhering to Section I clause DEAR 952.209-72, *Organizational Conflicts of Interest (AUG 2009)*, *Alternate I,* and describe its procedures for aggressively self-identifying and resolving both organizational and employee conflicts of interest. The overall purpose of the Plan is to demonstrate how the Contractor will assure that its operations meet the highest standards of ethical conduct, and how its assistance and advice are impartial and objective.

F-7 PERIOD OF PERFORMANCE FOR CLIN 0003 (MOD 0089)

The period of performance for SubCLINS under this CLIN 0003 areas follows:

SubCLIN 0003A, titled 138kv PTSR: The period of performance shall be 941 calendar days from the issuance of the Notice to Proceed.

SECTION G: CONTRACT ADMINISTRATION DATA

G-1 GOVERNMENT CONTACTS AND PROCEDURES (MOD 0042 AS CORRECTED BY MOD 0062, 0089, 0109)

(a) The Patent Counsel for items concerning patent, intellectual property, technology transfer, copyright, open source, licenses and technical data issues is identified below. Correspondence being sent to the DOE/NNSA Patent Counsel should be addressed to:

U.S. Department of Energy, National Nuclear Security Administration
NNSA Patent Counsel
Office of the General Counsel (NA-GC)
P.O. Box 5400
Albuquerque, NM, 87185-5400

(b) The Contractor may use the Organizational Property Management Officer as a point of contact for guidance and assistance involving property requirements. The Contracting Officer shall be contacted for any matter that involves a change in any of the express terms and conditions of the Contract. Correspondence being sent to the Organizational Property Management Officer should be addressed to:

U.S. Department of Energy, National Nuclear Security Administration Organizational Property Management Officer (OPMO)
Personal Property Albuquerque
P.O. Box 5400
Albuquerque, New Mexico, 87185-5400

(c) Technical and Administrative Correspondence:

Technical and administrative correspondence concerning performance of this Contract shall be addressed to the responsible DOE/NNSA Contracting Officer's Representative (COR), with an information copy to the Contracting Officer.

(d) Designation of Contracting Officer's Representative(s)

The COR's official delegation of authority will be provided by the Contracting Officer to the Contractor. This delegation will describe the COR's authorities in detail. However, it is emphasized that only the Contracting Officer has the authority to modify the terms of this Contract, therefore, in no event will any understanding, agreement, modification, change order, or other matter deviating from the terms of the basic Contract between the Contractor and any other person be effective or binding on the Government. When/If, in the opinion of the Contractor, an effort outside the existing scope of this Contract is requested, the Contractor shall promptly notify the Contracting Officer in writing, before proceeding with the COR direction. No action shall be taken by the Contractor unless the Contracting Officer has issued a formal contractual change.

If an effort under this Contract requires that an Alternate COR perform duties in the absence of the responsible COR, all responsibilities and functions assigned to the COR shall be the responsibility of the Alternate COR acting on behalf of the COR.

(e) Contractual Correspondence/Matters (Mod 0042 as corrected by Mod 0062)

(1) Correspondence involving contractual matters shall be addressed to the Administrative Contracting Officer (ACO), who is also primarily responsible forall contractual actions required to be taken by the Government under the terms of this Contract.

(3)*(I)* For CLIN 0003: The ACO may be contacted at: (Mod 0089)

Tia Scott
Contracting Officer
1000 Independence Ave, SW
Washington, DC 20585
Email: tia.scott@nnsa.doe.gov
Phone: (202) 586-5337**;**
Cell: (204) 686-9998 (Mod 0109)

(3)(II) ForSubCLIN0003A: The ACO may be contacted at: (Mod 0089)

Cristina Hayden
Contract Specialist Nevada Field Office
232 Energy Way North Las Vegas, NV 89030
Email: cristina.hayden@nnsa.doe.gov
Ph: (702)295-2060; Cell: (204) 654-2207 (Mod 0109)

(f) Marking

To promote timely and effective administration, correspondence submitted under this Contract shall contain a subject line commencing with the Contract number, as illustrated:

SUBJECT: Contract Number DE-NA0003624, (insert topic of correspondence after Contract Number)

G-2 MODIFICATION AUTHORITY

Notwithstanding any of the other clauses of this Contract, a Contracting Officer is the only individual authorized, on behalf of the Government, to:

(a) Accept nonconforming work;

(b) Waive any requirement of this Contract; or

(c) Modify any term or condition of this Contract.

G-3 CONTRACTOR CONTACT (MOD 0076, 0175)

The Contractor shall identify to the Contracting Officer the point of contact who has the authority and is responsible for managing, administering, and negotiating changes to the terms and conditions of this Contract as well as executing contract modifications on behalf of the Contractor.

Name: Garrett Harencak
Position: President
Company: Mission Support and Test Services LLC
Address: P.O. Box 98521, Las Vegas, NV 89193-8521
Alt. Address: 2621 Losee Road, N. Las Vegas, NV 89030-4129
Phone: (702) 295-4272
E-mail: HARENCG@NV.DOE.GOV

If the Contractor has organized a separate corporate entity to perform all work under this Contract, the Contractor's parent organization(s) or all member organizations if the Contractor is a joint venture, limited liability company, or other similar entity, where more than one company is involved in a business relationship created for the purpose of performing under the resultant contract, shall guarantee performance as evidenced by the Performance Guarantee Agreement(s) incorporated in Section J, Appendix E, *Performance Guarantee Agreement(s)*. If the Contractor is a joint venture, limited liability company, or other similar entity, where

more than one company is involved, the parent or all member organizations shall assume joint and severable liability for the performance of the Contract. In the event any of the signatories to the Performance Guarantee Agreement(s) enters into proceedings related to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish written notification of the bankruptcy to the Contracting Officer.

G-4 RECOGNITION OF PERFORMING ENTITY (MOD 0052)

(a) The Contractor and the Government recognize that the parties named below form the performing entity on which the award of this Contract was based.

The performing entity is Mission Support and Test Services LLC. This entity is comprised of: Honeywell International, Inc. (Honeywell), Jacobs Engineering Group, Inc. (Jacobs), and HII Nuclear Inc.

(b) Accordingly, the Contractor and the Government agree that the Contractor shall take no action to replace the components of the entity named in paragraph (a) of this clause without the prior written approval of the Contracting Officer.

G-5 RESPONSIBLE CORPORATE OFFICIAL (MOD 0008)

Notwithstanding G-4, *Performance Guarantee(s)*, the Government may contact, as necessary, the single responsible Corporate Official identified below, who is at a level above the senior Contractor official on-site and who is accountable for the performance of the Contractor. Should the responsible Corporate Official change during the period of the Contract, the Contractor shall promptly notify the Government of the change in the individual to contact.

Name: David C. Johnson
Position: Chairman, Mission Support and Test Services LLC, Board of Managers
Company: Vice President Customer Segment, Honeywell Defense & Space
Address: 1330 W. Warner Rd, Tempe, AZ 85284
Phone: (480) 606-9558

G-6 INVOICING FOR TRANSITION COSTS (MOD 0004)

(a) The Contractor shall submit vouchers electronically through the Oak Ridge Financial Service Center's (ORFSC) Vendor Inquiry Payment Electronic Reporting System (VIPERS) for reimbursement for work performed under CLIN 0001A, *Contract Transition Term.* VIPERS allows vendors to check the payment status of any voucher submitted to the DOE. To obtain access to and use VIPERS, please visit the web page at https://vipers.oro.doe.gov/. The Contractor shall contact the Contracting Officer if the Contractor is unable to submit invoices electronically.

(b) The Contractor shall invoice for work performed, as directed by the Contracting Officer (following the procedures at paragraph (a) of this clause).

(c) All billed transition costs shall reflect the rates as shown in the transition cost estimate provided on August 25, 2017 and in subsequent supporting documentation submitted thereafter. MSTS shall not exceed $10,000,000 for CLIN 0001A (Mod 0004)

SECTION H: SPECIAL CONTRACT REQUIREMENTS

H-1 CONTINUATION OF PREDECESSOR CONTRACTOR'S OBLIGATIONS

Existing contractual agreements and regulatory obligations entered into under Contract DE- AC52-06NA25946 will continue during performance of this Contract. The Contractor shall continue to have responsibility and accountability under this Contract for all existing commercial and regulatory obligations under the predecessor Contract. The contractual agreements shall include, but not be limited to all:

(c) Subcontracts and purchase orders;

(d) Agreements with domestic and foreign research organizations;

(e) Agreements with universities and colleges; and

(f) Other similar agreements.

Additionally, unless otherwise stated in this Contract, management systems, plans, permits, procedures, and other agreements that exist on the effective date of the Contract will continue until the Contractor addresses the applicable requirements contained in this Contract. For changes that require DOE/NNSA approval, the Contractor shall not implement a change until it is formally approved by the Contracting Officer.

H-2 SMALL BUSINESS PARTICIPATION

The Small Business Subcontracting Plan is incorporated in Section J, Appendix I. The Contractor shall submit annual subcontracting goals 60 days prior to the beginning of each fiscal year during the term of this Contract, or by such other date as authorized in writing by the Contracting Officer.

H-3 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFEROR

The Representations, Certifications, and Other Statements of Offeror completed by the Contractor and dated November 29, 2016, are hereby incorporated in this Contract by reference.

H-4 CONFLICT OF INTEREST COMPLIANCE AND MANAGEMENT PLAN

The Contractor and the Contractor's parent(s) and affiliate(s), if any, shall comply with the provisions of the approved Conflict of Interest Compliance and Management Plan (Plan) in the performance of the Contract and any deviations or amendments to the Plan shall require the express written approval, in advance, from the Contracting Officer. The Contractor shall submit to the Contracting Officer annual Organizational Conflict of Interest (OCI) Disclosure Update Statements beginning November 1st of each year after Contract award. Notwithstanding the annual disclosure requirement, any change in relevant facts since the last OCI Disclosure Update Statement shall be disclosed to the Contracting Officer pursuant to Section I clause DEAR 952.209-72, *Organizational Conflicts of Interest, Alternate I*, paragraph (c)(1), *Disclosure After Award*. Initial notification to the Contracting Officer shall be accomplished as soon as the facts are known with a full disclosure within 60 days of the initial notification, unless otherwise directed by the Contracting Officer.

H-5 LOBBYING RESTRICTION

The Contractor agrees that none of the funds obligated on this award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. § 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

H-6 RESERVED (MOD 0007)

H-7 CONFERENCE MANAGEMENT (MAR 2023) (MOD 0190)

The Contractor agrees that:

(a) The contractor shall ensure that contractor-sponsored conferences, and contractor participation in DOE conferences sponsored by a Departmental Element, reflect the DOE/NNSA's commitment to fiscal responsibility, appropriate stewardship of taxpayer funds and support the mission of DOE/NNSA as well as other sponsors of work. In addition, the contractor shall ensure its sponsored conferences do not include any activities that create the appearance of taxpayer funds being used in a questionable manner.

(b) For the purposes of this clause, "conference" is first defined by the Federal Travel Regulation (FTR) as "[a] meeting, retreat, seminar, symposium, or event that involves attendee travel. The term 'conference' also applies to training activities that are considered to be conferences under 5 C.F.R 410.404." Additionally, the Department's conference activity reporting guideline expands the FTR conference definition to disregard attendee travel as a determining factor, i.e., reporting can be required without the existence of attendee travel.

(c) Contractor-sponsored conferences include those events that meet the Department's expanded conference definition, and a DOE contractor holds the role of primary decision-maker for key planning items such as conference theme, agenda, location/venue, dates, and conference participation.

(d) Merely providing the contractor's facility space for a conference, or contractor staff participating in a conference, or procuring conference booth space, giving a speech, or serving as an honorary chairperson does not connote contractor sponsorship.

(e) The contactor will provide information on conferences they plan to sponsor, when expected costs exceed $100,000 in net costs to the Department, in the Department's Conference Management Tool (CMT), including:

(1) Conference title, description, and date

(2) Location and venue

(3) Description of any unusual expenses (e.g., promotional items)

(4) Description of contracting procedures used (e.g., competition for space/support)

(5) Costs for space, food/beverages, audio visual, travel/per diem, attendee registration costs

(6) Number of attendees

(f) The contractor will not expend funds on the proposed contractor-sponsored conferences with expenditures estimated to exceed $100,000 until notified of approval by the contracting officer and approved by the corresponding federal executive oversight entity.

(g) For DOE-sponsored conferences (i.e., sponsored by a Departmental Element), the contractor will not expend funds on the proposed conference that exceeds $100,000 in net estimated DOE cost, until it is approved in the CMT by the management of the Departmental Element sponsoring the conference,

(1) DOE-sponsored conferences include events that meet the Department's expanded conference definition, and a Departmental Element holds the role of primary decision- maker for key planning items such as conference theme, agenda, location/venue, dates and conference participation.

(2) Merely providing Federal facility space for a conference, or Federal staff participating in a conference, or procuring conference booth space, giving a speech, or serving as an honorary chairperson does not connote DOE sponsorship.

(3) The contractor will provide cost and attendance information on their participation in all DOE-sponsored conferences in the DOE Conference Management Tool.

(h) For conferences sponsored by a non-DOE external entity, the contractor shall develop and implement a process to ensure costs related to such conferences are tracked, allowable, allocable, reasonable, and further the mission of DOE/NNSA.

(i) Contractors are not required to enter participation or cost information on conferences sponsored by a non-DOE external entity in DOE'S Conference Management Tool.

(End of Clause)

H-8 FEDERAL FLEET MANAGEMENT SYSTEM

When the Contracting Officer has issued the Contractor authorization to obtain interagency fleet management system vehicles in performance of the contract, the Contractor shall follow the requirement of the Federal Fleet Management System known as FedFMS (https://ffms.fas.gsa.gov/ffms/fastart/). The Contractor shall provide the information needed to satisfy the reporting requirement as stated in FedFMS on a monthly basis using the Fleet Management Information System. The Contractor shall also address any of the data gaps/incomplete records that already exist.

H-9 ACCOUNTABILITY

The Contractor is responsible for the quality of its products and for assessing its operations, programs, projects and business systems and identifying deficiencies and implementing needed improvements in accordance with the terms and conditions of this Contract, regardless of whether NNSA has evaluated the Contractor's performance in any area of the Contract. The Contractor is encouraged to rely upon parent (as applicable) corporate leadership, systems and processes as well as independent third party assessments in assessing its own performance under this contract. The purpose of NNSA oversight is for assessing the Contractor's performance in meeting its obligations under this Contract. NNSA oversight shall not be relied upon by the Contractor in assessing its performance.

H-10 NNSA OVERSIGHT

(a) As used in this clause, "NNSA oversight" encompasses activities performed by NNSA organizations to determine the effectiveness of contractor performance of the Scope of Work. Oversight includes onsite reviews, assessments, performance evaluations, and other activities.

(b) NNSA oversight - NNSA will determine the level of NNSA oversight of all Contractor activities under this Contract, consistent with the Oversight Plan and approved funding levels. NNSA will apply its oversight of the Contractor consistent with the contractor's management systems, the risk level of the work processes, the contractor's performance, and the effectiveness of the Contractor Assurance System. The Contracting Officer will seek input from the contractor on the appropriate type and level of effort of oversight for management systems and processes. The oversight mechanisms will be documented by NNSA, linked to the Contractor Assurance System and subject to modification. In general, NNSA oversight will be consistent with the following concepts:

(1) There will be less oversight in areas subject to well-recognized, independent third party assessments, when the third party assessments find that the contractor systems are performing adequately.

(2) The level of oversight will take into account whether areas are directly related to critical outcomes of the mission of the NNSS, or areas that are not central to the core mission such as administrative support functions.

(3) Oversight will not unduly interfere with contractor efforts to implement industrial standards and/or best commercial practices.

(4) Oversight is subject to increase in areas where performance deficiencies exist. However, prior to increasing oversight, the Contracting Officer will consider whether contractor corrective action plans provide sufficient assurance.

(c) In addition to the rights and remedies provided to the Government under other provisions of the Contract, the Contractor shall fully cooperate with the NNSA oversight personnel and subject matter experts in the performance of their assigned oversight functions, and shall provide complete access to facilities, information and Contractor personnel.

(d) The Contractor shall continue to be subject to the oversight of independent oversight functions authorized by the Secretary of Energy in the performance of their duties such as the Office of Security and Safety Performance Assurance or the Office of the Inspector General. The Contractor shall not comply with a finding, opinion, or directive of an Independent Oversight Function absent direction from the Contracting Officer.

H-11 UPDATES TO FAR AND DEARCLAUSES

The Contractor agrees that the Contracting Officer may, from time to time and at any time, unilaterally modify the Contract to revise, add or delete Section I FAR and DEAR clauses due to changes in the regulations or the approval of new deviations. Should there be an impact to the Contractor as a result of any such modification to the Contract, the Contracting Officer will provide appropriate consideration.

H-12 MANAGEMENT TEAM COMPENSATION (MOD 0096)

Amounts of compensation reimbursed during the first two years of contract performance shall not exceed the total proposed management team costs for any position, as reflected in Section L Attachment G “Management Team Cost Sheet” of the Contractor’s proposal in response to solicitation No. DE-SOL-0008418. For the remaining years of the Contract, the Key Personnel compensation will be reimbursed in accordance with the Statement of Work, Chapter III, paragraph 3.2.3. After the first two years of the contract, bonuses and incentive compensation for Key Personnel are unallowable costs and will not be compensated by the Government. (Mod 0096)

H-13 CONFIDENTIALITY OF INFORMATION (NOV2009)

(a) To the extent that the work under this Contract requires that the Contractor be given access to or be furnished with confidential or proprietary business, technical, or financial information or data belonging to other entities that is clearly marked as confidential or proprietary, the Contractor shall, after receipt thereof, treat such information in confidence and agrees not to appropriate such information to its own use or to disclose such information to third parties unless specifically authorized in writing by the Contracting Officer. The foregoing obligations, however, shall not apply to:

(1) Information or data that is in the public domain at the time of receipt by the Contractor;

(2) Information or data that is published or otherwise subsequently becomes part of the public domain through no fault of the Contractor;

(3) Information or data that the Contractor can demonstrate was already in its possession at the time of receipt thereof; or

(4) Information or data that the Contractor can demonstrate was received by it from a third party that did not require the Contractor to treat it in confidence;

(b) The Contractor agrees to enter into an agreement, identical in all material respects to the requirements of paragraph (a) above, with each entity supplying such confidential or proprietary information or data to the Contractor under this order and to supply a copy of such agreement to the Contracting Officer. Upon request of the Contracting Officer, the Contractor shall furnish the Government with reports that specify any information or data received as confidential or proprietary and that identify the entity or entities who supplied the Contractor with such information or data.

(c) The Contractor shall obtain the written agreement of each employee permitted access to or furnished with confidential or proprietary business, technical, or financial information or data, whereby the employee agrees that such information or data that the Contractor is obligated to treat in confidence will not be discussed, divulged or disclosed except to those persons within the Contractor's organization directly concerned with the performance of this order or to Government representatives. Notwithstanding the foregoing Contractor-employee agreement, upon request of the Contracting Officer, the Contractor agrees to obtain from each employee a confidentiality agreement acceptable to the Contracting Officer.

(d) This clause, including this paragraph (d) shall be included in subcontracts if there is a requirement or there becomes a requirement that the subcontractor be given access to or be furnished with confidential or proprietary business, technical, or financial information or data.

H-14 CONTRACTOR USE OF GOVERNMENT VEHICLES – WORK TO DOMICILE

(a) Government-owned or leased vehicles shall be used for official purposes only. Official purposes do not ordinarily include transportation of a contractor's employee between domicile and place of employment. However, contractor employees driving government-owned orleased vehicles to their personal residences will be considered to do so for official purposes if all the following conditions exist–

(1) Unusual and special circumstances occur when contractor employees are required to work unusual hours and regular transportation is not available.

(2) The Contractor has defined, in writing, the special and unusual circumstances in which the driving of government-owned or leased vehicles by contractor employees to their personal residences will be considered used for official purposes and the Contracting Officer has approved them.

(3) The Contractor has designated, in writing, specific individuals who are authorized to approve the driving of government vehicles by contractor employees to their personal residences.

(b) The Contractor shall maintain records necessary to clearly establish the extent that home- to-work transportation was for official purposes. The Contractor shall determine, subject to approval of the Contracting Officer, the organizational level at which the records should be maintained and kept. The records shall be available for audit and shall contain information required by the Contracting Officer.

(c) The Contractor shall establish and enforce penalties for employees who use or authorize the use of Government vehicles for other than official purposes.

H-15 NNSA PRIME CONTRACTS

(a) In accordance with the Contract's Section I Clause entitled "DEAR 970.5243-1, Changes," the Contracting Officer may identify any of the work contemplated by Section J, Appendix A, Statement of Work, of this Contract to be performed either by another Contractor directly contracted by the DOE/NNSA or by Government employees. The Contractor agrees to fully cooperate with such other Contractors and Government employees, carefully fit its own work to such other work as may be

directed by the Contracting Officer, and provide reasonable support as required. The Contractor shall not commit or permit any act, which will interferewith the performance of work by any other Contractor or by Government employees. For work identified for performance by another Contractor directly contracted bythe NNSA:

(1) The Government and the Contractor will confer in advance on the strategy for changing responsibility for the work and will do so with the objective of minimum disruption to the site operations.

(2) The Government may designate the Contractor as the Technical Monitor (not authorized to accept or provide technical direction) for such Contracts that are directly related to the scope of this Contract. The Contractor agrees to perform such monitoring duties as shall be further described in the designation for each such Contract. No designation shall include, and the Contactor shall not perform any function determined to be inherently Governmental. These functions include, but are not limited to:

(i) Award, modification, change, or termination of the Contract.

(ii) Receipt, processing or adjudication of any claims, invoices, or demands for payment of any form.

(3) The Technical Monitor shall report to the Contracting Officer, or the Contracting Officer's Representative (COR), any performance of a designated Contract that may not be in compliance with its terms and conditions but is not authorized to take any other action regarding such noncompliance.

(4) Additionally, the NNSA agrees to insert the clause below entitled "Other Government Contractors Performing Work at the NNSS," substantially as written here, in all such Contracts as follows:

OTHER GOVERNMENT CONTRACTORS PERFORMING WORK AT THE NNSS

In addition to this Contract, (Insert Contract Number), the Government may undertake or award other Contracts for additional work or services at the NNSS.

The Contractor agrees to fully cooperate with the M&O Contractor, other Contractors, and Government employees, and carefully coordinate its own work with other work being performed at the site as may be directed by the Contracting Officer. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other Contractor or by Government employees at the site.

The Government may designate the M&O Contractor to be the Technical Monitor for any right, duty or interest in this Contract. If the M&O Contractor is designated, a copy of the designation letter will be provided to the Contractor by the Government. The Contractor further agrees to fully cooperate with the M&O Contractor for all matters under the terms of the designation.

(b) In the cases where the Government directly contracts with other entities and retains administration, the Contractor shall fully cooperate with these other entities and provide reasonable support as required.

(c) Adjustments shall be made to the Contractor's Subcontracting Plan to recognize the changes to the subcontracting base and goals, if appropriate.

H-16 INSTRUCTIONS FOR UPDATING FOREIGN OWNERSHIP, CONTROL OR INFLUENCE (FOCI) INFORMATION (MAY 2014)

(a) In order to submit periodic updates or to report changes to Foreign Ownership, Control or Influence information as required by DEAR 952.204-2, Security, the Contractor shall use the DOE FOCI electronic submission system located at https://foci.anl.gov.

(b) New users, when registering to update information under this contract, should select "NNSA Albuquerque Complex - Acquisition and Project Management (NA-APM)" as the FOCI Office that will review the FOCI Submission.

(c) All FOCI documentation/forms shall be completed within the eFOCI system. NOTE: A completed SF 328, Certificate Pertaining to Foreign Interests, executed in accordance with the instructions on the certification section of the SF328, shall be printed, signed and uploaded into the eFOCI system. The SF 328 is required for first time submissions, any time there are changes to the SF 328, and at the request of the Cognizant Security Authority (CSA). Specific problems maneuvering through the fields within the eFOCI system can be clarified by contacting the eFOCI help desk at (630) 252-6566 or fociserver@anl.gov mailto: fociserver@anl.gov.

(End of clause)

H-17 PARENT OVERSIGHT PLAN

(a) If a Parent Oversight Plan is requested by the Contracting Officer pursuant to Section J, Appendix A, Chapter I, 4.4.3, the Parent Oversight Plan will be attached and made part of the Contract at Section J. Elements of the Plan may be incorporated into the Performance Evaluation Plan. The Parent Oversight Plan shall identify the official(s) responsible for administration of the plan.

(b) The Contractor shall provide periodic reports of Parent Oversight activities and costs incurred as required by the Contracting Officer. Costs associated with Plan shall only include: the actual direct labor costs of the persons performing such services; a percentage factor of direct labor costs to cover fringe benefits and payroll taxes; travel; and other direct costs. Any fee or other indirect costs such as allocation for overhead, General and Administrative (G&A), and Cost of Money will not be reimbursed.

(c) Cost limitations set forth in paragraph (b) above shall not be exceeded without prior Contracting Officer approval. The Parties agree that the costs may be reviewed further for appropriateness and scope. In addition, the Parties agree that a tracking process, acceptable to the Contracting Officer, providing sufficient detail for reasonable accountability, shall be implemented. The Parties agree to negotiate in good faith any adjustments to these amounts as a result of empirical information from any such tracking system orreviews.

H-18 CONSTRUCTION PROJECTS

For construction projects, the Contractor agrees that the NNSA will incorporate, as appropriate, construction terms and conditions into the M&O Contract or work authorization for the completion of that project that are not otherwise contained in the M&O Contract. The work authorization will also include specific work requirements in accordance with applicable DOE Orders and the Contract's Section I Clause entitled "DEAR 970.5211-1, Work Authorization."

H-19 LABORATORY, PLANT AND SITE STRATEGIC PLANNING (MOD 0052)

The M&O partner shall submit to DOE/NNSA a laboratory, plant or site strategic plan annually in accordance with the annual strategic planning guidance and the terms and conditions of the contract or as directed by the Contracting Officer. The laboratory, plant, or site M&O management team shall present their plans and engage in discussions with senior DOE/NNSA leadership annually in accordance with the annual strategic planning guidance and as directed by the Contracting Officer.

H-20 MANAGEMENT AND OPERATING CONTRACTOR SUBCONTRACT REPORTING (NOV 2017) (MOD 0009, 0022)

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

"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 would benefit multiple contracts and/or the costs of which are normally applied to a Contractor's general and administrative expenses or indirect costs.

"Management and Operating Contractor Subcontract Reporting Capability (MOSRC)" means a DOE system and associated processes to collect key information about Management and Operating Contractor first-tier subcontracts for reporting to the Small Business Administration.

"Transaction" means any contract, order, other agreement or modification thereof (other than one involving an employer-employee relationship) entered into by the Contractor acquiring supplies or services (including construction) required solely for performance of the prime contract.

Reporting. The Contractor shall collect and report data via MOSRC necessary for DOE to meet its agency reporting requirements, as determined by the Small Business Administration, in accordance with the most recent reporting instructions at https://energy.gov/management/downloads/mosrc-reporting-instructions. The Contractor shall report first-tier subcontract data in MOSRC. Classified subcontracts shall not be reported. Subcontracts with Controlled Unclassified Information marking shall not be reported if restricted by its category. Contact your Contracting Officer if uncertain of information reporting requirements. The MOSRC reporting requirement does not replace any other reporting requirements (e.g. the Electronic Subcontracting Reporting System or the FFATA Subcontracting Reporting System.

H-21 PERFORMANCE DIRECTION

(a) The Contractor is responsible for the management and operation of the NNSS and satellite facilities in accordance with the Terms and Conditions of the Contract, duly issued Work Authorizations (WAs), and written direction and guidance provided by the Contracting Officer and the Contracting Officer's Representatives (CORs). NNSA/NSO is responsible for establishing the work to be accomplished, the applicable standards and requirements to be met, and overseeing the work of the Contractor. The Contractor shall use its expertise and ingenuity in contract performance to most effectively, efficiently, and safely accomplish the work called for by this Contract.

(b) Only the Contracting Officer may issue, modify, and priority rank WAs.

(c)

(1) The Contracting Officer will appoint, in writing, specific NNSA employees as CORs with the authority to issue Performance Direction to the Contractor. CORs are authorized to act within the limits of their delegation letter. A copy of each letter will be provided to the Contractor. COR functions include technical monitoring, inspection, and other functions of a technical nature not involving a change in the scope, cost, or Terms and Conditions of the contract. The COR is authorized to review and approve technical reports, drawings, specifications, and technical information delivered by the Contractor.

(2) The Contractor must comply with written Performance Directions that are signed by the COR and–

(i) Redirect the contract effort, shift work emphasis within a work area or a WA, further define or otherwise serve to accomplish the Statement of Work (SOW) or

(ii) Provide information that assists in the interpretation of drawings, specifications, or technical

portions of the work description.

(3) Performance direction does not–

(i) Authorize the Contractor to exceed the funds obligated on the contract;

(ii) Authorize any increased cost or delay in delivery in a WA;

(iii) Entitle the Contractor to an increase in fee; or

(iv) Change any of the terms or conditions of the contract.

(d) The Contractor shall accept only Performance Direction provided in writing by a COR and that is within the SOW and a WA.

(e)

(1) The Contractor shall promptly comply with each duly issued Performance Direction unless the Contractor reasonably believes that the Performance Direction violates this clause. If the Contractor believes the Performance Direction violates this clause, the Contractor shall suspend implementation of the Performance Direction and promptly notify the Contracting Officer of its reasons for believing that the Performance Direction violates this clause. Oral notifications to the Contracting Officer shall be confirmed in writing within ten days of the oral notification.

(2) The Contracting Officer will determine if the Performance Direction is within the SOW and WA. This determination will be issued in writing and the Contractor shall promptly comply with the Contracting Officer's direction. If it is not within the SOW or WA, the Contracting Officer may issue a change order pursuant to the Contract's Section I clause entitled "Changes."

(f) The Contracting Officer and the Contractor agree to maintain full and open communication at all times, and on all issues affecting contract performance, during the term of this Contract.

H-22 RESERVED

H-23 CONTRACTOR COMMUNITY COMMITMENTS (MOD 0022)

The Contract's Section J Appendix M entitled "Contractor Commitments, Agreements, and Understandings" sets forth the Contractor's Community Commitment Plan consistent with the intent of DEAR 970.5226-3, "Community Commitment". The plan shall describe the Contractor's planned activities as to how it will be a constructive partner to the communities in the State of Nevada. The Contractor is encouraged to consider specific performance goals around maximizing subcontracting to business within Nevada and Strategic Partnerships with Nevada's system of higher education. Reasonable costs associated with the development of the plan will be considered allowable, while costs associated with implementing the plan are unallowable.

H-24 DEFINITION OF UNUSUALLY HAZARDOUS OR NUCLEAR RISK AND OTHER TERMS FOR PURPOSES OF FAR CLAUSE 52.250-1, INDEMNIFICATION UNDER PUBLIC LAW 85-804 (APR 1984) ALT I (APR 1984) (MOD 0008, 0060, 0071)

(a) The term "a risk defined in this contract as unusually hazardous or nuclear" as used in FAR Clause 52.250-1 means the risk of legal liability to third parties (including legal costs as defined in paragraph jj of Section 11 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. Section 2014 jj, notwithstanding the fact that the claim or suit may not arise under Section 170 of said Act), arising from actions or inactions in the course of the following performed by the Contractor, under this contract:

(1) Participation in activities in support of a nonproliferation effort on behalf of the United States, outside the United States, as described in (i) through (iii):

(i) DOE's Nuclear/Radiological Advisory Team ("N/RAT");

(ii) DOE's Accident Response Group ("ARG")/DOE's Joint Technical Operations Team ("JTOT") ;

(iii) Crisis response teams to the extent participation in activities described in subparagraph (i), (ii) or (iii) above involves nuclear emergency response activities involving real or suspected nuclear weapons, nuclear weapons components, or nuclear materials which can be readily utilized either (1) for the production or the fabrication of nuclear weapons without substantial further effort, or (2) for intentional widespread contamination or dispersal of harmful nuclear materials, whether or not such real or suspected weapons, components, or harmful nuclear materials are owned by the United States; and

(2) Other activities relating to non-proliferation, emergency response, anti- terrorism activities, or critical national security activities that involve the use, detection, identification, assessment, control, containment, dismantlement, characterization, packaging, transportation, movement, storage, or disposal of nuclear, radiological, chemical, biological, or explosive material, facilities, or

(3) devices, and nuclear weapons research, design, development, production, testing and maintenance, and development of technology as part of Government programs for nuclear weapons deployment, storage and stockpile stewardship, transportation, demilitarization, dismantlement or disposition, provided such activities are specifically requested or approved, in writing, by the President of the United States, the Secretary of Energy, the Deputy Secretary of Energy, or an Under Secretary, and further provided that the request or approval specifically identifies a particular project involving one of those activities and makes the indemnity provided by this clause applicable to that particular project under the contract.

(4) Participation in tasks or activities by the Contractor or its subcontractors on or after March 13, 2020 through June 30, 2020 that is directed or authorized by the U.S. Department of Energy or the U.S. Department of Energy National Nuclear Security Administration, including work for others, as an element of activities taken now and through June 30, 2020 in response to COVID-19, to the extent that task or activity is not exempt from liability under the Public Readiness and Emergency Preparedness Act (PREP Act) or other law, or the exemption under the PREP Act or other law is limited in scope or amount which is not sufficient to provide complete protection against the liability to which the contractor is exposed. (Mod 0071)

(b) The unusually hazardous or nuclear risks described above are indemnified only to the extent that they are not covered by the Price-Anderson Act, Section 170d of the Atomic Energy Act of 1954, as amended, (42 U.S.C. Section 2210d) or where the indemnification provided by the Price- Anderson Act is limited by the restriction on Public Liability imposed by Section 170e of the Atomic Energy Act of 1954, as amended (42 U.S.C. Section 2210e) to an amount which is not sufficient to provide complete indemnification for the legal liability to which the contractor is exposed.

(c) Additional Definitions of Terms

(1) As used in this H-24 clause, the term "nuclear materials" means source, special nuclear, or byproduct materials as those terms are defined in Section 11 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. Section 2014.

(2) As used in FAR 52.250-1 INDEMNIFICATION UNDER PUBLIC LAW 85-804 (APR 1984) (ALTERNATE I) (APR 1984),

(i) the term "Contractor" except as used in paragraphs (a) and (e) of I-23, FAR 52.250-1 means

(A) Mission Support and Test Support, LLC (MSTS),

(B) MSTS's parent organizations including: Honeywell International, Inc. (HII), Jacobs Engineering Inc. (JEG) and Stoller Newport News Nuclear (SN3) and each parent organization corporate successors and corporate affiliates, and Employees, officers and directors of (A) and/or (B) above named or threatened to be named as defendants in lawsuits or litigation threatened or initiated by third parties which seek to impose or establish, or which could result in, a risk which is defined in this contract as unusually hazardous or nuclear, on account of actions or inactions of MSTS, or on account of actions or inactions undertaken by the corporations or individuals identified in subparagraph (A) and/or (B) above for, on behalf of, or with respect to, MSTS under this contract; and

(i) the term "Contractor" as used in paragraphs (a) and (e) of I-23, FAR 52.250- 1 means MSTS;

(ii) term "Contractor's business" means the management and operation of the Nevada National Nuclear Site (NNSS) and Satellite facilities of DOE/NNSA under this contract;

(iii) the terms "Contractor's operations at any one plant or separate location in which this contract is being performed" and "a separate and complete major industrial operation in connection with the performance of this contract" mean the NNSS located in a remote region of southern Nevada; as well as facilities in North Las Vegas, Nevada; Los Alamos and Albuquerque, New Mexico; Livermore and Santa Barbara, California; Nellis Air Force Base (AFB), Las Vegas, Nevada; and Andrews AFB, Suitland, Maryland;

(iv) the term "agency head" means the Secretary of Energy; and

(v) the term "corporate affiliates of MSTS" means the parent companies of MSTS (HII, JEG and SN3 and, if applicable, the parent companies of each) as well as companies, other than MSTS, that directly or indirectly, are owned or otherwise controlled by the parent companies of MSTS.

H-25 AGREEMENTS FOR COMMERCIALIZING TECHNOLOGY (MOD 0022)

This H-clause authorizes the use of the mechanism: Agreements for Commercializing Technology (ACT). In accordance with the requirements specified in this H-clause, the M&O Contractor may conduct third party-sponsored research at the M&O Contractor's risk. While the Department believes ACT has the potential to greatly assist in the commercialization of technologies, it also specifically recognizes that ACT can be used for other engagements with outside entities that are not necessary aimed at commercialization (e.g., technical assistance, training, studies), but which facilitate access to DOE facilities. In performing ACT work, the M&O Contractor may use staff and other resources associated with this M&O contract for the purposes of conducting technical services, training, studies, performing research and development, and/or furthering the technology transfer mission of the Department, only when such work does not interfere with DOE-funded activities conducted as authorized by other parts of this M&O contract. The resources that may be used include Government- owned or leased facilities, equipment, or other property that is either in the M&O Contractor's custody or available to the M&O Contractor under this M&O contract (unless specifically excluded by the Contracting Officer). For M&O Contractor activities conducted under authority of this H-clause, the M&O Contractor shall provide full-cost recovery, assume indemnification and liability as provided in paragraph 9 below, and may assume other risks normally borne by private parties sponsoring research at the DOE national laboratories and production plants. In exchange for accepting such risks, or for other private consideration provided by the M&O Contractor, the M&O Contractor is authorized to negotiate separate ACT agreements with the sponsoring third parties. Under ACT agreements, the M&O Contractor may charge those parties additional compensation beyond the full costs of the work at the facility.

The following applies to all work conducted under the ACT mechanism regardless of the source of funding:

1. *Authority to Perform work under this H-clause*. Pursuant to the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.) and other applicable authorities, the M&O Contractor may perform work for non-Federal entities, in accordance with the requirements of this H-clause.

2. *M&O Contractor's Implementation*. For ACT work conducted under the contract, the M&O Contractor must draft, implement, and maintain formal policies, practices, and procedures in accordance with this H- clause, which must be approved by the Contracting Officer, and such approval shall not be unreasonably withheld.

3. Conditions for Participation in ACT. The M&O Contractor:

   a. Must not perform ACT activities that would place it in direct competition with the private sector;

   b. May only conduct work under this H-clause if the work does not interfere with or adversely affect projects and programs the M&O Contractor conducts on behalf of the DOE under this contract, and complies with the terms and conditions of the prime contract. If the Government determines that an activity conducted under this H-clause interferes with the Department's work under the M&O contract, or that termination/stay/suspension of work under an ACT agreement is in the best interest of the Government, the M&O Contractor must stop the interfering ACT work immediately to the extent necessary to resolve the interference. At any time, the Contracting Officer may require the use of specified Government-owned or leased property and facilities for the exclusive use of the DOE mission by providing a written notice excluding said property from the M&O Contractor's activities under this H-clause. Any cost incurred as a result of Contracting Officer decisions identified in this subparagraph shall be borne by the M&O Contractor. The Contracting Officer shall provide to the M&O Contractor in writing its decision, identifying the issues and reasons for the decisions. The M&O Contractor shall be provided with a reasonable opportunity to address and resolve the issues identified by the Contracting Officer;

   c. Except as otherwise excluded in this H-clause, must perform all ACT activities in accordance with the standards, policies, and procedures that apply to performance under this M&O contract, including but not limited to environmental, safety and health, security, safeguards and classification procedures, and human and animal research regulations;

   d. Must maintain and provide when requested by the DOE Contracting Officer, a summary of project information for each active ACT project, consisting of: sponsor name; total estimated costs; project title and description; project point of contact; and estimated start and completion dates;

   e. Is responsible for addressing the following items in ACT agreements as appropriate: disposition of property acquired under the agreement; export control; notice of intellectual property infringement; and a statement that the Government and/or the M&O Contractor shall have the right to perform similar services in the Statement of Work for other Parties as otherwise authorized by this M&O contract subject to applicable data restrictions;

   f. Must include a standard legal disclaimer notice on all publications generated under ACT activities. Each DOE M&O Contractor has its own pre-approved publications statement, and this should be included; and

   g. Must insert the following disclaimer in each agreement under ACT, which must be conspicuous (e.g. bold type, all capital letters, or large font) in all Agreements under ACT so as to meet the standards of due notice.

      DISCLAIMER

*THIS AGREEMENT IS SOLELY BETWEEN [INSERT NAME OF THE M&O CONTRACTOR] AND [THE OTHER IDENTIFIED PARTY]. THE UNITED STATES GOVERNMENT IS **NOT** A PARTY TO THIS AGREEMENT, THIS AGREEMENT DOES NOT CREATE ANY OBLIGATIONS OR LIABILITY ON BEHALF OF THE GOVERNMENT AND THE GOVERNMENT MAKES NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITIONS OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS AGREEMENT, OR THE OWNERSHIP, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR RESULTING PRODUCT; THAT THE GOODS, SERVICES, MATERIALS, PRODUCTS, PROCESSES, INFORMATION, OR DATA TO BE FURNISHED HEREUNDER WILL ACCOMPLISH INTENDED RESULTS OR ARE SAFE FOR ANY PURPOSE INCLUDING THE INTENDED PURPOSE; OR THAT ANY OF THE ABOVE WILL NOT INTERFERE WITH PRIVATELY OWNED RIGHTS OF OTHERS. THE GOVERNMENT SHALL NOT BE LIABLE FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ATTRIBUTED TO SUCH RESEARCH OR RESULTING PRODUCT, INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DELIVERED UNDER THIS AGREEMENT. THIS DISCLAIMER DOES NOT AFFECT ANY RIGHTS THE GOVERNMENT MAY HAVE AGAINST THIRD PARTIES ARISING FROM WORK CONDUCTED IN CONNECTION WITH THIS AGREEMENT.*

4. Contracting Authority.

   a. Subject to DOE approval as described in this paragraph, the M&O Contractor is hereby authorized to negotiate terms and conditions between the M&O Contractor and third parties when entering into ACT agreements. The M&O Contractor will have no authority to bind the Government in any way with such terms and conditions. The Government will have no obligation to the M&O Contractor due to such terms and conditions.

      i. The M&O Contractor shall submit an ACT proposal package (Package) to the Contracting Officer for approval prior to beginning work under an ACT agreement. A complete Package will include at a minimum: the identity of the parties to the ACT agreement; the principal place of performance; any foreign ownership or control of the ACT agreement parties; a Statement of Work; an estimate of costs incurred under the M&O contract; an anticipated schedule; identification of key Government equipment and facilities that will be used under the ACT agreement; a list of expected deliverables; identification of the Intellectual Property (IP) lead and proposed selection of IP rights, as defined in DOE Class Waiver W(C)- 2011-013; a signed certification by the private party(ies) that the M&O Contractor offered the option to use CRADA and SPP alternatives (see paragraph 7a) sufficiently such that the private parties are aware of the relative costs and other differences between the ACT agreement and the CRADA and SPP alternatives; source of funds, including a statement that no Federal funds, including pass-through funds received as a subcontractor or partner, are being utilized to fund the agreement except as authorized under the FedACT pilot (see paragraph 14 below); applicable ES&H and NEPA documentation; a statement of consideration, summarizing the risk and/or consideration offered the ACT participants in exchange for charging beyond full cost recovery or for other compensation provided by the participants; and when multiple third parties are parties to the ACT agreement, or as otherwise requested by the Contracting Officer, an IP Management Plan that sets forth the proposed disposition of IP rights, and income and royalty sharing, among the parties to an ACT agreement.

      ii. If the M&O Contractor, the M&O Contractor's parent, member, subsidiary, or other entity in which the M&O Contractor, the M&O Contractor's parent, member or subsidiary has an equity interest, is a party to the ACT agreement, the M&O

Contractor shall include as necessary a project-specific addendum to the Master OCI Plan in the Package to address special circumstances not fully anticipated in the prior approved Master OCI Plan (see paragraph 7).

iii. If the ACT agreement includes a foreign entity as a party or the statement of work includes the use of human subjects, animal subjects, classified or sensitive subject matter or describes a work scope involving high risks or hazards including environmental issues, the M&O Contractor shall include additional information as necessary or as requested by the Contracting Officer.

b. The Contracting Officer shall use reasonable best efforts to review each complete Package submitted by the M&O Contractor under subparagraph 4.b. of this H-clause within ten (10) business days of receiving the Package and provide the M&O Contractor with approval or non- approval of the Package. The review of the complete Package by the Contracting Officer shall include a determination that the proposed work: (1) is consistent with or complementary to DOE missions and the contract statement of work; (2) will not adversely impact programs under the contract scope of work; (3) will not place the contractor in direct competition with the domestic private sector; and (4) will not create a detrimental future burden on DOE resources.

c. Except as conditionally allowed under subparagraph i. below, the Contracting Officer must approve the Package before the M&O Contractor may begin work under the proposed ACT agreement. If the Contracting Officer rejects the Package then the Contracting Officer must provide said rejection to the M&O Contractor in writing including the reasons for the rejection. Upon receipt of the Contracting Officer's written rejection, the M&O Contractor agrees to not further pursue the work described in the package or incur additional costs under the M&O contract for the work described in the Package.

i. The M&O Contractor may request a preliminary determination that the proposed scope of work is consistent with the contract statement of work and the Contracting Officer will use his/her best efforts to provide such a determination within three (3) business days. Upon such a determination from the Contracting Officer, the M&O Contractor may begin work under the ACT agreement at the M&O Contractor's risk pending final approval of the complete Package. The M&O Contractor must submit a complete Package, as identified in subparagraph 4.b. above, within (10) business days of the preliminary determination. All costs associated with the performance of work under a preliminary determination are the responsibility of the M&O Contractor, as no Federal funds will be used to fund any work conducted under this H-clause.

ii. If the M&O Contractor, the M&O Contractor's parent, member, subsidiary, or other entity in which the M&O Contractor, the M&O Contractor's parent, member or subsidiary has an equity interest, is a party sponsoring work in connection with the ACT agreement, work may not commence until approval of the complete Package by the Contracting Officer.

5. *Advance Payment for ACT Projects.* The M&O Contractor shall be responsible for providing adequate advance payment for ACT work conducted under this H-clause consistent with procedures defined in the Department's Financial Management Handbook. The M&O Contractor shall be solely responsible for collecting payments from third parties for any work conducted under this H-clause and such collections shall be independent of providing advance payment. For such payments and for any costs, obligations, or liabilities arising due to the M&O Contractor's

work under this H-clause, the M&O Contractor is entirely at risk and the Government shall have no risk.

6. *Costs.* All direct costs associated with the M&O Contractor's work conducted under this H-clause shall be directly charged to separate and identifiable accounts in accordance with the requirements of the Department's Financial Management Handbook. An allocable portion of indirect costs normally applied to equivalent work under this M&O contract shall also be applied to work conducted under this H-clause in accordance with the requirements of the Financial Management Handbook. As required by the Financial Management Handbook, changes to the Handbook will be incorporated into this H-clause by a unilateral administrative modification to the contract. In addition, all work must be performed at full costs which would include Federal Administrative Charge (FAC).

   a. Work conducted under this H-clause shall be excluded from the M&O contract award fee calculations and such fee shall not be allocable to work conducted under this H-clause.

   b. Federal funds will not be used to fund work conducted under this H-clause except as authorized under the FedACT pilot (see paragraph 14 below).

7. *Organizational Conflict of Interest.* The M&O Contractor shall conduct work under this H-clause in a manner that minimizes the appearance of conflicts of interest and avoids or mitigates actual conflicts of interest with the M&O Contractor's functions under this M&O contract. Accordingly, the M&O Contractor shall develop an Organizational Conflict of Interest Mitigation Plan (OCI Plan). The OCI Plan should address OCI issues that arise as a result of the M&O Contractor taking a financial interest in ACT projects, especially in cases where the M&O Contractor retains rights in ACT IP. Said OCI Plan shall be provided to the Contracting Officer for review and approval as soon as practicable after execution of the M&O contract modification incorporating this H-clause into the M&O contract. Unless provided otherwise by the Contracting Officer, no work on ACT agreements may commence before Contracting Officer approval of the OCI Plan. In addition to those elements expressly stated in the OCI Plan, the Department may condition any ACT transaction on such other mitigating conditions it determines are appropriate. The OCI Plan shall, at a minimum, include elements that address the following:

   a. *Full Disclosure*. Before work can begin under an ACT transaction, all parties to ACT agreements must sign a DOE-approved certification that they have been fully informed about the availability of SPP agreements and CRADAs in addition to ACT. The certification at a minimum shall briefly describe SPP agreements, CRADAs and ACT, and will include the relative disposition of IP rights and the costs (including identification of any additional costs e.g. insurance, and other compensation to the M&O Contractor under ACT) for each type of agreement for the scope of work being proposed.

   b. *Priority of Work*. The M&O Contractor shall not give work under ACT any special attention or priority over other work under the DOE M&O contract. Work under ACT shall be approved by the Contracting Officer and assigned the same priority relative to other work under the DOE M&O contract that it would normally have if performed under a non-Federal SPP agreement. The Contracting Officer has discretion to determine the agency's priority of work, considering the M&O Contractor's input.

   c. *Participation by Contractor-related Entity*: Where the M&O Contractor, the M&O Contractor's parent, member, subsidiary, or other entity in which the M&O Contractor, the M&O Contractor's parent, member or subsidiary has an equity interest, is a party to the ACT

agreement, the M&O Contractor shall include as necessary an addendum to the OCI Plan to address special circumstances not fully anticipated in the OCI Plan.

d. *Right of Inquiry for ACT IP Designation.* DOE Patent Counsel may inquire into the M&O Contractor's designation of any invention or data as arising under an ACT transaction. The M&O Contractor is responsible for curing any defect identified in such inquiry, and if the M&O Contractor cannot adequately justify the designation or cure the defect, then the parties to the ACT agreement may receive modified rights in the IP to the degree necessary to resolve the issues identified by the inquiry.

8. *Intellectual Property.* Disposition of intellectual property (IP) arising from work conducted under this H- clause shall be governed by Class Waiver W(C)-2011-013 (ACT Class Waiver) which is incorporated herein by reference.

   a. All Contractor ACT inventions shall be reported to DOE pursuant to the requirements of the [*cite Patent Rights –M&O contract, Nonprofit Organization or Small Business Firm Contractor*] clause of this M&O contract.

   b. In reporting ACT inventions, the M&O Contractor shall identify the ACT agreement under which the invention was made and specify the rights reserved by the Government pursuant to the ACT Class Waiver.

   c. All technical data identified by the ACT client as Protected ACT Information shall also be marked to identify the ACT agreement under which the data was generated.

   d. The M&O Contractor shall ensure that all rights and obligations concerning ACT IP, including the appropriate IP provisions authorized in the ACT Class Waiver, are clearly provided in ACT agreements, and that all parties granted any rights in ACT IP are informed of the terms of the waived rights, including the rights reserved by the Government. Where the M&O Contractor receives ownership or license rights to ACT IP, the M&O Contractor may elect to commercialize the ACT IP consistent with the Technology Transfer Mission clause of this M&O contract.

   e. As an alternative to subparagraph e., if the M&O Contractor has an authorized Private Funded Technology Transfer (PFTT) program, the M&O Contractor may elect to retain private ownership of the ACT IP and commercialize the IP under its applicable PFTT clause, using its private funds, where no costs for developing, patenting, and marketing will be allowable under this M&O contract. The M&O Contractor will share royalties collected on ACT IP with inventors in accordance with paragraph (h) of the Technology Transfer Mission clause of this M&O contract.

   f. For ACT projects in which the terms of the Agreement provide that the Government reserves the right to use generated data after the particular project expires, the M&O Contractor must provide to OSTI computer software produced under the Agreement in both source and executable object code format.

   g. Where terms and conditions governing Data and Subject Inventions under this Contract are inconsistent with the terms of the ACT Class Waiver, the ACT Class Waiver will control.

9. Contractor Liability and Indemnification.

   a. General Indemnity.

i. The M&O Contractor agrees to indemnify and hold harmless the Government, the Department, and persons acting on their behalf from all liability, including costs and expenses incurred, to any person, including the ACT participants, for injury to or death of persons or other living things or injury to or destruction of property arising out of the performance of an ACT transaction by the Government, the Department, the M&O Contractor, or persons acting on their behalf, or arising out of the use of the services performed, materials supplied, or information given hereunder by any person including the M&O Contractor, and not directly resulting from the fault or negligence of the Government, the Department, or persons (other than the M&O Contractor) acting on their behalf.

ii. Subject to Contracting Officer approval, the General Indemnity set forth in (i) above may be modified or waived where: (1) ACT participants are not providing material or equipment to the M&O Contractor to be used in the performance of the Statement of Work under the ACT transaction; and (2) ACT participants are not sending their employees to the M&O facilities as part of the Statement of Work; and (3) the specific activities performed under the ACT transaction are normally performed by the DOE M&O Contractor under the DOE contract.

iii. Notwithstanding the provisions in a (i) and a (ii) above, the M&O Contractor shall indemnify and hold harmless the Government, the Department, and persons acting on their behalf for loss, damage, or destruction of Government property resulting from the fault or negligence of the M&O Contractor. Such indemnification shall be subject to a liability limit of $2,000,000 (two million dollars) per year, or such greater liability limit approved by the cognizant DOE/NNSA Contracting Officer under the DOE contract. Above the applicable liability limit, the M&O Contractor's responsibility to the Government for such loss, damage or destruction, shall be as set forth in the "Property" clause of this contract.

b. *Intellectual Property Indemnity*. The M&O Contractor shall indemnify the Government, its agents, and employees against liability, including costs, for infringement of any United States patent, copyright, or other intellectual property arising out of any acts required or directed to be performed under the Statement of Work under an ACT transaction to the extent such acts are not already performed at the M&O contract facilities. Such indemnity shall not apply to a claimed infringement that is settled without the consent of the M&O Contractor unless required by a court of competent jurisdiction.

c. Product Liability Indemnity.

i. Except for any liability resulting from any negligent acts or omissions of the Government, the M&O Contractor agrees to indemnify the Government for all damages, costs, and expenses, including attorney's 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 ACT participants or the M&O Contractor, their assignees, or licensees, which was derived from the work performed under ACT transactions. With respect to this H-clause, neither the Government nor the M&O Contractor shall be considered assignees or licensees as a result of reserved Government rights in ACT IP. The indemnity set forth in this paragraph shall apply only if the M&O Contractor shall have been informed as soon and as completely as practical by the Government of the action alleging such claim and shall have been given an opportunity, to the maximum extent afforded by applicable laws, rules, or regulations, to participate in and control its defense, and the Government shall have provided all reasonably available information and

reasonable assistance requested by the M&O Contractor. No settlement for which the M&O Contractor would be responsible shall be made without the M&O Contractor's consent, unless required by final decree of a court of competent jurisdiction.

ii. Where the M&O Contractor assigns the responsibility for indemnifying the Government under subparagraph c(i) above to other ACT participants, the M&O Contractor agrees to seek such indemnification from the other ACT participants.

d. *Claims and Liabilities*. Claims and liabilities resulting from the M&O Contractor's performance of work under an ACT transaction authorized pursuant to this H-clause shall not be subject to the M&O contract clause entitled "Insurance -Litigation and Claims." In no event shall the M&O Contractor be reimbursed under the M&O contract for liabilities (and expenses incidental to such liabilities, including litigation costs, counsel fees, and judgment and settlements) incurred as a result of third party claims related to the M&O Contractor's performance under this H-clause.

e. *Government Obligations*. The M&O Contractor shall not include any guarantee or requirement that will obligate the Government to pay or incur any costs or create any liability on behalf of the Government in any ACT agreement or commitment the M&O Contractor executes under authority of this H-clause. The M&O Contractor agrees if the Contractor does include such a guarantee or requirement, it will have no effect on the Government, such that, the M&O Contractor will be responsible for any costs or liability due to such a guarantee or requirement.

f. *Insurance*. Any cost of insurance to cover risks of the M&O Contractor associated with ACT agreements is unallowable under this contract.

10. *ACT Records.* All records associated with the M&O Contractor's activities conducted under the authority of this H-clause, with the exception of information required under paragraphs 3e, 4.b.i, and 13 shall be treated as M&O Contractor-owned records under the provisions of the Access to and Ownership of Records clause of this M&O contract. The Government or its designees shall use such records in accordance with applicable Federal laws (including the Privacy Act), as appropriate.

11. *Termination.* The Government or the M&O Contractor may terminate ACT authority under this contract by providing written notification of termination to the other party (Contracting Officer or the M&O Contractor) as appropriate, no less than 60 days prior to the requested termination date. In such cases, the M&O Contractor shall provide DOE a comprehensive list of active ACT projects. DOE anticipates work commitments under these agreements will be completed regardless of termination. All costs associated with early termination of any ACT agreements prior to the completion shall be the responsibility of the M&O Contractor.

12. *Successor M&O Contractor.* To minimize the potential for negative Government programmatic impact and to facilitate seamless transition of work to a successor M&O Contractor, ACT agreement(s) executed under this H-clause and any contractual instruments associated therewith may be novated to the successor M&O Contractor with the mutual consent of the M&O Contractor, the successor M&O Contractor, and the parties to the affected ACT agreement(s). If the ACT agreement(s) cannot be novated, then the M&O Contractor as a private sponsor shall be permitted to enter into a Non-Federal SPP agreement with the successor M&O Contractor that will enable completion of the statement of work. Such agreements shall be entered into pursuant to DOE SPP policies. DOE shall make good faith efforts to incorporate the terms of the applicable ACT agreement.

13. *Minimum Reporting requirements.* The M&O Contractor shall maintain records of its activities related to ACT in a manner and to the extent satisfactory to DOE and specifically including, but not limited to the number of ACT agreements, the amount of funds reimbursed to DOE for work under ACT and aggregate funding received beyond costs in the performance of ACT, the number of third party entities engaged through ACT that had not previously sponsored projects under the M&O contract and the number that had not previously sponsored projects under any DOE/NNSA M&O contract, the amount of funds reimbursed to DOE by newly engaged entities, the number of parties and types of entities engaged in each individual ACT agreement, and the number of invention disclosures, licenses and startups arising from ACT. The M&O Contractor shall establish performance metric(s) to measure the time required to negotiate ACT agreements in a manner consistent with the time required to negotiate CRADAs and SPPs. The M&O Contractor shall obtain from each entity engaged in ACT the entity's reason(s) for selecting ACT for performance of work under the M&O contract. Also, the M&O Contractor shall report the above identified data annually to the DOE Contracting Officer and in such a format which will serve to adequately inform DOE of the Contractor's activities under ACT while protecting any data not subject to disclosure under this M&O contract. Such records shall be made available in accordance with the clauses of this M&O contract pertaining to inspection, audit and examination of records.

14. *FedACT Pilot.* Under this paragraph the DOE is authorizing a 3-year pilot program for Federally funded ACT (FedACT). FedACT contracts are ACT agreements between the M&O Contractor and a non- Federal third party partner, where a portion of the project funding originates from a Federal agency (i.e., Federal appropriations). In most cases, the industry partner's original source of funds will have been as a result of a contract or financial assistance award from the Federal agency. Any agreement that includes Federal funds must be performed under the FedACT pilot. Federal funds used to support a FedACT project must solely be used to carry out the purposes of the Federal award. FedACT does not include agreements directly funded from another Federal agency. DOE and the M&O Contractor recognize that FedACT is a new mechanism and subject to modifications as more data and experience are realized. During the FedACT pilot either party may suggest changes to the program based on the experiences gained. Furthermore, the M&O Contractor recognizes that the Department may decide to end the FedACT pilot at any time and that termination of the FedACT pilot by the Department will be in accordance with this paragraph. During the FedACT pilot the M&O Contractor is permitted to negotiate and execute such agreements, subject to DOE approval, as described in paragraph 4 above and as set forth herein. The following additional requirements apply:

    a. The M&O Contractor agrees, prior to executing such agreements, to submit to DOE for approval a modified ACT procedure for implementing the execution of FedACT.

    b. If the M&O Contractor is charging the third party additional compensation beyond the full costs of the work performed under the M&O contract, the ACT agreement will not be approved unless DOE or the M&O Contractor obtains a written certification from the Federal agency funding the third party that such additional compensation using Federal funds is permissible under the Federal award. In order to maximize the transparency of the transaction to the funding agency, the written certification shall be in the form of a standard template approved by DOE. Such template shall include at a minimum:

        i. The amount of and explanation for the cost difference between performing the work as an ACT agreement as compared with an SPP or CRADA; and

        ii. A detailed description of the risk and/or consideration offered the participant by the M&O Contractor in exchange for charging beyond full cost recovery. This information shall also be included in the statement of consideration contained in

the ACT proposal package submitted to the Contracting Officer.

c. M&O Contractor may not agree to any terms and conditions of the Federal award that conflict with this M&O contract.

d. Notwithstanding any other provision in this H-clause, rights to ACT inventions and copyrights arising from work conducted under this paragraph made by the M&O Contractor shall be governed by the terms of the Patent and Data Rights clauses of this M&O Contract, as well as any applicable PFTT clause. The ACT Class Waiver does not apply to any ACT agreement funded with Federal funds.

e. DOE's approval to negotiate and execute a FedACT agreement under this paragraph is for the sole purpose of evaluating and considering the M&O Contractor and DOE's processes and procedures for implementing such FedACT agreements and does not in any way provide the Contractor authority beyond the scope of this paragraph or imply that permanent authority shall be forthcoming.

f. Advance payment requirements in Section 5 equally apply to FedACT agreements.

g. All work must be performed at full costs which includes a Federal Administrative Charge (FAC).

Termination. The FedACT Pilot implemented by this H-clause will terminate three years from the date AL 2018-07 is issued, unless renewed by the Contracting Officer. The Government may provide the M&O Contractor with written notice to terminate the M&O Contractor's authority to conduct FedACT.

H-26 PAID LEAVE UNDER SECTION 3610 OF THE CORONAVIRUS AID, RELIEF, AND ECONOMIC SECURITY ACT (CARES ACT) TO MAINTAIN EMPLOYEES AND SUBCONTRACTORS IN A READY STATE. (OCTOBER 2020) (MOD 0072, 0086, 0091, 0094, 0100)

(a) The Contractor may submit for reimbursement and the Government (without requiring consideration but precluding additional fee) will treat as allowable (if otherwise allowable per federal regulations) the costs of paid leave (including sick leave) the Contractor or its subcontractors provide to keep employees in a ready state if—

(1) The employees: cannot perform work on a site approved by the Federal Government (including a federally-owned or leased facility or site) due to facilities closures or other restrictions; and cannot telework because their job duties cannot be performed remotely during the public health emergency declared on January 31, 2020 for COVID–19.

(2) The costs are incurred from March 31, 2021 to September 30, 2021. (Mod 0100)

(3) The costs do not reflect any amount exceeding an average of 40 hours per week for leave.

(b) Where other relief provided for by the CARES Act or any other Act would benefit the contractor or the contractor's subcontractors, including, but not limited to, funds available under sections 1102 and 1106 of the CARES Act, the contractor should evaluate the applicability of such benefits in seeking reimbursement under the contract.

(c) The Contractor must represent in any request for reimbursement-

(1) Either it: has not received, has not claimed, and will not claim any other reimbursement, including claims for reimbursement via letter of credit, for federal funds available under the CARES Act for the same purpose, including, but not limited to, funds available under sections

1102 and 1106 of the CARES Act; or if it has received, claimed, or will claim other reimbursement, that reimbursement has been reflected, or will be reflected when known, in requests for reimbursement but in no case reflected later than in its final proposal to determine allowable incurred costs. Its request reflects or will reflect as soon as known all applicable credits, including

(2) Its request reflects or will reflect as soon as known all applicable credits, including:

(i) Tax credits, including credits allowed pursuant to division G of Public Law 116-127; and

(ii) Applicable credits allowed under the CARES Act including applicable credits for loan guarantees.

H-27 CORONAVIRUS (COVID-19) VACCINE (MOD 0092)

The Contractor, as an authorized COVID-19 Vaccination Program Provider, may administer COVID-19 vaccinations to Contractor employees, federal employees, NNSA support service contractor employees, employees of other DOE management and operating contractors, and/or others, in accordance with work authorization requirements, Inter-Contractor Purchase requirements, and/or other written direction provided by the Contracting Officer or the Contracting Officer Representative. The Contractor shall perform such duties in accordance with Federal and State laws, regulations, and guidelines, including direction from any Authority Having Jurisdiction (as that term is defined by relevant Public Readiness and Emergency Preparedness Act Declarations), applicable Vaccination Program Provider Agreements, and any other applicable COVID-19 immunization direction applicable to the Contractor as a condition of receipt of COVID-19 vaccine doses. (Mod 0092)

(End of Clause)

Section H clauses numbers H-28 thru H-35 are being used for Sub CLIN 0003A 138kV project. Clauses are listed in Appendix O. Specific Section I clauses to 138kV project are also located in Appendix O. (Mod 0109)

H-36 PROHIBITION ON FUNDING FOR CERTAIN NONDISCLOSURE AGREEMENTS (MOD 0104)

The Contractor agrees that:

(a) No cost associated with implementation or enforcement of nondisclosure policies, forms or agreements shall be allowable under this contract if such policies, forms or agreements do not contain the following provisions: “These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to

(1) classified information,

(2) communications to Congress,

(3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or

(4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this agreement and are controlling.”

(b) The limitation above shall not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(c) Notwithstanding the provisions of paragraph (a), a nondisclosure or confidentiality policy form or agreement that is to be executed by a person connected with the conduct of an intelligence or intelligence-related activity, other than an employee or officer of the United States Government, may contain provisions appropriate to the particular activity for which such document is to be used. Such form or agreement shall, at a minimum, require that the person will not disclose any classified information received in the course of such activity unless specifically authorized to do so by the United States Government. Such nondisclosure or confidentiality shall also make it clear that they do not bar disclosures to Congress, or to an authorized official of an executive agency or the Department of Justice, that are essential to reporting a substantial violation of law**.**

(End of Clause) **(Mod 0104)**

H-37 PERSONAL PROTECTIVE EQUIPMENT (PPE) STRATEGIC RESERVE (MOD 0112)

The Contractor shall maintain the Site NNSA Strategic Reserve of critical PPE and cleaning consumables for all onsite federal employees, M&O contractor and subcontractor (if applicable) employees, and routine visitors to support continuity of critical mission work including Primary Mission Essential Functions (PMEFs), Mission Essential Functions (MEFs), and Essential Supporting Activities (ESAs), sufficient to sustain normal operations for a minimum of 120 days or as directed by the Contracting Officer. The Contractor shall provide PPE inventory data into the SAFER-PPE reporting tool monthly or as directed by the Contracting Officer.

(End of Clause) (Mod 0112)

PART II – CONTRACT CLAUSES
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CONTRACT CLAUSES
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SECTION I: CONTRACT CLAUSES

Notice: Clauses incorporated by reference.

A. FAR CLAUSES INCORPORATED BY REFERENCE (Mod 0008, 0009, 0014, 0022, 0033, 0037, 0044, 0052, 0056, 0060, 0069, 0076, 0080, 0085, 0099, 0120, 0142, 0144, 0175, 0180, 0181)

The references cited herein are from the Federal Acquisition Regulation (FAR) (48 CFR Chapter 1). The following FAR clauses are hereby incorporated by reference:

FAR NUMBER	CLAUSE TITLE *(Any insertions appear below the title in italics)*	DATE OF CLAUSE
52.203-3	Gratuities	Apr 1984
52.203-5	Covenant Against Contingent Fees	May 2014
52.203-6	Restrictions on Subcontractor Sales to the Government	Jun 2020 (Mod 0085)
52.203-7	Anti-Kickback Procedures	Jun 2020 (Mod 0085)
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	May 2014
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity	May 2014
52.203-12	Limitation on Payments to Influence Certain Federal Transactions	Jun 2020 (Mod 0085)
52.203-13	Contractor Code of Business Ethics and Conduct	Nov 2021 (Mod 0144)
52.203-14	Display of Hotline Poster(s) *(b)(3) Required poster is: 'DOE Hotline Poster* http://energy.gov/ig/downloads/office-inspector-general-hotline-poster'	Nov 2021 (Mod 0144)
52.203-16	Preventing Personal Conflicts of Interest	Jun 2020 (Mod 0022, 0085, 0144)
52.203-17	Contractor Employee Whistleblower Rights and Requirements to Inform Employees of Whistleblower Rights	Jun 2020 (Mod 0085)
52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements	Jan 2017 (Mod 0008)
52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper	May 2011
52.204-9	Personal Identity Verification of Contractor Personnel	Jan 2011
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards	Jun 2020 (Mod 0052,0085)

FAR NUMBER	CLAUSE TITLE *(Any insertions appear below the title in italics)*	DATE OF CLAUSE
52.204-13	System for Award Management Maintenance	Oct 2018 (Mod 0069)
52.209-6	Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment	Nov 2021 (Mod 0144)
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters	Oct 2018 (Mod 0069)
52.209-10	Prohibition on Contracting With Inverted Domestic Corporations	Nov 2015
52.210-1	Market Research	Nov 2021 (Mod 0144)
52.211-5	Material Requirements	Aug 2000
52.211-15	Defense Priority and Allocation Requirements	Apr 2008 (Mod 0069)
52.215-2	Audit and Records -- Negotiation	Jun 2020 (Mod 0085)
52.215-8	Order of Precedence -- Uniform Contract Format	Oct 1997
52.215-12	Subcontractor Certified Cost or Pricing Data	Jun 2020 (Mod 0085)
52.215-13	Subcontractor Certified Cost or Pricing Data -- Modifications	Jun 2020 (Mod 0085)
52.215-15	Pension Adjustments and Asset Reversions	Oct 2010
52.215-17	Waiver of Facilities Capital Cost of Money	Oct 1997
52.215-19	Notification of Ownership Changes	Oct 1997
52.215-22	Limitations on Pass-Through Charges—Identification of Subcontract Effort	Oct 2009
52.215-23	Limitations on Pass-Through Charges	Jun 2020 (Mod 0085)
52.219-9	Small Business Subcontracting Plan, *Alt II (Nov 2016)*	Oct 2022 (Mod 0144, 0168)
52.219-16	Liquidated Damages -- Subcontracting Plan	Sep 2021 (Mod 0120)
52.222-1	Notice to the Government of Labor Disputes	Feb 1997
52.222-2	Payment for Overtime Premiums (a) "4%, as a percentage of payroll"	Jul 1990 (Mod 0181)
52.222-3	Convict Labor	Jun 2003
52.222-4	Contract Work Hours and Safety Standards Act -- Overtime Compensation	May 2018 (Mod 0037)

FAR NUMBER	CLAUSE TITLE *(Any insertions appear below the title in italics)*	DATE OF CLAUSE
52.222-6	Construction Wage Rate Requirements	Aug 2018 (Mod 0069)
52.222-7	Withholding of Funds	May 2014 (Mod 0181)
52.222-8	Payrolls and Basic Records	Jul 2021 (Mod 0181)
52.222-9	Apprentices and Trainees	Jul 2005 (Mod 0181)
52.222-10	Compliance with Copeland Act Requirements	Feb 1988 (Mod 0181)
52.222-11	Subcontracts (Labor Standards)	May 2014 (Mod 0181)
52.222-12	Contract Termination-Debarment	May 2014 (Mod 0181)
52.222-13	Compliance with Construction Wage Rate Requirements and Related Regulations	May 2014 (Mod 0181)
52.222-14	Disputes Concerning Labor Standards	Feb 1988 (Mod 0181)
52.222-15	Certification of Eligibility	May 2014 (Mod 0181)
52.222-16	Approval of Wage Rates	May 2014 (Mod 0181)
52.222-17	RESERVED	(Mod 0144)
52.222-21	Prohibition of Segregated Facilities	Apr 2015
52.222-26	Equal Opportunity	Sept 2016
52.222-27	Affirmative Action Compliance Requirements for Construction	Apr 2015 (Mod 0181)
52.222-29	Notification of Visa Denial	Apr 2015
52.222-30	Construction Wage Rate Requirements-Price Adjustment (None of Separately Specified Method)	Aug 2018 (Mod 0181)
52.222-35	Equal Opportunity for Veterans	Jun 2020 (Mod 0085)
52.222-36	Equal Opportunity for Workers With Disabilities	Jun 2020 (Mod 0085)
52.222-37	Employment Reports on Veterans	Jun 2020 (Mod 0085)
52.222-40	Notification of Employee Rights Under the National Labor Relations Act	Dec 2010

FAR NUMBER	CLAUSE TITLE *(Any insertions appear below the title in italics)*	DATE OF CLAUSE
52.222-50	Combating Trafficking in Persons	Nov 2021 (Mod 0144)
52.222-54	Employment Eligibility Verification	May 2022 (Mod 0144)
52.222-55	Minimum Wages for Contractor Workers Under Executive Order 14026	Jan 2022 (Mod 0144)
52.222-62	Paid Sick Leave Under Executive Order 13706	Jan 2022 (Mod 0181)
52.223-2	Affirmative Procurement of Biobased Products Under Service And Construction FAR Contracts	Sep 2013
52.223-3	Hazardous Material Identification and Material Safety Data, Alternate I (Jul 1995) *(b) Nothing identified to date.*	Feb 2021 (Mod 0144)
52.223-5	Pollution Prevention and Right-to-Know Information, Alternate I (May 2011) – Alternate II (May 2011)	May 2011 (Mod 0008)
52.223-6	Drug Free Workplace	May 2001
52.223-7	Notice of Radioactive Materials "*in writing, thirty (30)* days*	Jan 1997 (Mod 0008)
52.223-10	Waste Reduction Program	May 2011
52.223-12	Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners	Jun 2016
52.223-13	Acquisition of EPEAT® -Registered Imaging Equipment, (June 2014) Alt I (Oct 2015)	Jun 2014 (Mod 0008)
52.223-14	Acquisition of EPEAT® -Registered Televisions	Jun 2014 (Mod 0008)
52.223-15	Energy Efficiency in Energy-Consuming Products	May 2020 (Mod 0085)
52.223-16	Acquisition of EPEAT® -Registered Personal Computer Products Alt I (Jun 2014)	Oct 2015
52.223-17	Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts	Aug 2018 (Mod 0052)
52.223-18	Encouraging Contractor Policies to Ban Text Messaging While Driving	Jun 2020 (Mod 0085)
52.223-19	Compliance With Environmental Management Systems	May 2011
52.224-1	Privacy Act Notification	Apr 1984
52.224-2	Privacy Act	Apr 1984
52.224-3	Privacy Training	Jan 2017 (Mod 0008)
52.225-1	Buy American-Supplies	Oct 2022 (Mod 0144, 0168)

FAR NUMBER	CLAUSE TITLE *(Any insertions appear below the title in italics)*	DATE OF CLAUSE
52.225-8	Duty-Free Entry	Oct 2010
52.225-13	Restriction on Certain Foreign Purchases	Feb 2021 (Mod 0144)
52.227-10	Filing of Patent Applications -- Classified Subject Matter	Dec 2007
52.227-23	Rights to Proposal Data (Technical)	Jun 1987
52.229-8	Taxes -- Foreign Cost-Reimbursement Contracts *(a) Name of foreign government is 'the foreign country(ies) referenced in the applicable Work Authorization or as specified by the Contracting Officer'. Name of country is 'exempt under the laws of 'the Country(ies) referenced in the applicable Work Authorization or as specified by the Contracting Officer'.*	Mar 1990
52.230-2	Cost Accounting Standards	Jun 2020 (Mod 0085)
52.230-6	Administration of Cost Accounting Standards	Jun 2010
52.232-17	Interest	May 2014
52.232-18	Availability of Funds	Apr 1984
52.232-24	Prohibition of Assignment of Claims	May 2014
52.232-39	Unenforceability of Unauthorized Obligations	Jun 2013 (Mod 0008)
52.232-40	Providing Accelerated Payments to Small Business Subcontractors	Mar 2023 (Mod 0144, 0180)
52.233-1	Disputes, Alternate I (Dec 1991)	May 2014
52.233-3	Protest After Award, Alternate I (Jun 1985)	Aug 1996
52.233-4	Applicable Law for Breach of Contract Claim	Oct 2004
52.234-4	Earned Value Management System	Nov 2016 (Mod 0009)
52.237-2	Protection of Government Buildings, Equipment, and Vegetation	Apr 1984
52.237-3	Continuity of Services	Jan 1991
52.242-1	Notice of Intent to Disallow Costs	Apr 1984
52.242-3	Penalties for Unallowable Costs	Sep 2021 (Mod 0142)
52.242-5	Payments to Small Business Subcontractors	Jan 2017 (Mod 0008)
52.242-13	Bankruptcy	Jul 1995
52.244-2	Subcontracts, Alternate I (Jun 2007)	Jun 2020 (Mod 0085)

FAR NUMBER	CLAUSE TITLE *(Any insertions appear below the title in italics)*	DATE OF CLAUSE
52.244-5	Competition in Subcontracting	Dec 1996
52.244-6	Subcontracts for Commercial Products and Commercial Services	Mar 2023 (Mod 0144, 0168, 0175, 0180)
52.246-26	Reporting Nonconforming Items	Nov 2021 (Mod 0144)
52.247-1	Commercial Bill of Lading Notations *(a) Specific agency is 'U.S. Department of Energy, National Nuclear Security Administration'.* *(b) Specific agency is 'U.S. Department of Energy, National Nuclear Security Administration'. Contract No. is 'DE-NA0003624. Contact is 'the Contracting Officer'.*	Feb 2006
52.247-63	Preference for U.S.-Flag Air Carriers	Jun 2003
52.247-64	Preference for Privately Owned U.S.-Flag Commercial Vessels	Nov 2021 (Mod 0144)
52.249-6	Termination (Cost-Reimbursement)	May 2004
52.249-14	Excusable Delays	Apr 1984
52.250-1	Indemnification Under Public Law 85-804, (Apr 1984) Alternate I (Apr 1984)	Apr 1984 (Mod 0008)
52.251-1	Government Supply Sources	Apr 2012
52.251-2	Interagency Fleet Management System Vehicles and Related Services	Jan 1991
52.253-1	Computer Generated Forms	Jan 1991

B. DEAR CLAUSES INCORPORATED BY REFERENCE (MOD 0007, 0052, 0069)

The references cited herein are from the U.S. Department of Energy Acquisition Regulation (DEAR) (48 CFR Chapter 9). The following DEAR clauses are hereby incorporated by reference:

DEAR NUMBER	CLAUSE TITLE *(Any insertions appear below the title in italics)*	DATE OF CLAUSE
952.203-70	Whistleblower Protection for Contractor Employees	Dec 2000
952.204-70	Classification/Declassification	Sep 1997
952.204-71	Sensitive Foreign Nations Controls	Mar 2011
952.204-75	Public Affairs	Dec 2000
952.204-77	Computer Security	Aug 2006
952.208-7	Tagging of Leased Vehicles	Apr 1984
952.209-72	Organizational Conflicts of Interest, Alternate I *(b)(1)(i) Period is 'five (5) years'.*	Aug 2009
952.211-71	Priorities and Allocations (ATOMIC ENERGY) Contract rated as DO-E2 (Mod 0069)	Apr 2008
952.215-70	Key Personnel *(a) Cross-reference is 'Section J, Appendix H.'*	Dec 2000
952.217-70	Acquisition of Real Property	Mar 2011
952.223-75	Preservation of Individual Occupational Radiation Exposure Records	Apr 1984
952.226-74	Displaced Employee Hiring Preference	Jun 1997
952.235-71	Research Misconduct	Jul 2005
952.242-70	Technical Direction	Dec 2000
952.247-70	Foreign Travel	Jun 2010
952.251-70	Contractor Employee Travel Discounts	Aug 2009
970.5203-2	Performance Improvement and Collaboration	May 2006
970.5204-1	Counterintelligence	Dec 2010
970.5204-3	Access to and Ownership of Records (DEVIATION) *Paragraph (b): All of the categories (1) - (5) of records are included in the clause.*	Oct 2014
970.5208-1	Printing	Dec 2000
970.5211-1	Work Authorization	May 2007
970.5217-1	Strategic Partnership Projects Program	Apr 2015
970.5222-1	Collective Bargaining Agreements-Management and Operating Contracts	Dec 2000

DEAR NUMBER	CLAUSE TITLE *(Any insertions appear below the title in italics)*	DATE OF CLAUSE
970.5222-2	Overtime Management	Dec 2000
970.5223-1	Integration of Environment, Safety, and Health into Work Planning and Execution	Dec 2000
970.5223-4	Workplace Substance Abuse Programs at DOE Sites	Dec 2010
970.5223-6	Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management	Oct 2010
970.5223-7	Sustainable Acquisition Program	Oct 2010
970.5225-1	Compliance with Export Control Laws and Regulations	Nov 2015
970.5226-1	Diversity Plan	Dec 2000
970.5226-2	Workforce Restructuring Under Section 3161 of the National Defense Authorization Act for Fiscal Year 1993	Dec 2000
970.5226-3	Community Commitment	Dec 2000
970.5227-6	Patent Indemnity-Subcontracts	Dec 2000
970.5227-8	Refund of Royalties	Aug 2002
970.5228-1	Insurance-Litigation and Claims	Jul 2013
970.5229-1	State and Local Taxes	Dec 2000
970.5231-4	Preexisting Conditions, Alternate II (DEC 2000) *(a) Date contract began is "December 1, 2017".* (Mod 0007)	Dec 2000
970.5232-1	Reduction or Suspension of Advance, Partial, or Progress Payments	Dec 2000
970.5232-4	Obligation of Funds	Dec 2000
970.5232-5	Liability with Respect to Cost Accounting Standards	Dec 2000
970.5232-6	Strategic Partnership Project Funding Authorization	Apr 2015
970.5236-1	Government Facility Subcontract Approval	Dec 2000
970.5243-1	Changes	Dec 2000
970.5245-1	Property	Aug 2016

C. FAR AND DEAR CLAUSES INCORPORATED IN FULL TEXT

I-1 FAR 52.202-1 DEFINITIONS (JUN 2020) (AS MODIFIED BY DEAR952.202-1) (MOD 0076, 0175)

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).

(End of clause)

I-1A FAR 52.204-21 BASIC SAFEGUARDING OF COVERED CONTRACTOR INFORMATION SYSTEMS (NOV 2021) (MOD 0052, 0151)

(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 websites) 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

(End of clause) (Mod 0151)

I-1B FAR 52.204-25 PROHIBITION ON CONTRACTING FOR CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (NOV 2021) (MOD 0056, 0085, 0151)

(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.

(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

(End of clause) (Mod 0151)

I-2 RESERVED (MOD 0180)

I-3 MOD 0142 DELETED I-3

I-4 MOD 0175 DELETED I-4

I-4A FAR 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000) (MOD 0175)

(a) The Government may extend the term of this contract by written notice to the Contractor within 30 days of contract expiration; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

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

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 10 years.

I-4B 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2022) (DOE & NNSA CLASS DEVIATION (1-3-2023)) (MOD 0175)

(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 124.1002, means a small business concern under the size standard applicable to the acquisition, that-

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

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

(ii) Each individual claiming economic disadvantage has a net worth not exceeding ~~$750,000~~ [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, 124.1015, 125.29, 126.900, and 127.700, a contractor acting in good faith is not liable for misrepresentations made by its subcontractors regarding the subcontractor's size or socioeconomic status.

(5) The Contractor shall confirm that a subcontractor representing itself as a HUBZone small business concern is certified by SBA as a HUBZone small business concern by accessing 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.

(End of clause)

I-5 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 postconsumer material content; and

(2) Submit this estimate to the Contracting Officer.

I-6 FAR 52.223-11 OZONE-DEPLETING SUBSTANCES AND HIGH GLOBAL WARMING POTENTIAL HYDROFLUOROCARBONS (JUN 2016)

(a) Definition. 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 that 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 at40 CFR part 82 subpart G with supplemental tables available at http://www.epa.gov/snap.

(End of clause)

I-7 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.

I-7A RESERVED (0190)

I-8 FAR 52.225-9 BUY AMERICAN–CONSTRUCTION MATERIALS (OCT 2022) (MOD 0168)

(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 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	Prices (dollars)*
Item 1:			
Foreign construction material			
Domestic construction material			
Item 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.*]			

I-9 MOD 0076 DELETED I-9

I-9A FAR 52.229-10 STATE OF NEW MEXICO GROSS RECEIPTS AND COMPENSATING TAX (APR 2003) (AS MODIFIED BY DEAR 970.2904-1(A)) (MOD 0076)

(a) Within thirty (30) days after award of this contract, the Contractor shall advise the State of New Mexico of this contract by registering with the State of New Mexico, Taxation and Revenue Department, Revenue Division, pursuant to the Tax Administration Act of the State of New Mexico and shall identify the contract number.

(b) The Contractor shall pay the New Mexico gross receipts taxes, pursuant to the Gross Receipts and Compensating Tax Act of New Mexico, assessed against the contract fee and costs paid for performance of this contract, or of any part or portion thereof, within the State of New Mexico. The allowability of any gross receipts taxes or local option taxes lawfully paid to the State of New Mexico by the Contractor or its subcontractors will be determined in accordance with the Payments and Advances clause of this contract except as provided in paragraph (d) of this clause.

(c) The Contractor shall submit applications for Nontaxable Transaction Certificates, Form CSR-3C, to the:

State of New Mexico Taxation and Revenue Dept.
Revenue Division
PO Box 630
Santa Fe, New Mexico 87509

When the Type 15 Nontaxable Transaction Certificate is issued by the Revenue Division, the Contractor shall use these certificates strictly in accordance with this contract, and the agreement between the U.S. Department of Energy and the New Mexico Taxation and Revenue Department.

(d) The Contractor shall provide Type 15 Nontaxable Transaction Certificates to each vendor in New Mexico selling tangible personal property to the Contractor for use in the performance of this contract. Failure to provide a Type 15 Nontaxable Transaction Certificate to vendors will result in the vendor's liability for the gross receipt taxes and those taxes, which are then passed on to the Contractor, shall not be reimbursable as an allowable cost by the Government.

(e) The Contractor shall pay the New Mexico compensating user tax for any tangible personal property which is purchased pursuant to a Nontaxable Transaction Certificate if such property is not used for Federal purposes.

(f) Out-of-state purchase of tangible personal property by the Contractor which would be otherwise subject to compensation tax shall be governed by the principles of this clause. Accordingly, compensating tax shall be due from the contractor only if such property is not used for Federal purposes.

(g) The U.S. Department of Energy may receive information regarding the Contractor from the Revenue Division of the New Mexico Taxation and Revenue Department and, at the discretion of the U.S. Department of Energy, may participate in any matters or proceedings pertaining to this clause or the above-mentioned Agreement. This shall not preclude the Contractor from having its own representative nor does it obligate the U.S. Department of Energy to represent its Contractor.

(h) The Contractor agrees to insert the substance of this clause, including this paragraph (h), in each subcontract which meets the criteria in 29.401-4(b)(1) through (3) of the Federal Acquisition Regulation, 48 CFR Part 29.

(i) Paragraphs (a) through (h) of this clause shall be null and void should the Agreement referred to in paragraph (c) of this clause be terminated; provided, however, that such termination shall not nullify obligations already incurred prior to the date of termination.

I-9B FAR 52.232-40 PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS (DEC 2013) (DEVIATION APR 2020) (MOD 0076)

(a)

(1) In accordance with 31 U.S.C. 3903 and 10 U.S.C. 2307, upon receipt of accelerated payments from the Government, the Contractor shall make accelerated payments to its small business subcontractors under this contract in accordance with the accelerated payment date established, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable contract or subcontract, with a goal of 15 days after receipt of a proper invoice and all other required documentation from the small business subcontractor. **(Mod 0076)**

(2) The Contractor agrees to make such payments to its small business subcontractors without any further consideration from or fees charged to the subcontractor. **(Mod 0076)**

(b) The acceleration of payments under this clause does not provide any new rights under the Prompt Payment Act. **(Mod 0076)**

(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 items. **(Mod 0076)**

(End of clause)

I-9C FAR 52.242-4 CERTIFICATION OF FINAL INDIRECT COSTS (JAN 1997) (MOD 0142)

(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: _____

(End of clause)

I-10 FAR 52.247-67 SUBMISSION OF TRANSPORTATION DOCUMENTS FOR AUDIT (FEB 2006)

(a) The Contractor shall submit to the address identified below, for prepayment audit, transportation documents on which the United States will assume freight charges that were paid –

(1) By the Contractor under a cost-reimbursement contract; and

(2) By a first-tier subcontractor under a cost-reimbursement subcontract thereunder.

(b) Cost-reimbursement Contractors shall only submit for audit those bills of lading with freight shipment charges exceeding $100. Bills under $100 shall be retained on-site by the Contractor and made available for on-site audits. This exception only applies to freight shipment bills and is not intended to apply to bills and invoices for any other transportation services.

(c) Contractors shall submit the above referenced transportation documents to—**the Contracting Officer.**

I-11 FAR 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

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

Federal Acquisition Regulations	*http://farsite.hill.af.mil/vffara. htm or https://www.acquisition.gov/far/index.html*
Federal Acquisition Forms	*http://www.gsa.gov/forms/farnumer.htm*
Department of Energy Acquisition Regulations	*http://energy.gov/management/downloads/searchable-electronic-department- energy-acquisition-regulation* *http://farsite.hill.af.mil/vfdoea. htm* *http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=ccc3d607ed1811c91460147ec7521076&mc=true & r=PART&n=pt48.5.952* *or*

	http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=ccc3d607ed1811c91460147ec7521076&mc=true&r=PART&n=pt48.5.970

I-12 FAR 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (NOV 2020) (MOD 0175)

(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 _____ [insert regulation name] (48 CFR _____) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

I-13 DEAR 952.204-2 SECURITY (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 theContractor 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 sourcematerial.

(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 applicableto 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 orregulation 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.

(End of clause)

[74 FR 23124, May 18, 2009, as amended at 74 FR 36368, 36370, July 22, 2009; 76 FR 7694, Feb. 11, 2011; 81 FR 45978, July 15, 2016]

I-14 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.

Effective date

( ) See note II below for instructions related to this section on Effective Date.

Relationship to general indemnity

( ) See note III below for instructions related to this section on Relationship to General Indemnity.

(End of clause)

Note I

Paragraph (i) of the clause will be replaced with "Reserved" in contracts specifically exempted from civil penalties by section 234 of the Act. That subsection provides that the following DOE contractors are not subject to the assessment of civil penalties:

(1) The University of Chicago (and any subcontractors or suppliers thereto) for activities associated with Argonne National Laboratory;

(2) The University of California (and any subcontractors or suppliers thereto) for activities associated with Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and Lawrence Berkeley National Laboratory;

(3) American Telephone and Telegraph Company and its subsidiaries (and any subcontractors or suppliers thereto) for activities associated with Sandia National Laboratories;

(4) Universities Research Association, Inc. (and any subcontractors or suppliers thereto) for activities associated with FERMI National Laboratory:

(5) Princeton University (and any subcontractor or suppliers thereto) for activities associated with Princeton Plasma Physics Laboratory;

(6) The Associated Universities, Inc. (and any subcontractors or suppliers thereto) for activities associated with the Brookhaven National Laboratory; and

(7) Battelle Memorial Institute (and any subcontractors or suppliers thereto) for activities associated with Pacific Northwest Laboratory.

(End of Note)

Note II

Contracts with an effective date after the date of June 12, 1996, do not require the effective date provision in this clause. Delete the title.

Use the EFFECTIVE DATE title and the following language, for those contracts:

"( ) This indemnity agreement shall be applicable with respect to nuclear incidents occurring on or after."

(1) Those that contained an indemnity pursuant to Public Law 85-840 prior to August 20, 1988, include the effective date provision above, inserting the effective date of the contract modification that replaced the Public Law 85-804 indemnity with an interim Price-Anderson based indemnity. Pursuant to the Price-Anderson Amendments Act, this substitution must have taken place by February 20, 1989.

(2) Those that contained, and continue to contain, either of the previous Nuclear Hazards Indemnity clauses, include the effective date provision above, inserting "August 20, 1988."

(3) Those with an effective date between August 20, 1988, and the date of the Final Rule, that (a) had "interim coverage" or (b) did not have "interim coverage" but have now been determined to be covered under the PAAA, include the effective date provision above, inserting the contract effective date.

Note III

The following alternate will be added to the above Nuclear Hazards Indemnity Agreement clause for all contracts that contain a general authority indemnity pursuant to 950.7101. Caution: Be aware that for contracts that will have this provision added which do not contain an effective date provision, this paragraph shall be marked (1). In the event an Effective Date provision has been included, it shall be market (m).

"( ) To the extent that the Contractor is compensated by any financial protection, or is indemnified pursuant to this clause, or is effectively relieved of public liability by an order or orders limiting same, pursuant to 170e of the Act, the provisions of the clause providing general authority indemnity shall not apply."

(End of note)

[56 FR 57828, Nov. 14, 1991, as amended at 58 FR 32307, June 9, 1993; 61 FR 21977, May 13, 1996; 61 FR 30823, June 18, 1996; 67 FR 14872, Mar. 28, 2002; 74 FR 36370, 36378, July 22, 2009; 75 FR 29459, May 26, 2010; 81 FR 45978, July 15, 2016]

I-14A DEAR 970.5203-1 MANAGEMENT CONTROLS (OCT 2021) (MOD 0142)

(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 CFR970.5232-3, 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.

(End of clause)

I-15 DEAR 970.5203-3 CONTRACTOR'S ORGANIZATION (DEC 2000) (CLASS DEVIATION)

(a) Organization chart. As promptly as possible after the execution of this contract, the Contractor shall furnish to the Contracting Officer

(1) 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*; and,*

(2) *a chart showing the name and organization of the Contractor's Parent Organization's responsible official for administering the Contractor's Parent Organization's Oversight Plan, 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. *For purposes of this contract, the Site Manager is the resident supervisory representative of the contractor.*

(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 Administrator of the NNSA or* 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. *Furthermore, nothing contained in this paragraph (c) shall in any way impair the statutory or contractual collective bargaining rights of union-represented contractor employees.*

(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.

(e) Nothing in this clause or its implementation is intended to conflict with 42 U.S.C. §7274p, or to otherwise affect the scientific integrity of persons required to provide independent technical judgments to provide the President or the Congress assurances on the safety, security, reliability, or effectiveness of the US nuclear weapons stockpile.

I-16 DEAR 970.5204-2 LAWS, REGULATIONS, AND DOE DIRECTIVES (DEC 2000) (CLASS DEVIATION)

(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.

(b) In performing work under this contract, the Contractor shall comply with the requirements of those Department of Energy directives, or parts thereof, *and National Nuclear Security Administration Policy Letters* identified in the *contract's Section J Appendix entitled "*List of Applicable Directives*" (the List)*. Except as otherwise provided for in paragraph (d) of this clause, the Contracting Officer may, from time to time and at any time, revise *the* List by unilateral modification to the contract to add, modify, or delete specific requirements. Prior to revising *the* List, the Contracting Officer shall notify the Contractor in writing of the Department's intent to revise *the* List 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 *the* List and so advise the Contractor not later than 30 days prior to the effective date of the revision of *the* List. The Contractor and the Contracting Officer shall identify and, if appropriate, agree to any changes to other contract terms and conditions, including cost and schedule, associated with the revision of *the* List *and fee may be adjusted* pursuant to the clause of this contract entitled, "Changes."

(c) Environmental, safety, and health (ES&H) requirements appropriate for work conducted under this contract may be determined by a DOE approved process to evaluate the work and the associated hazards and identify an appropriately tailored set of standards, practices, and controls, such as a tailoring process included in a DOE approved Safety Management System implemented under the clause entitled "Integration of Environment, Safety, and Health into Work Planning and Execution." When such a process is used, the set of tailored (ES&H) requirements, as approved by DOE pursuant to the process, shall be incorporated into *the* List as contract requirements with full force and effect. These requirements shall supersede, in whole or in part, the contractual environmental, safety, and health requirements previously made applicable to the contract by *the* List. If the tailored set of requirements identifies an alternative requirement varying from an ES&H requirement of an applicable law or regulation, the Contractor shall request an exemption or other appropriate regulatory relief specified in the regulation.

(d) Except as otherwise directed by the Contracting Officer, the Contractor shall procure all necessary permits or licenses required for the performance of work under this contract.

(e) 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.

I-17 DEAR 970.5215-3 CONDITIONAL PAYMENT OF FEE, PROFIT, AND OTHER INCENTIVES—FACILITY MANAGEMENT CONTRACTS (AUG 2019) (NNSA CLASS DEVIATION) (MOD 0069)

Definition of Earned Fee.

For the purposes of this clause, “Earned Fee” means the sum total of all incentive fees, award fees, fixed fees, and share of cost savings earned by the contractor during a performance evaluation period, as determined by the contracting officer or fee determining official (as appropriate). In the NNSA, the Fee Determining Official (FDO) is the Administrator, unless otherwise delegated. Where the contract provides for financial incentives that extend beyond a single performance 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 performance evaluation period. The allocable amount shall be the total amount of the earned fee divided by the number of evaluation periods over which it was earned.

General.

ES&H means “Environment, safety and health.” The purpose of accident investigations is to identify and understand causes so deficiencies can be addressed and corrected. This, in turn, is intended to promote improved environmental protections, safety, and health of DOE employees, contractors, and the general public. Facility management contracts are management and operating (M&O) contracts, as defined at 48 CFR subpart 17.6.

(1) The payment of any Earned Fee 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), including performance under an approved Safety Management System (SMS); 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) If the contractor does not meet the performance requirements or terms and conditions of this contract relating to ES&H or related to safeguarding of Restricted Data and other classified information during any performance evaluation period, the contracting officer may unilaterally reduce Earned Fee.

(3) The ES&H performance requirements of this contract are set forth in its ES&H terms and conditions, including the DOE approved contractor SMS or similar document. Financial incentives for timely mission accomplishment or cost effectiveness shall never compromise or impede full and effective implementation of the SMS and full ES&H compliance.

(4) The performance requirements of this contract are related to the safeguarding of Restricted Data and other classified information as set forth in the clauses of this contract, entitled DEAR 952.204-2 SECURITY (AUG 2016), "SECURITY," or its successor, and DEAR 970.5204-2 (DEC 2000) (CLASS DEVIATION), *"Laws, Regulations, and DOE Directives,"* or its successor, as well as in other terms and conditions.

(c) *Reduction amount*.

(1) The amount of Earned Fee that may be unilaterally reduced is correlated to the severity of the performance failure.

(i) Level 1 performance failure: not less than 26% nor greater than 100%;

(ii) Level 2 performance failure: not less than 11% nor greater than 25%; and

(iii) Level 3 performance failure: not greater than 10%.

(d) *Mitigating Factors*

(1) 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.

(2) The mitigating factors include, but are not limited to, the following:

(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.

(e) *Effect of Reduction.*

(1) The Government will effect Earned Fee reductions as soon as practical. If the effective date of the reduction falls after the completion of the fee determination for the evaluation period during which the performance failure occurred, the Government will effect the reduction during a subsequent evaluation period, by issuing a demand for payment or by reducing any Earned Fee, at the contracting officer's sole discretion. If the performance failure occurs during the last evaluation period before termination or completion of the contract, reduction will be effected as soon as practical during contract close-out.

(2) 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 Earned Fee.

(f) Environment, Safety and Health (ES&H). Performance failures occur if the Contractor does not comply with the contract's ES&H requirements, standards, terms or conditions (including the DOE/NNSA approved Contractor SMS). The levels of performance failure under which reductions of earned fee are:

(1) *Level 1:* Performance failures that are most adverse to ES&H. Examples of Level 1 performance failures include, but are not limited to:

(i) Failure to develop and maintain required DOE/NNSA approval of an SMS;

(ii) Any action/event that is considered an "Accident" for which an Accident Investigation Board (AIB) is appointed pursuant to DOE Order 225.1B, Accident Investigations, or its successor. Accidents also include those investigated by Joint Accident Investigation Boards (JAIB), in which federal and M&O staff members team up to investigate the incident.;

(iii) A combination of two, Level 2 performance failures that are significantly adverse to ES&H occurring during the same evaluation period; and

(iv) Contractor actions that result in a breakdown of the safeguards and security management system (SMS), that resulted in great harm to the environmental, safety and health of the general public.

(2) *Level 2:* Performance failures that are significantly adverse to ES&H. Examples of Level 2 performance failures include, but are not limited to:

(i) Any action/event that nearly results in an "Accident" for which an AIB is appointed pursuant to DOE Order 225.1B, Accident Investigations, or its successor;

(ii) A failure to comply with an approved SMS that results in injury, exposure, or exceedance;

(iii) Failure to notify DOE/NNSA (e.g., NNSA Field Office Manager or other authorized official)

of an imminent danger situation after discovery, where such notification is a requirement of the contract;

(v) Failure to mitigate a dangerous situation that could cause an Accident; and

(vi) Contractor actions that result in a breakdown of the SMS that resulted in serious harm to the environmental, safety and health of the general public.

(3) *Level 3:* Performance failures that reflect a lack of focus on maintaining or improving ES&H. Examples of Level 3 performance failures include, but are not limited to:

(i) Failure to implement effective corrective actions to address deficiencies/noncompliances documented through: external or internal oversight (e.g., reported per DOE Order 231.1B, Environment, Safety and Health Reporting, or its successor, requirements; DOE Order 232.2A, Occurrence Reporting and Processing of Operations Information, or its successor; of DOE Order 440.1B, Worker Protection Program for DOE/NNSA (including the National Nuclear Security Administration) Federal Employees), or its successor, requirements;

(ii) Multiple similar non-compliances identified with ES&H by external oversight that in aggregate indicate a significant programmatic breakdown;

(iii) Non-compliance with ES&H requirements, standards, terms or conditions 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/NNSA, as appropriate, upon discovery of events or conditions where notification is required by the terms and conditions of the contract; and

(v) Contractor actions that result in a breakdown of the SMS that resulted in harm to the environmental, safety and health of the general public.

(g) *Safeguarding Restricted Data and/or 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/or other classified information. The levels of performance failure under which reductions of earned fee will be determined as follows:

(1) *Level 1:* Performance failure to comply with applicable law, DOE regulation, or directive, that has resulted in, or that can reasonably be expected to result in, exceptionally grave damage to the national security. Examples of Level 1 performance failures include, but are not limited to:

(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 information in a Special Access Program (SAP) (regardless of classification level), 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 information in a SAP (regardless of classification level), 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 information in a SAP (regardless of classification level), information identified as SCI, or high-risk nuclear weapons-related data; and

(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 information in a SAP (regardless of classification level), information identified as SCI, or high-risk nuclear weapons-related data.

(2) *Level 2:* Performance failure to comply with applicable law, DOE regulation, or directive, that has resulted in, or that can reasonably be expected to result in, serious damage to the national security. Examples of Level 2 performance failures include, but are not limited to:

(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 (g)(1)(iii) of this clause); and

(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) *Level 3:* Performance failure 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. Examples of Level 3 performance failures include, but are not limited to:

(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; and

(v) Contractor actions that result in a breakdown of the safeguards and security management system that resulted in the loss, compromise, or unauthorized disclosure of Secret Restricted Data, or other information classified as Secret.

I-18 DEAR 970.5215-4 COST REDUCTION (AUG 2009) (CLASS DEVIATION MAR 2011)

(a) General. It is the Department of Energy's (DOE's) / National Nuclear Security Administration's (NNSA) intent to have its facilities and laboratories operated in an efficient and effective manner. To this end, the Contractor shall assess its operations and identify areas where cost reductions would bring cost efficiency to operations without adversely affecting the level of performance required by the contract. The Contractor, to the maximum extent practical, shall identify areas where cost reductions may be effected, and develop and submit Cost Reduction Proposals (CRPs) to the Contracting Officer. If accepted, the Contractor may share in any shared net savings from accepted CRPs in accordance with paragraph (h) of this clause.

(b) Definitions.

"Administrative cost" is the Contractor cost of developing and administering the CRP.

"Development cost" is the Contractor cost of up-front planning, engineering, prototyping, and testing of a design, process, or method.

"DOE/NNSA cost" is the Government cost incurred implementing and validating the CRP.

"Implementation cost" is the Contractor cost of tooling, facilities, documentation, etc., required to effect a design, process, or method change once it has been tested and approved.

"Hard savings" means savings that directly reduce the overall cost of operations for the negotiated period of savings. Examples of hard savings include:

(i) Permanently eliminating or reducing recurring costs through innovative product designs, or process improvements;

(ii) Supply chain management activities resulting in actual savings (as opposed to potential or sourcing savings);

(iii) Integration of life cycle approaches for the design and development of systems that minimize costs (e.g. experimental, maintenance and operations);

(iv) Reducing direct or indirect material or labor costs;

(v) Reducing inventory levels of product or material, or reducing the cost of carrying the same levels;

(vi) Reducing utility or natural resource consumption; or

(vii) Reducing or eliminating scrap dollars/rates.

Net Savings means the difference between the estimated cost of performing an effort as originally planned and the actual allowable cost of performing that same effort when implementing a Government approved CRP along with any Contractor development costs,

DOE/NNSA cost, implementation costs, and administrative costs associated with the CRP.

Soft Savings means:

(i) savings that cannot be demonstrated to reduce the bottom line operating costs including, for example, labor efficiency improvements that increase productivity but do not reduce total hours worked;

(ii) savings that are intangible and consequently difficult to measure, for example, a wellness plan

that is intended to reduce absenteeism, turnover or insurance costs; or

(iii) cost avoidances that cannot be demonstrated to lower cost of products/services based on a comparison against historical results, for example, slowing the rate of a cost increase.

(c) Consideration on Hard Savings

The Government's share of savings shall represent "hard savings" available for reprioritization by the DOE/NNSA. Proposed savings that will not be considered creditable by the Contracting Officer will include:

(1) Savings resulting from formal or informal NNSA direction or changes in mission, work scope, or routine Contractor adjustments due to budget changes;

(2) Underruns resulting from anything other than a Contractor efficiency improvement, including but not limited to additional NNSA funding, shifting of work scope to a future fiscal year, (e.g. moving upgrades to facilities or infrastructure to out years with no evidence of savings or computer buys that are routinely purchased on a 3 year bases are deferred for an additional two years) deferred maintenance, re-categorizing direct/indirect costs, or increases in the direct allocation bases;

(3) Site office initiatives, direction, work scope changes, mission changes, or reorganization, unless the Contractor can demonstrate a significant role in achieving savings resulting from the site office actions;

(4) Savings that have a negative impact on any existing Contract requirements such as scope, safety, or security;

(5) Soft savings; and

(6) Savings that have been credited elsewhere under this contract.

(d) Procedure for submission of CRPs.

CRPs submitted by the Contractor shall contain, at a minimum, the following:

(1) Current Method (Baseline)-A verifiable description of the current scope of work, cost, and schedule to be impacted by the initiative, and supporting documentation.

(2) New Method (New Proposed Baseline)-A verifiable description of the new scope of work, cost, and schedule, how the initiative will be accomplished, and supporting documentation.

(3) Feasibility Assessment-A description and evaluation of the proposed initiative and benefits, risks, and impacts of implementation. This evaluation shall include an assessment of the difference between the current method (baseline) and proposed new method including all related costs.

(e) Evaluation and Decision. All CRPs must be submitted to and approved by the Contracting Officer. Included in the information provided by the CRP must be a discussion of the extent the proposed cost reduction effort may—

(1) Pose a risk to the health and safety of workers, the community, or to the environment;

(2) Result in a waiver or deviation from DOE requirements, such as DOE Orders and joint oversight agreements;

(3) Require a change in other contractual agreements;

(4) Result in significant organizational and personnel impacts;

(5) Create a negative impact on the cost, schedule, or scope of work in another area;

(6) Pose a potential negative impact on the credibility of the Contractor or the DOE; and

(7) Impact successful and timely completion of any of the work in the cost, technical, and schedule baseline.

(8) Significantly impact internal controls.

(f) Acceptance or Rejection of CRPs. Acceptance or rejection of a CRP is a unilateral determination made by the Contracting Officer based on but not limited to the evaluation criteria established in paragraph (c) and (e). The Contracting Officer will notify the Contractor that a CRP has been accepted, rejected, or deferred within (Insert Number) days of receipt. The only CRPs that will be considered for acceptance are those which the Contractor can demonstrate, at a minimum, will—

(1) Result in net savings (in the sharing period if a design, process, or method change);

(2) Not reappear as costs in subsequent periods; and

(3) Not result in any impairment of essential functions (e.g. safety and security).

(g) The failure of the Contracting Officer to notify the Contractor of the acceptance, rejection, or deferral of a CRP within the specified time shall not be construed as approval.

(h) Sharing Arrangement. If a CRP is accepted, the Contractor may share in the shared net savings. The sharing arrangement shall be as follows:

(1) 50% of the net savings shall be the Government's share of savings,

(2) 10% of the net savings shall be share of savings fee payable to the Contractor,

(3) 40% of the shared savings shall remain at the DOE/NNSA site and may be negotiated under the CRP for the following contract activities consistent with the other terms and conditions of this contract:

(i) Program, project, or indirect cost activities to finance additional mission work that has been approved by the HQ office;

(ii) Projects that serve the M&O site as a whole, such as a parking structure, an office building or building a cafeteria that doesn't serve a discrete program and could be built with institutional general plant project funds;

(iii) Employee compensation for non-key personnel in accordance with Appendix

A. For the purposes of this clause, "employee compensation" means a one–time non-base lump sum payment which does not count towards the employee's pensionable earnings.

The specific percentage and sharing period shall be pre-negotiated and set forth in the contractual document and may span multiple years, however, cost sharing in future years will be contingent upon availability of funds and the Contracting Officer certifying each year that the savings have been sustained.

(i) Validation of Shared Net Savings. Each year the Contractor shall certify the amount of savings achieved that year and that the Government's share of savings is available for redirection. The Contracting Officer shall validate actual shared net savings. If actual shared net savings cannot be

validated, the Contractor will not be entitled to a share of savings. If the savings are validated, the Government will decide how to redirect its share of the funds.

(j) Relationship to Other Incentives. Only those benefits of an accepted CRP not awardable under other clauses of this contract shall be considered under this clause.

(k) Subcontracts. The Contractor may include a clause similar to this clause in any subcontract. In calculating any estimated shared net savings in a CRP under this contract, the Contractor's administration, development, and implementation costs shall include any subcontractor's allowable costs, and any CRP incentive payments to a subcontractor resulting from the acceptance of such CRP. The Contractor may choose any arrangement for subcontractor CRP incentive payments, provided that the payments not reduce the DOE's share of shared net savings.

I-18A DEAR 970.5216-7 ALLOWABLE COST AND PAYMENT (OCT 2021) (NNSA CLASS DEVIATION FEB 2022) (MOD 0142)

(a) Payment.

(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) Indirect costs paid in accordance with the same provisions as required for direct costs as described within this section.

(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 paid in accordance with DEAR 970.5232-2 Payments and advances (OCT 2021) Alternate II (OCT 2021) Alternate IV (DEC 2000) (NNSA CLASS DEVIATION FEB 2022) paragraph (b).

(3) Notwithstanding the audit and adjustment of invoices, payments, 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) or to an authorized representative 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 contract auditor's results.

(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 amount, base amount, 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).

(B-1) Laboratory/Plant Directed Research & Development (LDRD or PDRD) 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) *Intermediate indirect cost pools*. 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 all allocation bases, by element of cost, used to distribute indirect costs.

(F) RESERVED.

(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, or by a lower level of detail (e.g., Budget & Reporting (B&R) code) if required by the contracting officer, 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 at the same level of detail as provided in Schedule H.

(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's name, address, and point of contact information). The schedule should contain a sufficient level of detail to enable a reconciliation of actual subcontract costs incurred from Schedule J to those claimed on Schedule H (i.e., B&R level).

(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 and SPPs physically completed in this fiscal year (include contract and SPP 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 including Executive Compensation Form. 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 director's 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 cost incurred 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. The Contracting Officer shall advise the contractor if additional adjustments or repayments are necessary.

(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) *Forward pricing rates*. Until final annual indirect cost rates are established for any period, the contractor shall use the forward pricing rates established by the Contracting Officer or by an authorized representative, subject to adjustment when the final rates are established. These forward pricing 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, payments, vouchers, or 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."

(End of clause)

I-19 DEAR 970.5227-2 RIGHTS IN DATA-TECHNOLOGY TRANSFER (DEC 2000) (DEVIATION) ALTERNATE I (DEC 2000) *(SEE – DOE AL-2021-04)* (MOD 0120)

(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, developedat 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 thatis 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 inwriting 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 rightsdata, 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 usedin 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 usedin 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 daysor 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 otherwiseprovided 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 isotopeseparation, 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 andthe 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, andfor technical data or computer software it first produces under this Contract which is authorizedto be marked by DOE, the Contractor shall treat such data in accordance with any restrictive legend contained thereon.

(4) (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. lB, 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, worldwide 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 [insert current link].

(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] under Contract No. [insert thecontract 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 *[insert current link]*.

(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, subjectto 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 aninternational 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 copyrightor, 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 theassertion 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 orother documentation acceptable to Patent Counsel demonstrating such permissionhas 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 ordata 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 andinternational 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 oflimited 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 bythe 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 Contractorto 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 SoftwareAnnouncement Notice241.4;

(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 orprovided 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 announcementidentifying 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 OSTIguidelines, 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 performpublicly 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, assignthe 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 onthe 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 shallsubstantially 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 itsbehalf 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 doso. 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 THEIREMPLOYEES, 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, ORREPRESENTS 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 writtenrequest 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 thebenefit 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 Energyto

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 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 touse 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 PatentCounsel 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 softwareshall 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 asOSS. If Program has neither consented nor objected to the assertion of copyright within two weeks of such written notification, the Contractor may assert copyright inthe 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 fundingagency(ies) shall be obtained for OSS release, if practicable. Such federal governmentagency(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 mayprovide approval instead.

(2) *Assert copyright in the* OSS. Once the Contractor has met the program approval requirements set forth in paragraph (f)(l) of this clause, copyright in the software to be distributed as OSS maybe 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 announcethe 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 Boardsoperated 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 liabilityfor 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 derivativeworks 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 forthin 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 toassert 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, andto 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 theOSS 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 thePatent 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 dataand 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 orthe 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 theContracting 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 dataand 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 Governmentan 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 G~~overnmen~~t with the express limitations that the "limited rights data" may not be disclosed outside the Government or be used forpurposes 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'sprogram 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 emergencyrepair 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 StatesGovernment 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 asdata 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 restrictedcomputer 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 ContractNo._____. 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 theportions 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)(l) through (4) ofthis 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, itis 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 inpart.

(End of notice) (Mod 0120)

(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 indicatednext to the symbol. The symbol shall not be used to mark human readable material. In the eventthis 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 theCopyright 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.

(End of clause)

Alternate I (2000). (Deviation) As prescribed in 970.2704-3(b), where access to Category C-24restricted data is contemplated in the performance of a contract the Contracting Officer shall insert the phrase "and except Restricted Data in category C-24, 10 CFR part 725, in which DOE has reserved the right to receive reasonable compensation for the use of its inventions and discoveries, including related data and technology" after "laser isotope separation" and beforethe comma in paragraph (b)(2)(ii) of the clause at 970.5227-2, Rights in Data-Technology Transfer, as appropriate.

(End of clause) (Mod 0120)

Alternate I (DEC 2000). As prescribed in 48 CFR 970.2704-3(b), where access to Category C-24 restricted data is contemplated in the performance of a contract the contracting officer shall insert the phrase “andexcept Restricted Data in category C-24, 10 CFR part 725, in which DOE has reserved the right to receive reasonable compensation for the use of its inventions and discoveries, including related data and technology” after “laser isotope separation” and before the comma in paragraph (b)(2)(ii) of the clause at48 CFR 970.5227-2, Rights in Data - Technology Transfer, as appropriate.

(End of clause) (Mod 0120)

I-20 MOD 0120 DELETED I-20

I-20A DEAR 970.5227-3 TECHNOLOGY TRANSFER MISSION (AUG 2002) (DEVIATION) (MOD 0120, 0180)

(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)(l) and12(g) of the Stevenson-Wydler

Technology Innovation Act of 1980, as amended (15U.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); Section102 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 noncommercial 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 l 2(b)(5) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended(15 U.S.C. 37 l0a(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 or 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 Contactor'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.

(End of clause) (Mod 0180)

I-20B DEAR 970.5227-4 AUTHORIZATION AND CONSENT (AUG 2002) (DEVIATION) (SEE DOE AL-202104) (MOD 0120)

(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 anytier.

(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 ContractingOfficer. 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 clauseat 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 andconsent.

(End of clause) (Mod 0120)

I-20C 970.5227-5 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2000) (DEVIATION) (SEE DOE AL-2021-04)) (MOD 0120)

(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 ofwhich 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 expenseof the Government.

(c) The Contractor agrees to include, and require inclusion of, this clause suitably modified to identifythe parties, in all subcontracts at any tier expected to exceed the simplified acquisition threshold.

(End of clause) (Mod 0120)

I-21 DEAR 970.5227-12 PATENT RIGHTS-MANAGEMENT AND OPERATING CONTRACTS, FOR-PROFIT CONTRACTOR, PATENT WAIVER (DEC 2000) (DEVIATION) (MOD 0120, 0180)

(a) *Definitions*

Department of Energy (DOE), as used in this clause, includes the National Nuclear Security Administration (NNSA), and unless otherwise identified or indicated, includes the coordinated efforts of the DOE and NNSA.

DOE licensing regulations means the Department of Energy patent licensing regulations at 10 CFR part 781.

DOE patent waiver regulations means the Department of Energy patent waiver regulations at I 0 CFR part 784.

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 nonprovisional 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.

Patent Counsel means 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. 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 11229.

Subject Invention means any invention of the Contractor conceived or first actually reduced to practice in the course of or under this contract, provided that in the case of a variety of plant, the date of determination (as defined in section 4l(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) Assignment to the Government. Except to the extent that rights are retained by the Contractor by the granting of an advance class waiver pursuant to subparagraph (b)(2) of this clause or a determination of greater rights pursuant to subparagraph (b)(7) of this clause, the Contractor agrees to assign to the Government the entire right, title, and interest throughout the world in and to each subject invention.

(2) Advance class waiver of Government rights to the Contractor. DOE may grant to the Contractor an advance class waiver of Government rights in any or all subject inventions, at the time of execution of the contract, such that the Contractor may elect to retain the entire right, title and interest throughout the world to such waived subject inventions, in accordance with the terms and conditions of the advance class waiver. Unless otherwise provided by the terms of the advance class waiver, any rights in a subject invention retained by the Contractor under an advance class waiver are subject to 35 U.S.C. 203 and the provisions of this clause, including the Government license provided for in subparagraph (b)(3) of this clause, (t) U.S. Competitiveness of this clause, and any reservations and conditions deemed appropriate by the Secretary of Energy or designee.

(3) Government license. With respect to any subject invention to which the Contractor retains title, either under an advance class waiver pursuant to subparagraph (b)(2) or a determination of greater rights pursuant to subparagraph (b)(7) of this clause, the Government has 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.

(4) Foreign patent rights. If the Government has title to a subject invention and the Government decides against securing patent rights in a foreign country for the subject invention, the Contractor may request such foreign patent rights from DOE, and DOE may grant the Contractor's request, subject to 35 U.S.C. 203 and the provisions of this clause, including the Government license provided for in subparagraph (b)(3) of this clause, and any reservations and conditions deemed appropriate by the Secretary of Energy or designee.

(5) Treaties and international agreements. Any rights acquired by the Contractor in subject inventions are subject to any disposition ofright, title, or interest in or to subject inventions provided for in treaties or international agreements identified at DOE's Office of International Affairs (international CommitmentsIEC) (http://energy.gov/ia/iecdocuments), 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.

(6) Exceptional circumstance subject inventions. Except to the extent that rights are retained by the Contractor by a determination of greater rights in accordance with subparagraph (b)(7) of this clause, the Contractor does not have the 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 (ARPAE);

(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 6/7/2021 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) Exceptional circumstances subject inventions are as set forth in the applicable patent waiver. In addition, DOE reserves the right to unilaterally amend this contract to modify, by deletion or insertion, technical fields, programs, initiatives, and/or other classifications for the purpose of defining DOE exceptional circumstance subject inventions.

(7) Contractor request for greater rights. The Contractor may request greater rights in an identified subject invention, including an exceptional circumstance subject invention, to which the Contractor does not have the right to elect to retain title, in accordance with the DOE patent waiver regulations, by submitting such a request in writing to Patent Counsel with a copy to the Contracting Officer at the time the subject invention is first disclosed to DOE pursuant to subparagraph (c)(1) of this clause, or not later than eight (8) months after such disclosure, unless a longer period is authorized in writing by the Contracting Officer for good cause shown in writing by the Contractor. DOE may grant or refuse to grant such a request by the Contractor. Unless otherwise provided in the greater rights determination, any rights in a subject invention obtained by the Contractor under a determination of greater rights is subject to 35 U.S.C. 203 and the provisions of this clause, including the Government license provided for in subparagraph (b)(3) of this clause, and to any reservations and conditions deemed appropriate by the Secretary of Energy or designee.

(8) Contractor employee-inventor rights. If the Contractor does not elect to retain title to a subject invention or does not request greater rights in a subject invention, including an exceptional circumstance subject invention, to which the Contractor does not have the right to elect to retain title, 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 grant or refuse to grant such a request by the Contractor employee-inventor.

(9) Government assignment of rights in Government employees' subject inventions. If a DOE employee is a joint inventor of a subject invention to which the Contractor has rights, DOE may assign or refuse to assign any rights in the subject invention acquired by the Government from the DOE employee to the Contractor, consistent with 48 CFR 27.3041(d). Unless otherwise provided in the assignment, the rights assigned to the Contractor are subject to the Government license provided for in subparagraph (b)(3) of this clause, and to any provision of this clause applicable to subject inventions in which rights are retained by the Contractor, and to any reservations and conditions deemed appropriate by the Secretary of Energy or designee. The Contractor shall share royalties collected for the manufacture, use or sale of the subject invention with the DOE employee.

(c) Subject invention disclosure, election of title, and filing of patent application by Contractor.

(1) Subject invention disclosure. The Contractor shall disclose each subject invention to Patent Counsel with a copy to the Contracting Officer within two (2) months after an inventor discloses it in writing to contractor personnel responsible for patent matters or, if earlier, within six (6) months after the Contractor has knowledge of the subject invention, but in any event no less than 60 days before any on sale, public use, or publication of the subject invention. The disclosure to DOE shall be in the form of a written or electronic report and shall include:

(i) The contract number under which the subject invention was made;

(ii) The inventor(s) of the subject invention;

(iii) A description of the subject invention in sufficient technical detail to convey a clear understanding of the nature, purpose and operation of the subject invention, and of the physical, chemical, biological or electrical characteristics of the subject invention, to the extent known by the Contractor at the time of the disclosure;

(iv) The date and identification of any publication, on sale or public use of the invention;

(v) The date and identification of any submissions for publication of any manuscripts describing the invention, and a statement of whether the manuscript is accepted for publication, to the extent known by the Contractor at the time of the disclosure;

(vi) A statement indicating whether the subject invention is an exceptional circumstance subject invention, related to national security, or subject to a treaty or an international agreement, to the extent known or believed by Contractor at the time of the disclosure;

(vii) All sources of funding by Budget and Resources (B&R) code and, if applicable, the technology transfer agreement numbers; and

(viii) The identification of any agreement relating to the subject invention, including Cooperative Research and Development Agreements and Strategic Partnership Projects agreements. Unless the Contractor contends otherwise in writing at the time the invention is disclosed, inventions disclosed to DOE under this paragraph are deemed made in the manner specified in Sections (a)(l) and (a)(2) of 42 U.S.C. 5908.

(2) Publication after disclosure. After disclosure of the subject invention to the DOE, the Contractor shall promptly notify Patent Counsel of the acceptance for publication of any manuscript describing the subject invention or of any expected or on sale or public use of the subject invention, known by the Contractor. The Contractor shall obtain approval from Patent Counsel prior to any release or publication of information concerning an exceptional circumstance subject invention or any subject invention related to a treaty or international agreement.

(3) Election by the Contractor under an advance class waiver. If the Contractor has the right to elect to retain title to subject inventions under an advance class waiver granted in accordance with subparagraph (b)(2) of this clause, and unless otherwise provided for by the terms of the advance class waiver, the Contractor shall elect in writing whether or not to retain title to any subject invention by notifying DOE within two (2) years of the date of the disclosure of the subject invention to DOE, in accordance with subparagraph (c)(1) of this clause. The notification shall identify the advance class waiver, state the countries, including the United States, in which rights are retained, and certify that the subject invention is not an exceptional circumstance subject invention or subject to a treaty or international agreement. If a publication, on sale or public use of the subject invention has initiated the Statutory Period under 35 U.S.C. 102(b), the period for election may be shortened by DOE to a date that is no more than sixty (60) days prior to the end of the Statutory Period.

(4) Filing of patent applications by the Contractor under an advance class waiver. If the Contractor has the right to retain title to a subject invention in accordance with an advance class waiver pursuant to subparagraph (b)(2) of this clause or a determination of greater rights pursuant to paragraph (b)(7) of this clause, and unless otherwise provided for by the terms of the advance class waiver or greater rights determination, the Contractor shall file Initial Patent Application claiming the subject invention to which it retains title either within one (1) year after the Contractor's election to retain or grant of title to the subject invention or prior to the end of any Statutory Period whichever occurs first. Any patent applications filed by the Contractor in foreign countries or international patent offices shall be filed within either ten (10) months of the corresponding first filed patent application or, if such filing has been prohibited by a Secrecy Order, within six (6) months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications.

(5) Submission of patent information and documents. 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.

(6) Contractor's request for an extension of time. Requests for an extension of the time to disclose a subject invention, to elect to retain title to a subject invention, or to file a patent application under subparagraphs (c)(1), (3), and (4) of this clause may be granted at the discretion of Patent Counsel or DOE.

(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 35 U.S.C. 205 and37 CFR Part 40.

(8) Reporting to DOE and Approvals. Whenever possible in this paragraph (c), the Government electronic reporting system (e.g., iEdison or similar system) may be used for reporting and approvals. (d)

(d) Conditions when the Government may obtain title notwithstanding an advance class waiver.

(1) Return of title to a subject invention. If the Contractor requests that DOE acquire title or rights from the Contractor in a subject invention, including an exceptional circumstance subject invention, to which the Contractor retained title or rights under subparagraph (b)(2) or subparagraph (b)(7) of this clause, 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.

(2) Failure to disclose or elect to retain title. Title vests in DOE and DOE may request, in writing, a formal assignment of title to a subject invention from the Contractor, and the Contractor shall convey title to the subject invention to DOE, if the Contractor elects not to retain title to the subject invention under an advance class waiver, or the Contractor fails to disclose or fails to elect to retain title to the subject invention within the times specified in subparagraphs (c)(l) and (c)(3) of this clause.

(3) Failure to file domestic or foreign patent applications. In those countries in which the Contractor fails to file a patent application within the times specified in subparagraph (c)(4) of this clause, DOE may request, in writing, title to the subject invention from the Contractor, and the Contractor shall convey title to the subject invention to DOE; provided, however, that if the Contractor has filed a patent application in any country after the times specified in subparagraph (c)(4) of this clause, but prior to its receipt of DOE's written request for title, the Contractor continues to retain title in that country.

(4) Discontinuation of patent protection by the Contractor. If the Contractor decides to not file a nonprovisional application, or to discontinue the prosecution of a patent application, the payment of maintenance fees, or the defense of a subject invention in a reexamination or opposition proceeding, in any country, DOE may request, in writing, title to the subject invention from the Contractor, and the Contractor shall convey title to the subject invention to DOE.

(5) Termination of advance class waiver. DOE may request, in writing, title to any subject inventions from the Contractor, and the Contractor shall convey title to the subject inventions to DOE, if the advance class waiver granted under subparagraph (b)(2) of this clause is terminated under paragraph (v) of this clause.

(6) Upon a breach of paragraph(t) U.S. Competitiveness of this clause.

(e) Minimum rights of the contractor.

(1) Request for a Contractor license. Except for subject inventions that the Contractor fails to disclose within the time periods specified at subparagraph (c)(1) of this clause, the Contractor may request a revocable, nonexclusive, royalty-free license in each patent application filed in any country claiming a subject invention and any resulting patent in which the Government obtains title, and DOE may grant or refuse to grant such a request by the Contractor. If DOE grants the Contractor's request for a license, the Contractor's license extends 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.

(2) Transfer of a contractor license. Contractor must obtain DOE approval of any transfer of the Contractor's license in a subject invention, and DOE may determine that the Contractor's license is nontransferable, on a casebycase basis.

(3) Revocation or modification of a contractor license. DOE may revoke or modify the Contractor's domestic license 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 in 37 CFR part 404 and DOE licensing regulations. DOE may not revoke the Contractor's domestic license in that field of use or the geographical areas in which the Contractor, its licensees or its domestic subsidiaries or affiliates have achieved practical applications and continues to make the benefits of the invention reasonably accessible to the public. DOE may revoke or modify the Contractor's license in any foreign country to the extent the Contractor, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(4) Notice of revocation or modification of a contractor license. Before revocation or modification of the license, DOE shall furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor shall be allowed thirty (30) days from the date of the notice (or such other time as may be authorized by DOE for good cause shown by the Contractor) to show cause why the license should not be revoked or modified. The Contractor has the right to appeal any decision concerning the revocation or modification of its license, in accordance with applicable regulations in 37 CFR part 404 and DOE licensing regulations.

(f) Contractor action to protect the Government's interest.

(1) Execution and delivery of title or license instruments. The Contractor agrees to execute or have executed, and to deliver promptly to DOE all instruments necessary to accomplish the following actions:

(i) Establish or confirm the Government's rights throughout the world in subject inventions to which the Contractor elects to retain title;

(ii) Convey title in a subject invention to DOE pursuant to subparagraph (b)(5) and paragraph (d) of this clause; or

(iii) Enable the Government to obtain patent protection throughout the world in a subject invention to which the Government has title.

(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, and to execute all papers necessary to file patent applications claiming subject inventions or to establish the Government's rights in the subject inventions. This disclosure format shall at a minimum include 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) Contractor procedures for reporting subject inventions to DOE. The Contractor agrees to establish and maintain effective procedures for ensuring the prompt identification and timely disclosure of subject inventions to DOE. The Contractor shall submit a written description of such procedures to the Contracting Officer, upon request, for evaluation and approval of the effectiveness of such procedures by the Contracting Officer.

(4) Notification of discontinuation of patent protection. With respect to any subject invention for which the Contractor has responsibility for patent prosecution, the Contractor shall notify Patent Counsel of any decision to discontinue the prosecution of a patent application, payment of maintenance fees, or defense of a subject invention in a reexamination or opposition proceeding, in any country, not less than 60 days before the expiration of the response period for any action required by the corresponding patent office.

(5) Notification of Government rights. With respect to any subject invention to which the Contractor has title, the Contractor agrees to include, within the specification of any United States patent application and within any patent issuing thereon claiming a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by the United States Department of Energy. The Government has certain rights in the invention."

(6) Avoidance of royalty charges. If the Contractor licenses a subject invention, the Contractor agrees to avoid royalty charges on acquisitions involving Government funds, including funds derived through a Military Assistance Program of the Government or otherwise derived through the Government, to refund any amounts received as royalty charges on a subject invention in acquisitions for, or on behalf of, the Government, and to provide for such refund in any instrument transferring rights in the subject invention to any party.

(7) DOE approval of assignment of rights. Rights in a subject invention in the United States may not be assigned by the Contractor without the approval of DOE.

(8) Small business firm licensees. The Contractor shall make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms, and may 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, the Contractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision as to whether to give a preference in any specific case is at the discretion of the Contractor.

(9) 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.

(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)(5) of this clause. If the S&E DEC is applicable (see subparagraph (b)(3)(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 or 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 952.22713, suitably modified to identify the parties and any applicable exceptional circumstance, in any contract for experimental, developmental, demonstration or research work. If the S&E DEC is applicable (see subparagraph (b)(3)(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)(l)" 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 Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to those matters covered by this 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 rights 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 refusal and including 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, with a copy of the notification and identification to the Contracting Officer.

(h) Reporting on utilization of subject inventions. Upon request by DOE, the Contractor agrees to submit periodic reports, no more frequently than annually, describing the utilization of a subject invention or efforts made by the Contractor or its licensees or assignees to obtain utilization of the subject invention. In addition, the Contractor shall provide data to DOE for the annual data call for the Department of Commerce report that included the number of patent applications filed, the number of patent issued, licensing activity, gross royalties received by the Contractor, and other data and information reasonably specified by DOE. Upon request by DOE, the Contractor also agrees to provide reports in connection with any marchin proceedings undertaken by DOE, in accordance with paragraph (j) of this clause. If any data or information reported by the Contractor in accordance with this provision is considered privileged and confidential by the Contractor, its licensee, or assignee and the Contractor properly marks the data or information privileged or confidential, DOE agrees not to disclose such information to persons outside the Government, to the extent permitted by law.

(i) Preference for United States industry. Notwithstanding any other provision of this clause the Contractor agrees that with respect to any subject invention in which it retains title, neither it nor any assignee may grant to any person the exclusive right to use or sell any subject invention in the United

States unless such person agrees that any products 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, DOE may waive the requirement for such an agreement 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. With respect to any subject invention to which the Contractor has elected to retain or is granted title, DOE may, in accordance with the procedures in the DOE patent waiver regulations, 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. If the Contractor, assignee or exclusive licensee refuses such a request, DOE has the right to grant such a license itself under the patent waiver.

(k) Communications. The Contractor shall direct any notification, disclosure, or request provided for in this clause to the Patent Counsel identified in the contract.

(l) 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/or 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. The interim report shall state whether the Contractor's invention disclosures were submitted to DOE in accordance with the requirements of subparagraphs (f)(3) and (f)(4) of this clause.

(2) Final reports. Upon DOE's request, the Contractor shall submit to DOE, prior to close-out of the contract or within three (3) months of the date of completion of the contracted work, 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/or a list of all subcontracts containing a patent clause and awarded by the Contractor during the contract performance period, or a statement that no such subcontracts were awarded during the contract performance period.

(m) 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 products 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.

(n) 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 (o)(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.

(o) 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.

(p) Records relating to 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, and 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 (and inventor) compliance with the requirements of this clause, including proper identification and disclosure of subject inventions, and establishment and maintenance of invention disclosure procedures.

(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, 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.

(q) 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.

(r) Educational awards subject to 35 US. 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 related to exceptional circumstance technology or any person who is subject to treaties or international

agreements as set forth in paragraph (b)(6) of this clause or to agreements other than funding agreements. The Contracting Officer may disapprove of any such placement.

(s) 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.

(t) U.S. Competitiveness. Notwithstanding48 CFR 970.5227-3(!) 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) Publication. The Contractor shall receive approval from Patent Counsel prior to releasing or publishing information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract, to ensure such release or publication does not adversely affect the patent rights of DOE or the Contractor. At the discretion of the Patent Counsel, authority to review publications prior to release may be delegated to the Contractor.

(v) Termination of contractor's advance class waiver. If a request by the Contractor for an advance class waiver pursuant to subparagraph (b)(2) of this clause or a determination of greater rights pursuant to paragraph (c) of this clause contains false material statements or fails to disclose material facts, and DOE relies on the false statements or omissions in granting the Contractor's request, the waiver or grant of any Government rights (in whole or in part) to the subject invention(s) may be terminated at the discretion of the Secretary of Energy or designee. Prior to termination, DOE shall provide the Contractor with written notification of the termination, including a statement of facts in support of the termination, and the Contractor shall be allowed thirty (30) days, or a longer period authorized by the Secretary of Energy or designee for good cause shown in writing by the Contractor, to show cause for not terminating the waiver or grant. Any termination of an advance class waiver or a determination of greater rights is subject to the Contractor's license as provided for in paragraph (f) of this clause.

(w) 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.

(End of clause) (Mod 0180)

Alternate I - Weapons related subject inventions. (Deviation) As prescribed at 970.27032(g), insert the following definition in paragraph (a) and add subparagraph (b)(10):

(a) *Definitions. Weapons related subject invention* means any subject invention conceived or first actually reduced to practice in the course of or under work funded by or through defense programs, including Department of Defense and intelligence reimbursable work, or the Naval Nuclear Propulsion Program of the Department of Energy or the National Nuclear Security Administration.

(b) *Allocation of Principal Rights. (10) Weapons related subject inventions.* Except to the extent that DOE is solely satisfied that the Contractor meets certain procedural requirements and DOE grants rights to the Contractor in weapons related subject inventions, the Contractor does not have a right to retain title to any weapons related subject inventions.

(End of alternate) (Mod 0120, 0180)

I-22 DEAR 970.5232-2 PAYMENTS AND ADVANCES (OCT 2021) ALTERNATE II (OCT 2021) ALTERNATE IV (DEC 2000) (NNSA CLASS DEVIATION FEB 2022) (MOD 0142)

(a) Payment of Total available fee: Base Fee, Fixed Fee, and Performance Fee.

(1) The base fee and/or fixed fee amounts, if any, are payable in equal monthly installments. Total available fee amount earned is payable following the Government's Determination of Total Available Fee Amount Earned. Base fee and fixed fee amounts 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 or fixed fee amounts or total available fee amount earned payments 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 three (3) percent of the annual available award 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. 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 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/NNSA'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 which shall also include a schedule reconciling the allowable costs by fiscal year to the payments made by fiscal year;

(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.

(End of clause)

I-22A DEAR 970.5232-3 ACCOUNTS, RECORDS, AND INSPECTION (OCT 2021) (NNSA CLASS DEVIATION FEB 2022) (MOD 0142)

(a) *Accounts.* The Contractor shall maintain a single financial management system with separate and distinct set of accounts, records, documents, and other evidence showing and supporting: all allowable costs incurred or anticipated to be incurred; 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 (that the Contracting Officer agrees is sufficient) 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. The Contractor further agrees to include an "Audit" clause, the substance of which is the "Audit" clause set forth at 48 CFR 52.215-2, in each subcontract which does not include provisions similar to those in paragraph (a) through paragraph (g) and paragraph (h) of this clause, but which contains a "defective cost or pricing data" clause.

(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.

(2) 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.

(3) 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.

(End of clause)

I-22B DEAR 970.5232-7 FINANCIAL MANAGEMENT SYSTEM (OCT 2021) (MOD 0142)

(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.

(End of clause)

I-22C DEAR 970.5232-8 INTEGRATED ACCOUNTING (OCT 2021) (MOD 0142)

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.

(End of clause)

I-23 DEAR 970.5244-1 CONTRACTOR PURCHASING SYSTEM (OCT 2021) (NNSA CLASS DEVIATION FEB 2022) (MOD 0142)

(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 (that the Contracting Officer agrees is sufficient)--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 Cognizant Contract Auditor to determine if the auditor is already planning to audit the subcontract. If not already planned, 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.

(2) 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).

(3) 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.

(4) 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.

(2) 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.

(i) 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.

(j) 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.

(k) Government property. The Contractor shall establish and maintain a property management system that complies with criteria in 48 CFR 970.5245-1, Property.

(l) 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.

(m) Leasing of motor vehicles. Contractors shall comply with 48 CFR subpart 8.11 and 48 CFR subpart 908.11.

(n) 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.

(o) 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.

(p) 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) Helium—48 CFR subpart 8.5

(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

(q) 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.

(r) 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.

(s) 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.

(t) Strategic and critical materials. The Contractor may use strategic and critical materials in the National Defense Stockpile.

(u) 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.

(v) Unclassified controlled nuclear information. Subcontracts involving unclassified controlled nuclear information shall be treated in accordance with 10 CFR part 1017.

(w) 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 970.0404-4(a).

(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.

(x) Legal services. Contractor purchases of litigation and other legal services are subject to the requirements in 10 CFR part 719.

(End of clause)

I-24 FAR 52.204-23 PROHIBITION ON CONTRACTING FOR HARDWARE, SOFTWARE, AND SERVICES DEVELOPED OR PROVIDED BY KASPERSKY LAB AND OTHER COVERED ENTITIES (NOV 2021) (MOD 0030, 0151)

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

Covered article means any hardware, software, or service that—

(1) Is developed or provided by a covered entity;

(2) Includes any hardware, software, or service developed or provided in whole or in part by a covered entity; or

Covered entity means—

(1) Kaspersky Lab;

(3) Any successor entity to Kaspersky Lab;

(4) Any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or

(5) 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 covered article. The Contractor is prohibited from—

(1) Providing any covered article that the Government will use on or after October 1, 2018; and

(2) Using any 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 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 1 business day 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 covered article, any reasons that led to the use or submission of the covered article, and any additional efforts that will be incorporated to prevent future use or submission of 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 items.

(End of clause)

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Section J
Appendix A:
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CHAPTER I. Objectives, Scope, and Requirements

1.0 OBJECTIVE

The objective of this Contract is to obtain management expertise and leadership necessary to support National Nuclear Security Administration (NNSA) and broader national security requirements at the Nevada National Security Site (NNSS) and satellite facilities.

The Contractor shall be fully responsible for the performance and integration of the functions required to support NNSA Stockpile Stewardship and Management Program activities, Nuclear Nonproliferation activities, National Emergency Response activities, Nuclear Counter-Terrorism, and Infrastructure, Maintenance, and Recapitalization (including the DOE Nuclear Criticality Safety Program) projects. In addition, the Contractor will also support Environmental Management activities and other activities assigned for Department of Energy (DOE) offices.

Beyond DOE/NNSA, the Contractor shall provide unique services to ongoing missions for other Government agencies or privately owned organizations, as appropriate.

In addition to achieving Presidential goals outlined in the April 2010 Nuclear Posture Review, this Contract will strengthen NNSA's vision for a fully integrated and interdependent Nuclear Security Enterprise (NSE), consisting of all eight NNSA sites, by achieving the following three specific objectives:

i) Safely and securely executing national security missions for the NNSA, DOE, and other Government Agencies;

ii) Reducing the cost of performing work; and

iii) Executing actions that support operations for the DOE/NNSA enterprise efficiently integrating NNSS activities with the NNSA National Laboratories, other DOE offices and other government agencies.

2.0 BACKGROUND

2.1 The NNSA Mission

The NNSA, established by Congress per the NNSA Act (Title XXXII) of the National Defense Authorization Act (NDAA) for Fiscal Year 2000,(Public Law 106-65) as a semiautonomous element within DOE. The NNSA ensures the Nation sustains a safe, secure, and effective nuclear deterrent through the application of science, technology, engineering, and manufacturing. To deal with the changing face of nuclear deterrence and more-widely dispersed nuclear knowledge, NNSA, also ensures the United States (U.S.) maintains excellence in nuclear science and technology that is second to none. Within the NSE, the central mission, which includes maintaining the active stockpile, Life Extension Programs (LEPs) and Weapons Dismantlement, is referred to as the Stockpile Stewardship and Management Program. NNSA also works closely with a wide range of international partners, key U.S. federal agencies, the U.S. national laboratories, and the private sector to secure, safeguard, and/or dispose of dangerous nuclear and radiological material, and detect and control the proliferation of related weapons of mass destruction (WMD) technology and expertise. In addition, NNSA is the U.S. government's primary capability for radiological and nuclear emergency response and for providing security to the nation from the threat of nuclear terrorism by maintaining a high level of readiness for protecting and serving the U.S. and its allies through the development, implementation and coordination of programs and systems designed to serve as a last line of defense in the event of a nuclear terrorist incident or other types of radiological accident. The NNSA also manages the nation's only multi-purpose criticality experiments facility at the NNSS, which serves multiple missions within the DOE, other government agencies and non-governmental entities.

2.2 The NNSA Organization

The NNSA's nuclear security enterprise spans eight sites, including three national laboratories, four plants, and the NNSS. Each site's technical expertise enables NNSA to accomplish its work across NNSA's four mission areas.

NNSA relies on Management and Operating (M&O) Contractors to manage day-to-day site operations and to adhere to its policies when operating its laboratories, production plants, NNSS, and other facilities in the NSE in compliance with legal requirements and DOE/NNSA policies. NNSA sets the program and

performance requirements to be accomplished by the Contractor. The Contractor has the flexibility to use its expertise and ingenuity to determine how the work is to be accomplished and is accountable for assuring safe, secure, effective, and efficient operations, and providing directed deliverables in accordance with the terms and conditions of this Contract.

NNSA also established a system where federally-run field offices oversee the M&O contractors for each site. The field offices provide the conduit between Headquarters (HQ) program and the M&O contractors for oversight and execution of the individual contracts.

2.3 Locations of Performance

The NNSS is a unique expanse of Federally-controlled land and facilities in a remote region of southern Nevada. The primary mission of the NNSS is to provide facilities, infrastructure, and personnel that the national security laboratories and other organizations can use to conduct nuclear and non-nuclear experiments essential to maintaining the nuclear weapons stockpile and national security. It is the primary location with the nuclear security enterprise where experiments using radiological and other high hazard materials are conducted. It is the only location where high explosive (HE) driven plutonium experiments can be conducted. In addition, to perform this national security work development and deployment of state of the art diagnostics and instrumentation, data analysis, storage of programmatic materials, conduct of criticality, counterterrorism, and counter-proliferation activities and experiments must be successfully achieved. The NNSS represents the US' unique capability to support the underground nuclear test readiness program by executing the complex dynamic experiments that involve Special Nuclear Materials or hazardous materials. The NNSS is also home to the US' unique criticality experiments capability at the National Criticality Experiments Research Center.

The approximately 1,375 square miles that make up the NNSS are surrounded by the U.S. Air Force Nellis Test and Training Range and unpopulated land controlled by the Bureau of Land Management. The biological, geological, hydrological, meteorological, and radiological environments are well characterized. The Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada and the associated Record of Decision allow for the execution of a variety of complex and unique projects and experiments while ensuring the protection of the public and the environment. In addition, work is also performed at satellite facilities in Los Alamos and Albuquerque, New Mexico (NM); Livermore and Santa Barbara, California (CA); Nellis Air Force Base (AFB), Las Vegas, Nevada (NV); and Andrews AFB, Suitland, Maryland (MD).

3.0 SCOPE (MOD 0160)

This Contract is comprehensive with an objective to perform and integrate all necessary operational, coordination, and management functions at the NNSS and satellite facilities required to support NNSA and broader national security missions assigned to these facilities. This includes, but is not limited to, all ongoing missions and functions, as well as those that may be assigned during the term of the Contract.

The Contractor shall be fully responsible and accountable for the safe and secure accomplishment of all work, whether performed by its own personnel, team members, or subcontractors. The Contractor shall be responsible for all integration, planning and coordination of activities; management and execution of all programs; support and execution of large and small projects; and completing operations and other activities as described in this Statement of Work (SOW).

3.1 Mission

The work structure and functional activities of the site is defined in Section J, Appendix A, Chapter II Work Scope Structure.

The Contractor shall provide support and infrastructure for experiments and activities at the NNSS and Satellite facilities. The Contractor shall be responsible for integrating and executing a wide range of

facility and operational activities in support of DOE/NNSA missions that includes: nuclear, nuclear explosive, high explosive and high/moderate hazard operations; remote field experiment; support for the operation of critical assemblies; system design, fabrication, installation, and implementation; physical and environmental science; nuclear waste management systems and technology; design and fabrication of electronic, mechanical, optical and structural systems; remote and robotic sensing; management of multi-laboratory facilities, mining, engineering, and construction operations; chemical, explosives, and hazardous materials systems and technologies; and waste management for various categories of waste. The Contractor shall be responsible for a wide-range of nuclear, high hazard, and

non-nuclear facilities, laboratories, and systems that support the custom design, construction, and fielding of experimental systems ranging from small electronic and remote sensing packages that are fielded in complex systems in hostile environments for use throughout the world. The term "nuclear facilities' is defined as those facilities, activities, or operations that involve, or will involve, radioactive and/or fissionable materials in such form and quantity that a nuclear hazard potentially exists to workers, the public, or the environment. "High hazard" are those facilities, activities, and operations such as detonation of high explosives, planned chemical releases, and live fire exercises. "Nonnuclear facilities" are those facilities, activities, or operations where a nuclear hazard potential does not exist.

In performing work under this Contract, the Contractor shall establish and maintain a cooperative working relationship with the National Security Laboratories and other Government Agencies and their associated Contractors.

At a minimum the Contractor shall:

i) Serve as the Site operator and integrator for all activities, performed by all parties, on the NNSS;

ii) Provide the nuclear and non-nuclear test beds, infrastructure, appropriate scientific, engineering, experimental platforms, and technical staff to support defense and national security-related nuclear and nonnuclear experiments at the NNSS and offsite locations, including maintaining the NNSS capability to conduct an underground nuclear test within the required readiness time;

iii) Provide nuclear facility safety management and conduct of operations at NNSS nuclear facilities such as the Device Assembly Facility (DAF), the U1a Complex, the Joint Actinide Shock Physics Experimental Research (JASPER) facility, and Area 3/5 Waste Management Sites;

iv) Provide radiological, high hazard and non-nuclear facility operations and safety management at NNSS radiological, high hazard, and non-nuclear facilities, tunnels, and operations on the NNSS, including management of the land, facilities, personal property and emergency planning and preparedness;

v) Design, develop, test and deploy state of the art new technologies and experimental platforms to advance U.S. capability of technical collections systems for national security applications.

vi) Provide laboratory and field capabilities to assess threats and manage radiological emergencies involving a variety of hazardous situations;

vii) Provide expertise, remote sensing and site safety management of underground activities including seven active tunnel systems, large scale above ground HE experiments, chemical/biological simulant and radiological controlled releases, and aerial operations that include runways and airdrops;

viii) Provide response and detection for a broad array of ground and airborne (fixed- and rotary-winged aircraft) capabilities to assigned National Emergency Response programs;

ix) Perform the onsite physical environmental restoration (in conjunction with the Environmental Restoration contractor) and waste management programs including staging, storage, treatment, transportation, and disposal of wastes, including classified waste, generated through operation and environmental restoration programs at the NNSS or other DOE or NNSA locations;

x) Capitalize on the unique resources and capabilities available at the NNSS and satellite facilities to manage and perform, compatible with NNSA work, a variety of reimbursable work for other governmental organizations in support of national security goals and programs;

xi) Provide air space management coordination and support for "Special Use" airspace for all air traffic;

xii) Participate in the testing and development of all types of Unmanned Aerial Systems UASs for various customers;

xiii) Conduct a security program that fosters an institutionalized security conscious culture that performs work securely and assigns unambiguous roles, responsibilities, authorities, and accountability while integrating excellence in safeguards and security into all Site activities; and

xiv) Maintain, operate, modernize, and/or dispose of NNSS base, common, or shared infrastructure, including Maintenance, Operations of Facilities, Safety Operations, Recapitalization, and Construction, as appropriate.

The Contractor is expected to move to a higher level of performance throughout the term of the Contract by making the following process enhancements:

Improve integration, partnering, and support among the Nevada Enterprise (NvE) Contractors to promote early on-site problem solving and assist in NvE site issues, consolidation of business and management elements, and drive verifiable cost efficiencies that can be reinvested to better enable mission;

i) Develop and deploy effective strategic planning and communication for the mission in the environment of changing budgets and technical and regulatory requirements;

ii) Ensure that the infrastructure and facilities are efficiently operated in a safe, secure, and compliant posture, and that an acceptable defined level of readiness is sustained at all facilities;

iii) Demonstrate a culture of continuous improvement for required disciplines (such as cross-functional skill development, flexibility in job classifications, outsourcing of appropriate products, quality, scheduling for continuous output, cost controls) and the associated metrics to demonstrate performance; and

iv) Assure effective human resource management and the availability of critical skills and capabilities. Ensure operations are performed timely and efficiently that are responsive to programmatic shifts and priorities.

3.2 Operational Excellence

Operational excellence is the expected underlying philosophy and mindset for operating the NNSS and satellite facilities. This incorporates the principle that compliance with regulations and standards shall be accomplished while performing missions on time, at a reasonable cost, while protecting human health and the environment, and conserving the Government's assets. Operational excellence shall include a focus on the requisite rigor and discipline in all aspects of Contractor activities and, in particular, holding management and staff accountable to commitments. To achieve this operational excellence, it is essential that operations at the NNSS be performed in a manner that meets DOE mission and regulatory objectives. Therefore, a disciplined, effective and efficient management system to meet and exceed current industry performance in productivity, safety, and security is a significant objective of this Contract.

3.3 Scope and Financial Management

The Contractor shall support the DOE/NNSA Planning, Programming, Budgeting and Evaluation (PPBE) process. In supporting PPBE, the Contractor shall provide financial data for Government systems, such as:

- Standard Accounting and Reporting System (STARS)
    - STARS information is provided under the Institutional Cost Reporting Categories
- iMANAGE
- Enterprise Portfolio Analysis Tool (EPAT)
- Facilities Information Management System (FIMS)
- Enterprise Management Information System, Generation 2 (G2)

The Contractor shall maintain financial cost reporting systems to provide detailed cost reports for cost, scope, and schedule for direct and indirect costs for all work performed under this Contract. The cost reports shall include labor costs, leave/hours not worked, staff augmentation, fringe, pension, legacy, materials, services-subcontractors, direct service centers, other expenses, capital, labor category, and full-time equivalent (FTE) resource usage for all direct and indirect costs and use cost benefit analyses to determine the appropriate level of support functions and risks. The Contractor shall provide NNSA transparency into those financial cost reporting systems and shall provide routine reports to allow NNSA visibility into program and cost management supporting reports to external sources (see Section J, Appendix K Program Management and Cost Reports).

The Contractor's financial cost reporting systems shall support the DOE STARS, iMANAGE, EPAT and support systems, such as FIMS, as well as other Government systems as they are developed and implemented.

The NNSA will provide the initial cost information, FTE data and scope framework on the effective date of the Contract. The Contractor shall develop an Annual Controlled Baseline (ACB) for all Contractor direct programs and indirect support costs, in accordance with DOE institutional cost reporting categories. The baseline will be constructed at a level that provides the ability to report the baseline and any changes to the baseline, programmatically and by resource organization. The baseline shall include cost, scope of work, and schedule and be fully consistent with directive and planning documents, budget requests, and progress reporting such as earned value management systems. The ACB will be under configuration management and control, with all changes formally documented. The ACB should be maintained in a manner consistent with and reconcilable to approved work authorizations, funding levels, and any programmatic reporting including EVMS or EVMS-like systems and any changes to the ACB should be based on changes in scope or formal direction from NNSA. The ACB will be submitted annually by August 15th unless otherwise agreed to in advance by the Contracting Officer. Administrative changes initiated by the Contractor should be net zero cost changes or otherwise must be approved by the Contracting Officer. **(Mod 0096)**

The Contractor shall have tools in place to: 1) manage mission and indirect changes in scope, cost, and schedule; 2) compare actual costs of work performed (ACWP) to budgeted costs of work performed (BCWP); 3) accurately forecast estimated costs to complete (ETC) and estimated total costs at completion (EAC); and 4) document deviations from the baselines described above in this paragraph and, on a timely basis, notify the Contracting Officer of such changes. The Contractor shall not make retroactive changes to records pertaining to work performed that will change previously-reported costs, except for correction of errors and routine accounting adjustments and shall not make retroactive changes for funding fluctuations or revisions in EAC.

3.4 Enterprise Success

The Contractor shall actively identify and participate with NNSA and other NNSA M&O Contractors as part of an "enterprise organization" to evaluate, plan, develop and implement strategic initiative activities that optimize mission and business operations across the NSE. The goal of these initiatives is to increase the efficiency and cost effectiveness from a business and mission perspective.

The Contractor shall lead and/or participate in strategic business and management initiatives that result in:

- Improved partnering collaborations with the National Security Laboratories to integrate more effectively and efficiently;
- Improved cost estimation practices for all Contractor work;
- Streamlined business operations and reduced operational costs enterprise- wide;
- Implement best practices enterprise wide for efficient, safe, secure high-paced parallel nuclear operations;
- Improved risk-management practices, including risk-informed, mission supportive, cost-efficient, safety basis processes.
- More consistent work practices and operational processes;
- Better pricing, better products, more timely delivery;
- Reduced administrative costs and lead times for both the Contractor and the DOE/NNSA;
- Greater standardization and interchangeability of processes and priorities across the NSE; and
- Increased awards to small business entities.

NNSA expects these and other initiatives to result in a shift to an enterprise focus, based on the Contractor who possesses the most expertise and experience level within the NSE.

The Contractor shall cooperate with NNSA and NSE Contractors in identifying potential cross-NSE benefits to be derived from implementing common practices and goals across the NSE in the areas of mission workload and enterprise functional support.

The Contractor and NNSA shall establish performance incentives with performance measures and targets for strategic efforts that result in enterprise performance improvement overall for the Government.

4.0 ADMINISTRATIVE AND TECHNICAL REQUIREMENTS

4.1 Integrated Safety Management (ISM), Integrated Safeguards and Security Management (ISSM), Environmental Management System (EMS), and Quality Assurance Systems (QAS)

The Contractor shall ensure that the principles of ISM, ISSM, EMS, and QAS are integrated into its operations and that its' Contractor Assurance System (CAS) reflects Contractor integrated performance related to these systems.

4.2 Work Authorization (WA) System

Specific work requirements under this Contract will be established annually and updated as needed by the Contracting Officer in accordance with DOE Order

412.2 entitled "Work Authorization System" and the Contract's Section I Clause entitled "Department of Energy Acquisition Regulation (DEAR) 970.5211-1, Work Authorization."

4.3 Information Technology (IT) and Cybersecurity

The Contractor shall support NNSA's efforts to optimize the efficiency of the NvE by consolidating IT infrastructure/services and eliminate redundant systems, to increase efficiency through mobility and cloud computing, and to improve business processes to better integrate across sites. To accomplish these goals, the Contractor shall develop a single, integrated "to-be" vision that uses the best available technologies and management practices from both Government and commercial sources to improve and achieve performance excellence, including fiscal efficiency. Desktop and back-office computing capabilities shall be compatible with those used by NNSA. Back-office functions shall include, but not be limited to, payroll, finance, project management, and human resources.

In the area of cybersecurity, the Contractor shall ensure data confidentiality, integrity, and availability; and implement technology designs that provide effective network monitoring, limit an intruder's ability to traverse the network and mitigate new vulnerabilities in a timely manner. The Contractor shall develop enhanced information security protection tools for information systems, applications, and networks within both classified and unclassified environments; and ensure compliance with NNSA's defense-in-depth cybersecurity strategy.

All deliverables that involve information technology that use internet protocol shall comply with Internet Protocol version 6 (IPv6) standards, the Homeland Security Presidential Directive-12 (HSPD-12), and interoperate with both IPv6 and IPV4 systems and products. If the Contractor plans to offer a deliverable that involves IT that is not initially compliant, the Contractor shall (1) obtain Contracting Officer's approval before starting work on the deliverable; (2) provide a migration path and firm commitment to upgrade to IPv6 and HSPD-12 compatibility for all application and product features, and (3) have IPv6 technical support for fielded product management, development and implementation available.

The Contractor, prior to using any Contractor-owned software and systems where reimbursement is expected, shall obtain the Contracting Officer's approval. Per the Section I clause DEAR 970.5227-2 Rights in Data - Technology Transfer (Dec 2000) Alternate I (Dec 2000) (NNSA Class Deviation Oct 2011), the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license by or for the Government, in any Contractor-owned software and systems brought in and used. Said license shall be limited to the continued work by successor Contractors.

4.4 Governance

Governance is the system of management and controls exercised in the stewardship of the organization. The governance system shall be consistent with NNSA governance documents. Contractors must self-govern and deliver mission results in a safe and secure manner. The Contractor shall implement governance through a collaborative partnership with NNSA to form the self-governance framework by which the mission is accomplished in an effective and efficient manner. The governance framework invokes trust and confidence between parties, defines expectations and authorities and verifies performance by using objectives, requirements, assessments, metrics and rewards. The Contractor will focus on NNSA transformation activities that maximize the ability to complete the mission in a way that ensures effective and efficient stewardship of the taxpayers' money. The Contractor shall streamline operations and reduce costs to maximize mission accomplishment through a common understanding of expectations and performance accountability, supported by a strong Contractor Assurance System (CAS). The Contractor shall have a CAS as a subordinate and supporting feature of Governance as described in 4.4.1 below.

4.4.1 **Contractor Assurance System:** The Contractor shall have a Contractor designed and used system to manage performance consistent with Contract requirements. The CAS shall be a primary tool used by Contractor management to measure and improve performance, ensure that mission objectives and

Contract requirements are met; ensure that workers, the public and the environment are protected; and ensure that operations, facilities, and business systems are efficiently and effectively operated and maintained. An effective CAS integrates Contractor management, supports corporate parent governance and facilitates Government oversight systems. NNSA oversight shall not be relied upon by the Contractor as the primary feedback in assessing its performance. The Contractor is fully accountable for performing its own assessment of these areas and to provide transparency of the system information to the Field Office for use in its oversight activities.

4.4.2 **Standards and Directives Reform:** The Contractor shall submit a plan within 180 days after start of Base Term that identifies standards (e.g., International Organization for Standardization (ISO) 9001, 14001, 18001, or other international or industry standards) to be used to replace other DOE requirements and provide the ability for the Contractor to operate with industry best practices. The plan shall describe how quickly the Contractor will achieve ISO certifications or other recommended standards but commit to completion no later than by the end of the second year of the Base Term. In addition, the Contractor, as part of its governance, shall continuously evaluate and examine DOE directives, orders, and requirements to propose needed exemptions or modifications to allow the Contractor to operate in the most effective and efficient manner and to assist in delivering cost savings to the Government.

4.4.3 Parent Organization(s)

i) The Contractor is encouraged to identify opportunities for the use of parent corporate systems and corporate home and branch office personnel for site operations for the purposes of monitoring site performance, assisting the site in meeting its mission and operational requirements, streamlining the Contractor's administrative and business systems, improving performance, and adapting private sector expertise to site issues.

ii) The term "systems" means any discrete process, procedure, program, document or instrument where cost of use under this contract can be identified and quantified to the parent corporation.

iii) The Contractor, prior to using any parent corporate systems or home and branch office personnel where reimbursement is expected, shall submit a plan to the Contracting Officer for review and approval. In reviewing the plan, the Contracting Officer will consider the extent to which each separate element of the Plan is more efficient in meeting mission and operational requirements; represents an overall cost savings to the Government; brings value-added expertise; assists the monitoring of performance; and whether data is readily transferable to a successor Contractor.

iv) Per the Section I clause DEAR 970.5227-2 Rights in Data-Technology Transfer (Dec 2000) Alternate I (Dec 2000) (NNSA Class Deviation Oct 2011), the Contractor hereby grants the Government an irrevocable, nonexclusive, paid-up license, by or for the Government, in any Contractor-owned software and systems brought in and used in the performance of this Contract. Said license shall be limited to the continued operations of the NNSS by successor Contractors.

v) The parent organization(s) shall establish an oversight entity, independent and autonomous from NNSS management that shall ensure successful contract performance by identifying opportunities for the parent organization(s) to engage with NNSS management to address NNSS performance issues and demonstrate resolution of those issues. The parent organization shall discuss oversight mechanism results and initiatives with senior NNSA leadership each quarter.

vi) The parent organization(s) shall also establish an audit entity (e.g., audit committee), independent and autonomous from NNSS management, that shall perform financial reporting, risk management, internal control, ethics, compliance with laws and regulations and the site code of conduct, and the internal audit and external audit and review processes. The audit entity shall be established consistent with best practices identified by the Institute of Internal Auditors (IIA) and The Sarbanes Oxley Act of 2002, Section 301.

The audit entity shall provide the Contracting Officer with annual reports of its activities. On an annual basis, the audit entity shall brief the Contracting Officer, or other delegate, as to its perspective on the:

1) Health of the Contractor's control environment;

2) Effectiveness of corrective action plans resulting from audit and review findings;

3) Significant financial and operational risk facing the organization; and

4) Adequacy of the Contractor's internal audit activity and staffing.

4.4.4 **Award Fee Plan:** The Contractor shall participate in the formulation of Performance Evaluation Management Plans (PEMP) that covers a defined period of time. The PEMP shall include performance objectives, goals, and measures.

4.4.5 **Performance Metrics:** The Contractor shall propose a list of performance metrics that provide Contractor and NNSA management an overall assessment of the "health of the operation" quickly and accurately. Once established, the metrics shall be part of the CAS and be provided with transparency to aid in the identification and understanding of significant performance issues. The metrics should be updated as required and flowed through the CAS system.

4.5 Contractor Human Resources and Labor Relations

The Contractor shall have the flexibility to restructure the workforce and make changes to employee benefits throughout the term of the Contract, as may be permitted by this Contract and applicable law, to maximize efficiencies. The Contractor shall be responsible for identification and maintenance of critical skills and for the employment of all professional, technical, skilled, and other personnel engaged and to be engaged by the Contractor in the work hereunder, and for the training of personnel, including apprentice programs. Persons employed by the Contractor or its subcontractors or consultants shall not be deemed employees of the Government. The Contractor shall follow the Human Resources (HR) requirements pertaining to workforce transition and management in accordance with Section J, Appendix A, Chapter III, Human Resources. The Contractor shall maintain, refresh, and provide qualified personnel to successfully implement the scope of work of the contract.

The Contractor shall provide labor relations management support for all matters relating to bargaining unit employees and collective bargaining agreements, including such activities as hiring and terminations; work rules development and administration; dispute resolution; wage and fringe benefits; and labor agreement negotiations and compliance.

4.6 Environmental Permits and Applications

In recognition of the Contractor's responsibility to operate in compliance with all applicable environmental requirements, the Contractor is responsible for signing environmental permits and applications as "operator or co-operator" at the sites.

i) If bonds, insurance, or administrative fees are required as a condition for such permits, such costs shall be allowable. In the event that such costs are determined by NNSA to be excessive or unreasonable, NNSA shall provide the regulatory agency with an acceptable form of financial responsibility.

ii) The Contractor shall accept, in its own name, service of notices of violations or alleged violations (NOVs/NOAVs) issued by Federal or State regulators to the Contractor resulting from the

Contractor's performance of work under this Contract, without regard to liability. The allowability of the costs associated with fines and penalties shall be subject to clauses of this Contract. The Contractor shall notify the Contracting Officer promptly when it receives service from the regulators of NOVs/NOAVs and fines and penalties. Nothing stated above shall affect the Contractor's right to challenge or contest the applicability or validity of such NOVs/NOAVs and fines and penalties.

iii) In the event of termination or expiration of this Contract, NNSA will require the new Contractor to accept transfer of all environmental permits executed by the Contractor.

iv) When providing NNSA with permits and applications that are to be signed or co- signed by NNSA, the Contractor will accompany such document with a certification statement, signed by the appropriate Contractor corporate officer, attesting to NNSA that the document has been prepared in accordance with all applicable requirements and the information is, to the best of its knowledge and belief, true, accurate, and complete.

4.7 Defense Nuclear Facilities Board and Other Government Agencies Support and Liaison

The Contractor shall support NNSA in interacting with various Government agencies and regulatory/oversight bodies such as the Defense Nuclear Facilities Safety Board (DNFSB), Department of Defense (DOD), Inspector General (IG), General Accounting Office (GAO), national and state regulatory agencies, congressional and senate bodies and members. The Contractor shall conduct activities in accordance with those DOE commitments to the DNFSB and other government agencies and regulatory/oversight bodies as contained in implementation plans and other DOE correspondence. The Contractor shall support preparation of responses to issues and recommendations, which affect or can affect Contract work. The Contractor shall fully cooperate with the DNFSB and other government agencies and regulatory/oversight bodies to provide access to such work areas, personnel, and information as necessary. The Contractor shall maintain a document process consistent with the applicable DOE manual on interface with the DNFSB and other regulatory/oversight bodies. The Contractor shall be accountable for ensuring that subcontractors adhere to these requirements.

4.8 Interfaces with Other Site Users

Within the NNSS and satellite locations, there are multiple Contractors responsible for a variety of broad-based programs. Within 90 calendar days after the start of the transition period, the Contractor shall submit, for NNSA approval, an Interface Management Plan (IMP) for the affected sites to identify and manage site interfaces/services between DOE, NNSA, DOE/NNSA Contractors, and tenant entities engaged in onsite activities. The IMP should identify any costs related to other site users. For the various sites/entities, services that require interface agreements shall be provided in accordance with existing or newly developed Memoranda of Understanding (MOU) or other appropriate agreements. The Contractor will provide input to the Nevada Field Office (NFO) regarding effective support toward common site operational objectives, training, access, and reporting.

4.9 Privacy Act System of Records

The Contractor shall design, develop, and maintain a system of records on individuals to accomplish an agency function in accordance with the Contract's Section I Clauses entitled "Federal Acquisition Regulation (FAR) 52.224-1 Privacy Notification" and "FAR 52.224-2, Privacy Act." The applicable systems of records are available on the Federal Register. A list of applicable records will be finalized after contract award.

CHAPTER II. Work Scope Structure

1.0 INTRODUCTION

Specific work requirements under this Contract will be established annually by the Contracting Officer in accordance with the Chapter I, Section 4.2 above entitled "Work Authorization System." The Contracting Officer will issue Work Authorizations for each major work area to be accomplished in a given year. These Work Authorizations will conform to the Scope of Work of this Contract and further affect the General Requirements specified in this section.

2.0 GENERAL REQUIREMENTS

2.1 Programs

The Contractor shall provide the nuclear and non-nuclear test beds, infrastructure, and appropriate scientific, engineering, and technical staff to support defense- related nuclear and nonnuclear experiments at the NNSS and offsite locations as well as other national security programs, including maintaining the NNSS capability to conduct an underground nuclear test within the required readiness time.

2.2 DOE and NNSA Strategic Planning Process

The Contractor shall contribute to NNSA's strategic planning process by participating in the PPBE process, including but not limited to development of planning budgets, programmatic implementation plan input, and milestones of execution. The goal of the DOE and NNSA planning processes is to safely and securely integrate programmatic work to maximize scientific and technical work accomplishment, while minimizing duplication between programs and sites and providing for major investments in facilities within essentially fixed budgets. The Contractor shall conduct strategic planning processes incorporating risk management and develop appropriate plans consistent with NNSA missions and goals.

2.3 Technology and Business Integration

The Contractor shall use available technology and management practices from both Government and commercial sources to improve and achieve excellence. The Contractor shall propose and participate with other NNSA Contractors and other Federal Contractors and agencies to support these efficiencies. If a stockpile stewardship function were centralized at a single site, the Government would provide these centralized materials and services to the other sites.

Therefore, the DOE reserves the right to reassign missions, both core and non- core responsibilities, when it is in the best interest of the Government, and require the Contractor to propose and support such initiatives.

2.4 Site Directed Research, Development and Demonstration (SDRD) Program

The Contractor shall conduct a DOE approved Site Directed Research, Development and Demonstration (SDRD) Program that supports NNSA and other government agency national security goals and requirements to encourage advanced research, development, and demonstration work to enhance the science and technology capabilities and core competencies required to fulfill the NNSS mission. Associated with this program, the Contractor shall annually prepare proposal(s) to for submission during the annual call for DOE Nuclear Safety Research and Development (NSRD) proposals to further advance the technical basis and efficiency of nuclear safety as applied to the NSE mission.

2.5 Project Management

The Contractor shall establish, maintain, and use a project management system, including an Earned Value Management System (EVMS) meeting the requirements of the American National Standards Institute (ANSI) standard ANSI/EIA-748 (American National Standards Institute/Electronic Industry

Alliance). The Contractor shall apply the project management system, using a graded approach, to all projects. The Contractor shall develop, plan, and execute projects to ensure all mission objectives are appropriately controlled and successfully achieved. When requested, the Contractor shall provide project management support to NNSA or an Other Government Agency (OGA).

3.0 DEFENSE PROGRAM REQUIREMENTS

The Office of Defense Programs (DP) for the NNSA ensures the Nation sustains a safe, secure, and effective nuclear deterrent through the application of science, technology, engineering, and manufacturing through the science-based Stockpile Stewardship and Management Program (SSMP). To deal with the changing face of nuclear deterrence and more-widely dispersed nuclear knowledge, the SSMP, also requires excellence in nuclear science and technology by replacing the functions of nuclear tests with a combination of nonnuclear and nuclear experiments, highly accurate physics modeling, and improved computational power to simulate and predict nuclear weapon performance over a wide range of conditions and scenarios. The Stockpile Stewardship (SS) portion of the SSMP provides the necessary tools to assess the stockpile, maintain its performance, continuously improve safety, respond to technological surprise and support future treaties. The SS includes research, development, computer simulation, and inertial confinement fusion activities to maintain the safety, security and effectiveness of the nuclear weapons stockpile; provides a technical basis for the annual assessment; develops modernization options, such as multipoint safety; and quantifies and mitigates the effects of aging on the stockpile.

The DP work is defined in two major categories:

- **Directed Stockpile Work**: activity that supports ongoing stockpile maintenance and refurbishment, dismantlement, and Life Extension work as well as the scientific understanding and engineering development capabilities necessary for the refurbishment and certification of the stockpile; and

- **Research, Development, Technology and Experimentation (RDT&E)**: activity that conducts new scientific research and combines it with existing data from stockpile surveillance, past nuclear tests, and computer simulations to improve and validate NNSA's models of nuclear weapons performance and physics and to certify the nuclear weapons stockpile. Activities advance the understanding of weapon physics, combined with improved computing power, leading to higher-fidelity predictive models that allow the NNSA complex to confidently conduct annual assessments, develop new technologies for LEPs, and support non-stockpile national security missions.

The Contractor shall provide the nuclear and non-nuclear facilities, test beds, infrastructure, and the most advanced diagnostic data recovery platforms for nuclear and non-nuclear experimental work, and assigned NNSA activities in support of the nuclear weapons stockpile, which includes, but is not limited to:

- Providing the integrating function for work including non-nuclear and nuclear test beds, experimental work, and other operational activities;

- Providing the scientific and technical expertise and experimental platforms that support assessment of the stockpile, including fundamental physics and application of the knowledge and experimental tools to assessments of emerging nuclear threats;

- Establish, exercise, and execute a sustainable dynamic plutonium experimental capability at NNSS to assess the effects of aging and manufacturing process on proposed approaches to stockpile LEPs, significant finding investigations (SFIs), and other issues that affect the viability of the current and future stockpile;

- Supporting nuclear and non-nuclear experiments at the NNSS and offsite locations at the National Nuclear Weapon Laboratories to validate codes, models, and databases for weapons assessment;

- Executing experiments and NNSA assigned work for primary and secondary reuse and LEP options;

- Continuously developing, advancing, fabricating (ruggedize), and delivering (including but not limited to) next generation diagnostics for assigned nuclear and non-nuclear experimental work that advance data capture, including subcritical, hydrodynamic, and dynamic materials experiments,, and deploy into the experimental platform at the NNSS and offsite locations Technologies for advancement, include but are not limited to: streak cameras and solid state fast digital imaging; control, timing and firing systems; neutron diagnosed systems; multi-axis, multi-pulse, radiography; software detection and analysis; signal process and transmission systems; and radiation, chemical, high explosive, biological sensors;

- Providing calibration services for diagnostic equipment supporting NNSA and national security assigned missions;

- Providing re-analysis capability of past underground test data that incorporate system response and quantitative error estimation;

- Conducting experiments on surrogate materials to optimize future platform potential with documentation of accuracy; and,

- Maintaining the NNSS capability to conduct an underground nuclear test within the required readiness timeframe.

4.0 DEFENSE NUCLEAR NONPROLIFERATION REQUIREMENTS

The Office of Defense Nuclear Nonproliferation (DNN) works closely with a wide range of international partners, key U.S. federal agencies, the U.S. national laboratories, and the private sector to secure, safeguard, and/or dispose of dangerous nuclear and radiological material, and detect and control the proliferation of related WMD technology and expertise.

The Contractor shall support U.S. national and nuclear security objectives in reducing global nuclear security threats through the innovation of unilateral and multi-lateral technical capabilities to detect, identify, and characterize: 1) foreign nuclear weapons programs, 2) illicit diversion of special nuclear materials, and 3) global nuclear detonations. In supporting U.S. national and nuclear security objectives in reducing global nuclear security threats, requirements include, but are not limited to:

- Designing, developing, testing and potential deploying of new technologies to advance U.S. capabilities to monitor nonproliferation and arms control treaty and agreement implementation;

- Providing unique training and capacity-building programs;

- Removing, eliminating, securing, safeguarding, and managing dangerous materials;

- Developing technologies to detect nuclear and radiological proliferation worldwide and global detonations; and

- Collaborating internationally to ensure the secure and safe expansion of global nuclear energy and other peaceful uses.

Specifically, many DNN activities involve experimentation and/or operations at NNSS for material and arms control monitoring and nuclear nonproliferation. The Contractor shall execute work, as a minimum, for:

- Nuclear Test Monitoring: Develop test beds and technical integration capabilities to perform real-world testing and validation of technologies and processes for 1) monitoring foreign nuclear weapons program activities for compliance with nuclear arms control treaties; and 2) improving the effectiveness of an On-Site Inspection capability.

- Nuclear Warhead Monitoring: Develop test beds and technical integration capabilities to perform real-

world testing and validation of technologies and processes for 1) detecting and tracking nuclear weapons and material movement, monitoring its storage, or detecting and tracking its diversion; and 2) conducting realistic arms control-related scenarios, including international participation and red teaming, where appropriate.

- Nuclear Proliferation Detection: Develop test beds and technical integration capabilities for 1) detecting the use of nuclear material production equipment or processes; 2) detecting activities associated with a foreign nuclear weapons development process; and 3) improving the accuracy and decreasing the timeline for nuclear forensics analyses, geared to properly and promptly inform decision makers in a post-detonation scenario.

5.0 NATIONAL INCIDENT RESPONSE REQUIREMENTS

NNSA's National Incident Response (NIR) (formerly National Emergency Response) Program is the U.S. government's primary capability for radiological and nuclear emergency response and for providing security to the nation from the threat of nuclear terrorism. The NIR program maintains a high level of readiness for protecting and serving the U.S. and its allies through the development, implementation and coordination of programs and systems designed to serve as a last line of defense in the event of a nuclear terrorist incident or other types of radiological accident. This readiness level provides the U.S. government with quickly deployable, dedicated resources capable of responding rapidly and comprehensively to nuclear or radiological incidents worldwide. The NIR program for the Contractor focuses on the following key areas:

- **Radiological search** – detecting nuclear or radiological materials during a particular event.

- **Render safe** – disabling a potentially yield-producing nuclear device by gaining access and performing diagnostics and disablement operations. Also, safely disposing of the components and supporting nuclear forensics

- **Consequence management** – addressing the consequence of a nuclear or radiological incident, including a terrorist attack, on people and the environment.

In support of the NIR program, the Contractor shall maintain and/or support a variety of emergency response assets and capabilities. These assets and capabilities encompass four core competencies: core knowledge of U.S. nuclear weapons, "dirty bombs" and crude nuclear devices; core knowledge of use and interpretation of specialized radiation detection equipment; core technical operations; and core technical support requirements. The assets and capabilities that the Contractor shall maintain include, but are not limited to:

- Aerial Measuring System (AMS): characterizing ground-deposited radiation from aerial (fixed- and rotary-wing aircraft) platforms with radiological measuring equipment, computer analysis of aerial measurements, and equipment to locate lost radioactive sources, conduct aerial surveys, or map large areas of contamination.

- Accident Response Group (ARG)/Joint Technical Operations Team (JTOT) support: providing technical response element comprised of scientists, technical specialists, crisis managers, and equipment ready for short-notice dispatch to the scene of a U.S. nuclear weapon accident.

- Federal Radiological Monitoring and Assessment Center (FRMAC): coordinating the interagency entity for federal offsite radiological monitoring and assessment activities for nuclear accidents or incidents and is responsible for providing a single source of compiled, quality controlled monitoring and assessment data to the lead federal agency involved in the national incident response.

- Radiological Assistance Program (RAP): providing advice and radiological assistance for incidents involving radioactive materials that pose a threat to public health and safety or the environment by providing field deployable teams of health physics professionals equipped to conduct radiological search, monitoring, and assessment activities.

- Radiation Emergency Assistance Center/Training Site (REAC/TS): providing medical advice, specialized training, and onsite assistance for the treatment of all types of radiation exposure accidents.

- Emergency Communications Network (ECN): providing mobile and stationary classified network (equipment & personnel) support for onsite and deployed Emergency Response assets.

- National Technical Nuclear Forensics (NTNF): providing technical specialists, equipment and facilities for conducting Pre-Detonation and Post-Detonation operations related to Improvised Nuclear Devices and/or Radiological Dispersal Devices.

- Nuclear/Radiological Advisory Team (NRAT): providing scientific advisory support in the areas of Nuclear Physics and Radiation for deployed NNSA/HQ Nuclear Incident Team and technical specialists and equipment in the area of radiological/nuclear search supporting other federal agencies.

6.0 INFRASTRUCTURE AND SAFETY REQUIREMENTS

6.1 Operations of Facilities

Operation of NNSS nuclear and non-nuclear facilities, including, but not limited to, labor, equipment, utilities, general services, leases, operation of equipment, Environment, Safety, Health & Quality (ESH&Q), nuclear safety, configuration management, and waste management activities required to run NNSA facilities in a safe and secure manner. Current facilities include:

6.1.1 Major Nuclear Facilities at NNSS JASPER, DAF, U1a Complex, Area 3/5 (requiring specialists (including but not limited to) in radiological, conventional high explosive, system engineering, mining, fire protection, material control and accountability, fissile material handling, safety basis, operational readiness, waste management, security, classification)

6.1.2 Radiological Facilities such as Radiological/Nuclear Countermeasures Test and Evaluation Complex (RNCTEC) (requiring some of the same expertise as mentioned in 6.1.1)

6.1.3 High Hazard Facilities such as Nonproliferation Test and Evaluation Complex (NPTEC)/Port Gaston (requiring expertise (including but not limited to) in various forms of high explosives, biological simulant, both hazardous and nonhazardous chemicals, mining)

6.1.4 Tunnels (requiring expertise (including but not limited to) in mining, ground support, industrial hygiene).

6.1.5 Low Hazard such as Shipping/Receiving, Warehouses, Cafeteria, Office Buildings, and facilities with activities such as classified machining, component dismantlement and disposition, detonator testing.

6.2 Maintenance

Recurring day-to-day work that is required to sustain and preserve plant, property, assets, systems, roads, and equipment in a condition suitable for it to be used for its designated purpose and to maintain retired facilities to adequately mitigate risk until disposition. The Contractor shall reduce deferred maintenance across the NNSS.

6.3 Recapitalization

Enhancements which include improvements to property, plant, and equipment (PP&E) that result in better quality, higher capacity, or an extended useful life, or work to accommodate regulatory and other requirement changes. Includes non- line item required infrastructure improvements for aged infrastructure such as Mercury and forward redevelopment and NNSS road, power, communications and security improvements.

6.4 Line Item Construction

Large construction projects to replace obsolete or unreliable infrastructure to reduce safety and program risk as well as improve productivity and sustainability.

6.5 National Criticality Safety Program

The Contractor shall safely and efficiently support NCERC operations.

7.0 DEFENSE NUCLEAR SECURITY REQUIREMENTS (MOD 0160)

The Office of Defense Nuclear Security (DNS) leads, develops, and implements the National Nuclear Security Administration's (NNSA) safeguards and security (S&S) program to enable NNSA's nuclear security enterprise (NSE) missions. The NNSA S&S program provides protection for NNSA personnel, facilities, nuclear weapons, and materials from a full spectrum of threats, ranging from minor security incidents to acts of terrorism.

The Contractor shall implement an effective and efficient S&S program that fosters a security conscious culture and focuses on innovation as well as appropriate application of risk management. The Contractor is responsible for executing all S&S programs employed at NNSS and satellite offices. This responsibility includes planning, integration, and management of all program elements, such as Protective Force, counter unmanned aerial systems (CUAS), physical security systems, materials control and accounting, personnel security, technical security, information security, operations security, performance assurance/vulnerability assessments, classification/declassification, and cyber security. The Contractor shall provide a highly trained, competent, qualified, and certified Protective Force to protect NNSA assets at the NNSS. The Contractor is expected to provide protective force staffing to meet requirements and mission needs in a risk-based, cost-effective manner.

The Contractor shall effectively plan, estimate, and execute security projects and procurements necessary for equipment and infrastructure modernization and enhancement. The Contractor will be required to effectively interact with local law enforcement from multiple jurisdictions in multiple States. At some satellite offices, the Contractor shall conduct operations security, entry and access control, and security education and awareness. The Contractor shall establish and maintain best practices for all security programs. The Contractor is expected to meet these requirements in a cost-effective manner.

8.0 MANAGEMENT AND ADMINISTRATION REQUIREMENTS

The Contractor shall provide management and administrative capabilities to maintain the NNSS and satellite offices. Maintaining this state of readiness requires the Contractor to provide the following administrative and technical capabilities, and to provide an assessment of its Readiness to DOE each year.

8.1 General Management, Administration, and Oversight

The Contractor shall be fully responsible and accountable for the safe, efficient and effective accomplishment of all work, whether performed by its own personnel or onsite subcontractors. The Contractor shall be responsible for planning, integrating, managing and executing the programs, projects, operations and other activities as described in this scope of work such that all functions are fully integrated and work is accomplished safely and securely. The Contractor shall provide general management and program management functions that include: legal services, audit services, business systems management, human resources, property management, labor relations, information resources, financial services, safeguards and security (including cybersecurity), public information and external communications activities, intergovernmental affairs, community relations, information technology, strategic planning, training, procurement, and industrial relations.

The Contractor shall provide and maintain other administrative services such as communications systems; diversity management programs; employee assistance programs; transportation and traffic management; a records management system; and a system of records for individuals, including those related to personnel radiation exposure information, medical, safety, and health.

The Contractor shall prepare, submit, disseminate, or otherwise publish financial, schedule, scientific, technical plans and reports, and other information and deliverables consistent with the needs of the various programmatic sponsors and other customers or as required elsewhere in the contract or as specifically required by the Contracting Officer.

The Contractor shall establish clear Environmental, Safety, and Health (ES&H) priorities and manage activities in proactive ways that comply with human health, safety and environmental regulations; minimize wastes; and comply with applicable regulatory requirements and DOE directives.

The Contractor shall continuously analyze site activities to identify commercial standards and practices that may be substituted for DOE Orders and Directives or for current site business practices. The Contractor shall evaluate the benefits of incorporation of those standards and practices into facility operations, and develop proposals that define the transition timelines and metrics to be used in monitoring the success of those substitutions that are approved by NNSA. The Contractor shall integrate the concepts of continuous improvement, such as independent quality certification, safety and environmental management systems, and total quality management into all aspects of site operations.

8.2 Waste Management/Energy Efficiency

The Contractor shall manage and perform waste minimizations and waste management activities, including pollution prevention and recycling, to support site operations. The Contractor shall assist DOE through direct participation and support in achieving DOE's energy efficiency goals and objectives in electricity, water, and thermal consumption, conservation, and savings.

8.3 Construction (Mod 0042 as corrected by Mod 0062)

(a) The Contractor shall ensure the construction of facilities is safe, secure, reliable and cost effective. In doing so, the Contractor shall:

(1) Perform design and construction activities for all projects as assigned;

(2) Adhere to project management requirements in accordance with DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets,* or its successor; only if applicable.

(3) Cooperate, collaborate, and interface with other NNSA Contractors to maximize efficiencies;

(4) Perform initial project development (for all projects regardless of dollar value), project management, design, and construction management activities in accordance with required DOE Orders; and

(5) Maintain project baselines, comply with required reporting, develop Documented Safety Analyses, if applicable; define quality requirements, ensure National Environmental Policy Act compliance, provide quarterly reports to the NNSA for assigned projects, support external reviews, and meet other requirements as defined in the Contract and as directed by the Contracting Officer.

(b) The Contractor shall effectively use an Earned-Value/resource loaded Project Management System across the Site to deliver projects on schedule, within budget, and to meet mission performance. The Contractor shall provide design and risk analysis, value engineering, configuration management, conceptual designs, preliminary designs, material testing, and surveying in support of engineering designs (Title I); final designs and construction drawings (Title II); and as-built drawings pursuant to

construction inspections, surveying, and material testing (Title III) services for activities supporting NNSA and its programmatic customers. The Contractor shall provide the skills necessary to accomplish this work to the safety and quality levels required for all facilities up to and including nuclear facilities, as applicable, while meeting agree upon customer time constraints and milestones.

8.4 Real Property and Asset Management

The Contractor shall perform management of government-owned/leased and Contractor-leased real property, facilities and equipment including, but not limited to: overall integrated planning, acquisition support, maintenance, operation, management, and disposition of Government-owned/leased real property and Contractor-leased facilities and infrastructure. In doing so shall provide, as a minimum, the following:

8.4.1 Planning/Engineering/Support

The Contractor shall manage government-owned, leased, or controlled real property and attendant facilities under this Contract. Specific activities include land and facility use planning, real property management, construction project management, utility management, maintenance management, configuration management, and support of the DOE/NNSA missions.

The Contractor shall provide design and risk analysis, value engineering, configuration management, conceptual designs, preliminary designs, material testing, and surveying in support of engineering designs (Title I); final designs and construction drawings (Title II); and as-built drawings pursuant to construction inspections, surveying, and material testing (Title III) services for activities supporting NNSA/NSO and its programmatic customers. The Contractor shall provide the skills necessary to accomplish this work to the safety and quality levels required for all facilities up to and including nuclear facilities, as applicable, while meeting demanding customer time constraints and milestones.

8.4.2 Utility Operations

The Contractor shall manage utility operations that include support for all electric service, fuel oil, natural gas, potable water/sewer service, purified water, nitrogen, steam, chilled water, and non-potable hot water operations and utility services, whether contracted for by the Contractor or DOE. Included in the Contractor's responsibilities is the operation of boiler/chiller plants, utility systems, procured utilities, utilities to other federal tenants, and managing the facility in an energy efficient manner per developed energy management plans.

8.4.3 Maintenance

The Contractor shall manage maintenance activities, including but not limited to: facilities, custodial services, and energy repairs and/or projects, modifications, and special project services for facilities. The Contractor shall perform periodic condition assessments of the property to determine any deterioration or technical obsolescence that may threaten performance or safety, per DOE/NNSA requirements.

8.5 Site Services

The Contractor shall provide the following site services, comparable to best-in- industry practices. In some cases where National Laboratory partners have their own programs at the NNSS the responsibility is to integrate with these programs providing assurance that they meet the intent of the programs (e.g. ESH, QA) established by the Contractor.

8.5.1 Environmental, Safety, & Health Programs

The Contractor shall manage and integrate ES&H programs for the purpose of ensuring that current and future site operations do not negatively impact the environment, or the health and safety of the

public, employees, and property. ES&H programs include, but are not limited to, accident prevention; criticality safety, nuclear safety, nuclear explosive and explosive safety; firearms safety; electrical, industrial, construction, and aviation safety; hazards identification; safety analysis and risk management; fire prevention and protection/suppression, hazardous material and nuclear explosive packaging and transportation operations, safety training, industrial hygiene, health physics, occupational safety, radiological protection, air emissions; storm-water, sanitary, and waste water discharges.

8.5.2 Quality Assurance

The Contractor shall meet appropriate quality assurance requirements, including those for nuclear activities.

8.5.3 Security

The Contractor shall implement all security programs employed at NNSS and satellite offices including but not limited to the physical, materials control and accounting, classified and sensitive information protection, personnel, technical, and cyber security programs. In the area of cybersecurity, the Contractor shall ensure data confidentiality, integrity, and availability; and implement technology designs that provide effective network monitoring, limit an intruder's ability and mitigate new vulnerabilities in a timely manner. The Contractor shall develop enhanced information security protection tools for information systems, applications, and networks within both classified and unclassified environments.

8.5.4 Emergency Services

The Contractor shall manage onsite emergency management and emergency operations programs, including but not limited to, emergency planning and preparedness activities for all NNSS and satellite facilities as well as Emergency Fire and Rescue Response services. The Contractor shall manage the NNSA/NSO Emergency Operations Center (EOC). The Contractor shall provide trained and qualified personnel to provide emergency fire and rescue response services, including firefighters and paramedics. Firefighters shall meet applicable National Fire Protection Association standards. Ambulance service shall be a state of Nevada permitted industrial ambulance service. Paramedic service and cooperative medical and fire and rescue response to surrounding areas is covered by NNSA/NSO MOU. The Contractor shall maintain and operate fire stations, fire alarm and fire suppression systems, and various fire-fighting and rescue equipment at the NNSS.

8.5.5 Medical Services

The Contractor shall provide personnel who are graduates of approved programs and licensed by their respective boards in the State of Nevada to provide emergency, non-occupational palliative, and occupational medical services to all workers and visitors of the NNSS and maintain adequate documentation of services provided.

8.5.6 Site Operations

The Contractor shall coordinate, schedule, and de-conflict all operations and activities occurring external to facilities at the NNSS including, but not limited to, site access coordination, air space and ground use, incident and emergency notifications, and emergency response dispatch.

8.5.7 Other Site Services

The Contractor shall provide other site services that are incidental or related to this SOW as directed and funded by DOE/NNSA. These support services include onsite and offsite activities that are complementary to the NNSA mission and enable DOE/NNSA to accomplish its integrated nuclear

weapons mission.

The Contractor shall provide assistance to the Nevada Field Office (NFO) National Environmental Policy Act (NEPA) compliance program upon request. This assistance may include, but is not limited to, development and implementation of NEPA compliance policies and procedures; development and implementation of employee training; assistance with the preparation of NEPA documentation and supporting studies; records management; and NEPA project tracking systems. The Contractor shall ensure that NEPA review is initiated early in the planning process and fully integrated with work planning and control processes at all levels. The Contractor shall conduct periodic reviews of NEPA compliance efforts at the policy and line levels as part of its performance assurance program. The Contractor shall not undertake on DOE's behalf an action that is subject to NEPA until DOE has notified the Contractor that DOE has satisfied applicable NEPA requirements.

The Contractor shall promptly review Freedom of Information Act (FOIA) requests and provide timely and quality responses consistent and compliant with Federal law and regulations (including DOE regulations), the NNSA FOIA program as implemented by the NNSA FOIA Officer, 10 CFR 1004, or as may otherwise be directed by the Contracting Officer.

9.0 FUNCTIONAL SUPPORT REQUIREMENTS

The Contractor shall provide:

9.1 General Support

General management and program management functions including: executive direction, strategic planning, human resources, financial support services, procurement, labor relations, legal services, centralized administrative services, training, program and project controls, information outreach, information technology services, records management, real and personal property management and other general support functions.

9.2 Mission Support

Mission support functions including environmental, safety and health, quality assurance, nuclear materials management, nuclear and non-nuclear packaging and transportation, facilities management, maintenance, utilities, engineering, safeguards and security, logistics support, project management, quality assurance, and laboratory/technical support.

9.3 Conduct and Formality of Operations

The Contractor shall conduct operations with appropriate formality and discipline applying an NNSA/NSO approved graded approach, up to and including nuclear facility rigor where required.

9.4 Communications, Public Affairs, Community Relations

9.4.1 The Contractor shall conduct communications, information, and public affairs programs, including internal and external communications; community involvement and outreach; interactions with the media, business, and the scientific and technical community; and liaison with Congressional offices and local, state, and Federal Agencies. The Contractor shall also provide public affairs functions necessary to support the NIR programs for NNSA

9.4.2 The Contractor shall develop and foster relationships and support with state, county and local community organizations. The Contractor shall initiate a technical cooperative program with the Nevada state universities system that builds technical capability in the universities based on programmatic funding and deliverables and fosters a resource pool for next generation of staff to support the national security missions.

9.5 Site Specific Support

Site specific support includes management and incentive fee administration, state and local taxes, and direction of a DOE-approved SDRD Program.

10.0 OTHER DOE SUPPORT REQUIREMENTS

10.1 Office of Environmental Management

The Contractor will execute Environmental and Waste Management at the NNSS that address the environmental legacy from historic nuclear weapons-related activities, while ensuring the health and safety of works, the public, and the environment through investigation and implementation of appropriate risk informed, cost-effective corrective actions related to contaminated groundwater, facilities, and soils; permanent disposal of low-level and mixed low-level radioactive waste generated by environmental cleanup activities across the DOE complex; and environmental protection, compliance, and monitoring of the air, water, plants, animals, and cultural resources at the NNSS. The Contractor, in close working relationships with the Environmental Restoration contractor and other DOE/NNSA stakeholders, shall perform the onsite physical environmental restoration and waste management programs. In addition, the Contractor shall manage the staging, storage, treatment, transportation, and disposal of waste generated through operational and environmental restoration programs at the NNSS or other NNSA locations. The Contractor shall minimize waste through pollution prevention and recycling activities.

10.2 Intelligence and Counterintelligence

The Contractor shall support the requirements of the Intelligence (IC) and Counterintelligence communities. The Contractor will support the DOE's Office of Intelligence and Counterintelligence and the broader IC mission requirements, including but not limited to, acting as a lead integrator of multiple technologies, developed elsewhere in the community, into complete systems.

11.0 OTHER NON-DOE SUPPORT

The Contractor shall manage and execute other assigned programs related to the NNSS mission.

11.1 Strategic Partnership Program (SPP) and Strategic Intelligence Partnership Program (SIPP)

The Contractor shall conduct a Strategic Partnership Program (SPP) and Strategic Intelligence Partnership Program (SIPP) in accordance with the Contract. The Contractor shall capitalize on the unique resources and capabilities available at the NNSS and satellite facilities to perform and manage, compatible with NNSA missions, a variety of reimbursable work for other government agencies in support of a broad range of national security goals and programs. The Contractor shall support the requirements of the IC as well as other federal agency sponsors such as the DOD, Federal and State agencies, and academia. All such work shall be consistent with and complementary to the approved missions of the NNSS.

11.2 Technology Partnerships Program

The Contractor shall support or establish Technology Partnerships for the transfer of technology to American-owned businesses as required. This work takes advantage of partnerships with industry through cooperative research and development agreements, outreach and direct assistance programs, user agreements and facilities, and education and training. All projects must enhance the NNSA's ability to meet mission requirements and improve the industrial competitiveness and national security of the United States.

11.3 Potential Mission Expansion Areas

The Contractor shall provide and manage facilities, test beds, technical and other services necessary to support future expansion of the NNSS and satellite facilities services to current and future customers as directed by the Contracting Officer.

CHAPTER III. Human Resources

1.0 DEFINITIONS (MOD 0160)

Incumbent Employees are the employees in good standing of National Security Technologies, LLC (NSTec) under Contract DE-AC52-06NA25946 as of the effective date of the Contract, or of SOC, LLC under Contract DE-NA0003676, as of the effective date of Modification No. 0160. Non-Incumbent Employees are new hires, i.e., employees other than Incumbent Employees who are hired by the Contractor on or after the beginning of the Base Term of the contract.

2.0 WORKFORCE TRANSITION (MOD 0160)

The following are requirements the Contractor shall carry out during the Transition Term prior to the beginning of the Base Term. After the effective date of the Contract, the Contractor may propose alternate due dates for the deliverables described in **2.1 Staffing Plan, 2.2 Pay & Benefits**, and **2.3 Incumbent Employees Right of First Refusal**, and **2.4 Personnel Appendix (*Section J Appendix G*).** The Contracting Officer may approve such changes provided the deliverable dates make transition more effective and efficient for both parties.

2.1 Staffing Plan

No later than 30 calendar days after the effective date of the Contract the Contractor shall provide NNSA its plan for achieving the right workforce size and skills mix and an estimate of the number of employees at each site to whom it expects to make employment offers. This staffing plan shall highlight essential skills and personnel that must be retained, by position, to ensure continuity of essential mission, safety, security, and safeguards programs.

2.1.1 No later than 30 calendar days after the effective date of Modification No. 0160, the Contractor shall provide NNSA its plan for achieving the right workforce size and skills mix and an estimate of the number of employees to whom it expects to make employment offers. This staffing plan shall highlight essential skills and personnel that must be retained, by position, to ensure continuity of essential mission, safety, security, and safeguards programs.

2.2 Pay & Benefits

Consistent with the requirements identified in 3.0 COMPENSATION and 4.0 BENEFITS below, the Contractor shall develop and submit for NNSA approval a pay and benefits program to cover non-bargaining unit Incumbent and non- bargaining unit Non-Incumbent Employees. It is expected that the benefits program will be developed using best practice and market-based design concepts to achieve maximum efficiency and lower cost.

2.2.1 No later than 45 calendar days after the effective date of the Contract, the Contractor shall submit for NNSA approval all proposed benefit plans including but not limited to retirement plans, disability, healthcare, and paid time off. The submission shall include all plan documents that will describe benefits provided to employees including existing plans to which the Contractor becomes a sponsor at the beginning of the Base Term (with proposed changes to existing plans) as well as newly proposed plans.

The submission shall also include an "Employee Benefits Value Study" comparing the proposed benefits for non-bargaining unit Incumbent Employees and non-bargaining unit Non-Incumbent

Employees using the Consolidated Employee Benefit Value Study methodologies and comparator companies, to be provided by the Contracting Officer, described in 4.1.5 below. Contracting Officer's approval of the Contractor's benefits program will be contingent on the net benefit value not exceeding the comparator group by more than five percent.

2.2.2 No later than 90 calendar days after the effective date of the Contract, the Contractor shall submit a plan with a timeline for implementing a Compensation system that meets the criteria defined **3.0 COMPENSATION** below.

2.2.3 No later than 45 calendar days after the effective date of Modification No. 0160, the Contractor shall submit for NNSA approval all proposed benefit plans including but not limited to retirement plans, disability, healthcare, and paid time off for Incumbent Employees who are former SOC, LLC employees. The submission shall include all plan documents that will describe benefits provided to employees including existing plans to which the Contractor becomes a sponsor as a result of Modification No. 0160 (with proposed changes to existing plans), as well as newly proposed plans.

2.3 Incumbent Employees Right of First Refusal

The Contractor shall use the Transition Term to make hiring decisions. The Contractor shall give a right of first refusal of employment for every position identified by the Contractor as necessary for completing the requirements of the Contract (other than positions occupied by Key Personnel and managers who directly reported to them) under this Contract to Incumbent Employees as defined in **1.0 DEFINITIONS** who meet the qualifications for a particular position. The Contractor shall provide a written offer of employment that identifies the individual's pay and a summary of the benefits package that will be available to the individual. Incumbent Employees offered the same position shall be provided their same base salary/pay rate in existence (provided by the incumbent Contractor) at the time the offer is made. Incumbent Employees offered a different position than the position they are performing at the time the offer is made shall be provided pay commensurate with the offered position. Such offers shall be provided to employees as soon as possible, however, no later than 90 calendar days after the effective date of the Contract.

2.4 Personnel Appendix

The Personnel Appendix (*Section J Appendix G*) sets forth certain Contractor Human Resources Management policies and related expenses that have cost implications under this Contract and are not covered explicitly in the FAR or DEAR cost principles. No later than 120 days after the effective date of the Contract, the Contractor shall submit a plan to address the open items in the Personnel Appendix Section J- Appendix G, which include but may not be limited to 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 7.0, 7.2, 8.2, 11.1 and 11.2. The Contractor shall obtain CO approval of Personnel Appendix proposals before implementation.

3.0 COMPENSATION

The Contractor, in a cost effective manner, shall recruit and retain a highly-skilled, motivated, and experienced workforce in a cost effective manner capable of carrying out the technical and other requirements set forth elsewhere in this SOW.

3.1 Total Compensation System

Consistent with the requirement in 2.2, Pay and Benefits, the Contractor shall establish a market based pay and benefit program. The objective is to provide a level of total compensation, which, within available funds, attracts, motivates and retains a highly competent workforce and maintains a competitive position in the applicable labor markets.

The Contractor shall develop, implement and maintain formal policies, practices and procedures to be used in the administration of its compensation system including a compensation system Self-Assessment Plan consistent with FAR 31.205-6 and DEAR 970.3102-05-6; "Compensation for Personal Services (Total Compensation System). In addition, the Contractor's Total Compensation System shall include the following components:

i) Philosophy and strategy for all pay delivery programs;

ii) System for establishing a job worth hierarchy;

iii) Method for relating internal job worth hierarchy to external market;

iv) System that includes a documented method and process for evaluating individual job performance and that bases individual and/or group compensation decisions on individual performance and Contractor performance as appropriate. In addition, the system must show the link to the annual evaluation of Contractor performance for individual compensation actions as appropriate;

v) Method for planning and monitoring the expenditure of funds; (vi) System for internal controls and self-assessment; and

vi) System to ensure that reimbursement of compensation, including stipends, for employees who are on joint appointments with a parent or other organization shall be pro-rated according to the amount of time the employee spent performing work under this Contract.

vii) Any changes to the Total Compensation System shall be submitted to the Contracting Officer 60 days prior to implementation. Changes that impact current or future costs shall be approved by the Contracting Officer prior to implementation.

3.2 Cash Compensation

The Contractor shall submit the following to the Contracting Officer for a determination for cost allowability for reimbursement under the Contract:

3.2.1 Any proposed major compensation program design changes prior to implementation.

3.2.2 An Annual Compensation Increase Plan (CIP). The CIP shall be provided to the Contracting Officer on October 1 annually and shall include the following components and data:

i) Comparison of average pay to market average pay;

ii) Information regarding surveys used for comparison;

iii) Aging factors used for escalating survey data and supporting information;

iv) Projection of escalation in the market and supporting information;

v) Information to support proposed structure adjustments, if any;

vi) Analysis to support special adjustments;

vii) Funding requests and supporting analysis for each pay structure to include breakouts of merit, promotions, variable pay, special adjustments, and structure movement;

A. The proposed plan totals shall be expressed as a percentage of the payroll for the end of the previous plan year.

B. All pay actions granted under the CIP are fully charged when they occur regardless of time of year in which the action transpires and whether the employee terminates before year end.

C. Specific payroll groups (e.g., exempt, nonexempt) for which CIP amounts are intended shall be defined by mutual agreement between the Contractor and the Contracting Officer.

D. The Contracting Officer may unilaterally adjust the CIP amount after approval based on major changes in factors that significantly affect the plan amount (for example, in the event of a major reduction in force or significant ramp-up).

E. The Contractor is authorized to make minor shifts (up to 10%) in funds between payroll groups without prior Contracting Officer approval. The Contractor shall notify the Contracting Officer at the time funds are shifted.

viii) A discussion of the impact of proposed CIP on the site budget; and (ix) Discussion of relevant factors other than market average pay (e.g., turnover and offer-to-acceptance statistics, collective bargaining provisions, geographic considerations, total compensation).

3.2.3 When any Key Personnel Person is replaced, the compensation for the replacement shall be submitted for approval by the Contracting Officer. The top contractor official (i.e., General Manager or equivalent) salary actions including merit pay increases shall be submitted annually to the Contracting Officer for approval. The top contractor official's approved reimbursed base salary will not exceed the benchmark referenced in FAR 31.2056(p) (3) and will serve as the maximum allowable salary reimbursement under the Contract. With these proposed compensation actions, the Contractor shall submit supporting justification related to internal and external equity, individual performance and the Application for Contractor Compensation Approval Form (DOE 3220.5). This documentation shall be provided to the Contracting Officer at least 30 days before the proposed effective date of the action.

3.2.4 For any proposed establishment of an Incentive Compensation Plan (variable pay plan/pay-atrisk), documentation shall be provided to the Contracting Officer, no later than 60 days prior to proposed implementation. No person in a Key Personnel position or acting in a Key Personnel position may participate in any Incentive Compensation Plan or other bonus plan that is a reimbursed cost under this Contract. Such proposal must contain:

i) The design of the Incentive Compensation Plan, the funding methodology, and linkage to Contract performance measures;

ii) Requirement for approval of Incentive Compensation Plan design changes by the Contracting Officer prior to implementation;

iii) Requirement for an annual approval, prior to the performance period, of the total dollar amount of the pool, the eligible positions, and linkage to Contract performance goals;

iv) Requirement for policy that provides a specific passover rate, i.e., percent of participants who will not receive an incentive;

v) Requirement for an annual summary report on distributions made under an Incentive Compensation Plan; and

vi) For any Executive Incentive Plans, a requirement for pay at risk. (Mod 0096)

3.2.5 Assignments of individuals outside of their normal duty station for which the NNSA/DOE will reimburse all or some of their compensation or other expenses shall be approved by the Contracting Officer prior to beginning the assignment. Requests shall be submitted 30 days prior to the desired start date. The Contractor shall submit a report of all such assignments, to include the total cost of each assignment, reason for assignment, location, duration, and cost-share arrangement to the Contracting Officer by January 30 of each year unless otherwise specified.

3.2.6 The Contractor shall submit a severance plan within 60 days of the effective date of the base term, which must include the notification period, pay-in-lieu policy, and the severance schedule. Supporting documentation must include information regarding standards from nationally recognized sources and or comparator firms (including corporate parents).

Severance Pay is not payable to an employee under this Contract if the employee:

i) Voluntarily separates, resigns or retires from employment, except that in the event the Contractor conducts an NNSA approved voluntary separation program;

ii) Is offered employment with a successor/replacement Contractor;

iii) Is offered employment with a parent or affiliated company; and/or

iv) Is discharged for cause; or

v) Is currently in a Key Personnel position

Service Credit for purposes of determining severance pay does not include any period of prior service for which severance pay has been previously paid through a DOE cost-reimbursement contract.

3.3 Reports and Information: Compensation

The Contractor shall provide the Contracting Officer with the following reports and information with respect to pay and benefits provided under this Contract:

i) An Annual Contractor Salary-Wage Increase Expenditure Report to include, at a minimum, breakouts for merit, promotion, variable pay, special adjustments, and structure movements for each pay structure, showing actual against approved amounts, no later than 90 days after Compensation Increase Plan Year expenditures; and

ii) Other compensation reports as requested by the Contracting Officer.

4.0 BENEFITS (MOD 0143)

4.1 Assumption of Existing Pension and Benefit Plans and Establishment of New Pension and/or Benefit Plans

The Contractor will be required to become a sponsor of the existing pension and other Post Retirement Benefit Plans (PRB), as applicable, with responsibility for management and administration of the plans, including maintaining the qualified status of those plans. The Contractor shall carry over the length of service credit and leave balances for Incumbent Employees accrued as of the date of the Base Term.

4.1.1 To the extent the Contractor seeks to establish new benefit plans or change existing benefit plans at the time of Contract transition, the Contractor shall provide written justification to the Contracting Officer for all new benefit plans and for all changes to existing benefit plans, plan design, or funding methodology. Changes that increase costs must also include cost impact, and the basis of determining cost. The Contractor must obtain approval from the Contracting Officer no later than 60 days prior to implementation of benefit plans that are 1) either new or first time for the site; 2) would have a

significant impact to employees; or 3) increase cost or 4) which may set a precedent for the DOE/NNSA contractor system.

4.1.2 Cost reimbursement for pension and other benefit programs sponsored by the Contractor for non-bargaining and bargaining unit employees will be based on conformance with the "Employee Benefits Value Study" and an "Employee Benefits Cost Survey Comparison" requirements as described in 4.1.5.1 and 4.1.5.2 below.

4.1.3 If the Contractor seeks to terminate any benefit plan during the term of the Contract, the Contractor must obtain Contracting Officer approval for such termination. In addition, a Contractor proposal to terminate a pension plan must be provided to the Contracting Officer at least 60 days prior to the scheduled date of plan termination.

4.1.4 Service Credit for cost reimbursement for employee benefits to include PRB eligibility will be determined in accordance with NNSA Supplemental Directive NA SD O 350.1, M&O Contractor Service Credit Recognition.

4.1.5 Unless otherwise stated, or as directed by the Contracting Officer, the Contractor shall submit the studies required in paragraphs 4.1.5.1 and 4.1.5.2 below. In addition, the Contractor shall submit updated studies to the Contracting Officer for approval prior to the adoption of any change to a pension or other benefit plan that will increase costs.

4.1.5.1 The Consolidated Employee Benefits Value Study for non-bargaining unit employees, shall be completed every two years and submitted to the Contracting Officer no later than July 31 of the applicable year. An Employee Benefits Value Study (Ben Val) is an actuarial study of the relative value (RV) of the benefits programs offered by the Contractor to employees measured against the RV of benefit programs offered by comparator companies. The Contractor shall use the comparator companies previously used in the last Consolidated Benefit Value Study. If any of the comparator companies no longer participate, the Contractor shall recommend replacement companies for approval by the Contracting Officer. The Contractor shall include major non-statutory benefit plans offered by the Contractor, including qualified defined benefit (DB) and defined contribution (DC) retirement plans; capital accumulation plans; and death, disability, health, and paid time off welfare benefit programs in the Value Study. Any M&O Contractor defined benefit pension plans and post-retirement benefit plans, closed to new entrants, do not have to be included in the Ben Val measurement. (Mod 0143)

4.1.5.2 With respect to the Ben Val that must be submitted every two years, per 4.1.5.1 above, when the average net benefit value for non-bargaining employees exceeds the comparator group average by more than five percent, the Contractor may be required to provide, for Contracting Officer approval, a Corrective Action Plan describing the specific actions they plan to take to get to 105% within a specified period of time. (Mod 0143)

4.1.5.3 An Employee Benefits Cost Study Comparison (Cost Study) for non-bargaining and bargaining unit employees if applicable, shall be completed annually and submitted to the Contracting Officer no later than July 31. The Cost Study must use a professionally recognized measure approved by the Contracting Officer that analyzes the Contractor's employee benefits cost for employees on a per capita basis per full time equivalent employee and compares it with appropriate comparator data. (Mod 0143)

4.1.5.4 When the average of the Contractor's Cost Study total benefit per capita cost for the non-bargaining employees exceeds the comparator group's total benefit per capita cost by more than five percent, the Contractor shall submit an analysis to determine the particular benefits that have driven the per capita costs in excess of 105% of the comparator group's benchmark. Based on this analysis, the Contracting Officer will determine whether a corrective action plan is necessary and the specified period of time. (Mod 0143)

4.1.5.5 Within two years of Contracting Officer approval of the Contractor's corrective action plan for non-bargaining employees, or upon the next collective bargaining period for bargaining unit employees, the Contractor shall attempt to align employee benefit programs with the benefit value and per capita cost range as approved by the Contracting Officer.

4.2 Reports and Information: Benefits

The Contractor shall provide to the Contracting Officer:

i) All data requested to be entered into DOE's iBenefits management system, including but not limited to the Report of Contractor Expenditures for Employee Supplemental Compensation.

4.3 Workers' Compensation

4.3.1 The Contractor, unless workers' compensation coverage is provided through a state funded arrangement or a corporate benefits program, shall submit to the Contracting Officer for approval all new workers' compensation policies and all initial proposals for self-insurance (Contractors shall provide copies to the Contracting Officer of all renewal policies for workers compensation).

4.3.2 Workers' compensation loss income benefit payments when supplemented by other programs (such as salary continuation, short term disability) are to be administered so that the total benefit payments from all sources shall not exceed 100% of employee's net pay.

4.4 Pension Plans

The Contractor will be required to become a sponsor of the existing pension plans and other Post Retirement Benefit Plans (PRB), as applicable, with responsibility for management and administration of the plans, including maintaining the qualified status of those plans. The Contractor shall carry over the length of service credit and leave balances for Incumbent Employees accrued as of the date of the Base Term.

For cost allocability and reimbursement purposes, any defined benefit (DB) or defined contribution (DC) pension plans established by the Contractor and may DB or DC plans for which the Contractor assumes sponsorship upon the start of the Base Term, shall be maintained consistent with the requirements of the Internal Revenue Code (IRC), Employee Retirement Income Security Act of 1974 (ERISA) as amended and any other applicable laws.

4.4.1 Any pension plan maintained by the Contractor, for which NNSA reimburses costs, shall be maintained as a separate pension plan distinct from any other pension plan which provides credit for service not performed under this Contract. Each Contractor pension plan shall be subjected to a limited-scope audit annually that satisfies the requirements of Employee Retirement Income Security Act (ERISA) section 103, except that every third year the Contractor shall conduct a full-scope audit satisfying ERISA section 103. Alternatively, the Contractor may conduct a full-scope audit satisfying ERISA section 103 annually. In all cases, the Contractor shall submit the audit results to the Contracting Officer within 30 days from the completion of the audit. In years in which a limited scope audit is conducted, the Contractor shall provide the Contracting Officer with a copy of the qualified trustee or custodian's certification regarding the investment information that provides the basis for the plan sponsor to satisfy reporting requirements under ERISA section 104.

4.4.2 The Contractor will be reimbursed for pension contributions in the amounts necessary to ensure that the plans are funded to meet the annual minimum required contribution under ERISA, as amended. If an additional pension contribution over and above the minimum required contribution would have the effect of avoiding benefit restrictions to defined benefit plan participants, the Contractor shall notify the Contracting Officer at least 60 days prior to the date a payment would be due. Reimbursement above the annual ERISA required minimum contribution will require prior approval of the

Contracting Officer. The Contracting Officer will take into consideration all pre-funding balances and funding standard carryover balances when evaluating whether to approve reimbursement above the minimum required contribution. The timing and amount of contributions to the plan will be made to satisfy the Section 430 of the Internal Revenue Code and Section 302 of ERISA and avoiding any penalties associated with contributions made after a required installment date.

4.4.3 The Contractor shall obtain the advance written approval of the Contracting Officer for any proposed changes to DB and/or DC plans that are not required by law and which may increase costs or liabilities. The Contractor shall submit the proposal at least 60 days prior to the effective date of the proposed changes. In addition any proposed special programs (including, but not limited to, plan-loan features, employee contribution refunds, or ancillary benefits) shall be submitted to the Contracting Officer for prior approval with an analysis of the impact of special programs on the actuarial accrued liabilities of the pension plan, and on relative benefit value, or cost per capita, if applicable. The analysis should also describe the potential impact on the plan's qualified status at present and the potential impact of the special programs on the qualified status through the duration of the Contract.

4.4.3.1 For proposed changes to DB and DC plans that are not mandated by law and which increase plan costs and/or liabilities, the Contractor shall provide the following to the Contracting Officer:

(i) A clean copy of the current plan document (as conformed to show all prior plan amendments), with the proposed new amendment indicated in redline/strikeout:

(ii) An analysis of the impact of any proposed changes on actuarial accrued liabilities and an analysis of relative benefit value and a cost study index;

(iii) Except in circumstances where the Contracting Officer indicates that it is unnecessary, a legal explanation of the proposed changes from Contractor legal counsel for purposes of compliance with all legal requirements applicable to private sector DB and DC plans;

(iv) The Summary Plan Description; and

(v) Any such additional information as requested by the Contracting Officer.

4.4.3.2 When changes to DB and/or DC plans are required by law, or the changes do not increase costs or liabilities under the plan(s), the Contractor must provide a copy of the current plan document (as conformed to show all prior plan amendments), with the proposed new amendment indicated in redline/strikeout no later than 60 days before the new amendment is to take effect.

4.4.4 When operations at a designated NNSA facility are terminated and no further work is to occur under the prime Contract, the following apply.

4.4.4.1 No further benefits for service shall accrue.

4.4.4.2 The Contractor shall provide a determination statement in its settlement proposal, defining and identifying all liabilities and assets attributable to the NNSA Contract.

4.4.4.3 The Contractor shall base its DB pension liabilities attributable to NNSA Contract work on the market value of annuities or dispose of such liabilities through a competitive purchase of annuities. The Contractor, as pension plan sponsor, must adhere to Department of Labor guidance set forth at 29 CFR 2509.95-1 regarding selection of an annuity provider for the purpose of benefit distributions from a DB pension plan.

4.4.4.4 Assets shall be determined using the "accrual-basis market value" on the date of termination of operations.

4.4.4.5 NNSA and the Contractor shall establish an effective date for spinoff or plan termination. On the same day as the Contractor notifies the Internal Revenue Service (IRS) of the spinoff or plan termination, all NNSA assets assigned to a spun-off or terminating plan shall be placed in a high-yield, fixed-income portfolio until the successor trustee, or an insurance company, is able to assume stewardship of those assets. The portfolio shall be rated no lower than Standard & Poor's "AA."

4.4.5 Terminating Plans

4.4.5.1 If the Contractor seeks to terminate any pension plan during the term of the Contract, the Contractor must obtain Contracting Officer approval for such termination. In addition, a Contractor proposal to terminate a pension plan must be provided to the Contracting Officer at least 60 days prior to the scheduled date of plan termination.

4.4.5.2 To the extent possible, the Contractor shall satisfy plan liabilities to plan participants by the purchase of annuities through competitive bidding on the open annuity market, or through lump sum payouts. The Contractor, as pension plan sponsor, must adhere to Department of Labor guidance set forth at 29 CFR 2509.95-1 regarding selection of an annuity provider for the purpose of benefit distributions from a DB pension plan. With respect to standard plan terminations, the Contractor must adhere to all Pension Benefit Guaranty Corporation regulations regarding the termination of a pension plan.

4.4.5.3 Funds to be paid or transferred to any party as a result of settlements relating to pension plan termination or reassignment shall accrue interest from the effective date of termination or reassignment until the date of payment or transfer.

4.4.5.4 If ERISA or Internal Revenue Code (IRC) rules prevent a full transfer of excess NNSA reimbursed assets from the terminated plan, the Contractor shall pay any deficiency directly to NNSA according to a schedule of payments to be negotiated by the parties.

4.4.5.5 On the same day as the Contractor notifies the IRS of the plan termination, all NNSA assets will be placed in a low-risk liability matching portfolio until full disposition of the terminating plan's liabilities. The portfolio shall be rated no lower than Standard & Poor's "AA."

4.4.5.6 NNSA liability to a commingled pension plan shall not exceed that portion which corresponds to participants' service accrued for their work under an NNSA Contract. The NNSA shall have no other liability to the plan, to the plan sponsor, or to the plan participants.

4.4.5.7 After all liabilities of the plan are satisfied, the Contractor shall return to NNSA an amount equaling the asset reversion from the plan termination and any earnings, which accrue on that amount because of a delay in the payment to NNSA. Such amount and such earnings shall be subject to NNSA audit. To affect the purposes of this paragraph, NNSA and the Contractor may stipulate to a schedule of payments.

4.4.6 Post Contract Responsibilities for Pension and Other Benefit Plans

4.4.6.1 If this Contract expires or terminates and NNSA has awarded a contract under which the new contractor becomes a sponsor and assumes responsibility for management and administration of the pension or other benefit plans covering active or retired Contractor employees with respect to service, the Contractor shall cooperate and transfer to the new contractor its responsibility for sponsorship, management and administration of the plans consistent with direction from the Contracting Officer. If a comingled plan is involved, the Contractor shall:

(i) Spin off the NNSA portion of any commingled plan that provides benefits for employees working at the NNSA facility into a separate plan. The new plan shall provide benefits

similar to those provided by the commingled plan and shall carry with it the NNSA assets on an accrual basis market value, including NNSA assets that have accrued in excess of NNSA liabilities.

(ii) Bargain in good faith with NNSA or the successor Contractor to determine the assumptions and methods for establishing the liabilities involved in a spinoff. NNSA and the Contractor(s) shall establish an effective date of spinoff. On the same day as the Contractor notifies the IRS of the spinoff, all NNSA assets assigned to a spun-off plan shall be placed in a high-yield, fixed income portfolio until the successor trustee is able to assume stewardship of those assets. The portfolio shall be rated no lower than Standard & Poor's "AA."

4.4.6.2 If this Contract expires or terminates and NNSA has not awarded a contract to a new contractor under which the new contractor becomes a sponsor and assumes responsibility for management and administration of the Plans, or if the Contracting Officer determines that the scope of work under the Contract has been completed (any one such event may be deemed by the Contracting Officer to be "Contract Completion" for purposes of this paragraph), whichever is earlier, and notwithstanding any other obligations and requirements concerning expiration or termination elsewhere in this Contract, the following actions shall occur regarding the Contractor's obligations regarding the Plans at the time of Contract Completion:

(i) Subject to paragraph 4.4.6.2

(ii) below, and notwithstanding any legal obligations independent of the Contract the Contractor may have regarding responsibilities for sponsorship, management, and administration of the Plans, the Contractor shall remain the sponsor of the Plans, in accordance with applicable legal requirements.

(iii) The parties shall exercise their best efforts to reach agreement on the Contractor's responsibilities for sponsorship, management and administration of the Plans prior to or at the time of Contract Completion. However, if the parties have not reached agreement on the Contractor's responsibilities for sponsorship, management and administration of the Plans prior to or at the time of Contract Completion, unless and until such agreement is reached, the Contractor shall comply with written direction from the Contracting Officer regarding the Contractor's responsibilities for continued provision of pension and welfare benefits under the Plans, including but not limited to continued sponsorship of the Plans, in accordance with applicable legal requirements. To the extent that the Contractor incurs costs in implementing direction from the Contracting Officer, the Contractor's costs will be reimbursed pursuant to applicable Contract provisions.

4.4.7 Reports and Information - Retirement Plans: For each DB and DC pension plan as applicable or portion of a pension plan for which NNSA reimburses costs, the Contractor shall provide the Contracting Officer with the following information within nine months of the last day of the current pension plan year except for the Pension Management Plan which must be submitted by January 30 of each year.

4.4.7.1 The annual actuarial valuation report for each NNSA-reimbursed pension plan. When a pension plan is commingled, the Contractor shall submit separate reports for NNSA's portion and the plan total.

4.4.7.2 Copies of IRS Forms 5500 with Schedules for each NNSA-funded pension plan, no later than that submitted to the IRS.

4.4.7.3 Copies of all forms in the 5300 series submitted to the IRS that document the establishment, amendment, termination, spin-off, or merger of a plan submitted to the IRS.

4.4.7.4 The annual Pension Management Plan as described below (**4.5 Pension Management Plan**) by January 30 of each year.

4.5 Pension Management Plan

4.5.1 The Contractor shall submit a plan for management and administration (Pension Management Plan) for each defined benefit pension plan (Plan) for which the Department has a continuing obligation to reimburse pension contributions that is consistent with the terms of this Contract.

4.5.2 The Pension Management Plan, shall be submitted annually on January 30, shall include:

4.5.2.1 The Contractor's best estimate of the contributions which it will be legally obligated to make to the Plan(s), beginning with the required contributions for the current fiscal year, based on the latest actuarial valuation, and continuing for the following four fiscal years. This estimate will be based upon compliance with all applicable legal requirements relating to the determination of contributions and upon the assumptions set out in the Plan document(s). All contribution calculations should reflect payments made during DOE fiscal years, beginning October 1, through September 30, and the next succeeding six fiscal years. Please include a summary of the key actuarial assumptions used to determine the required contribution. All estimates must be based upon the most recently available asset information for the Plan. For example, for a Plan with a July 1 valuation date, project the July 1, value of assets for the current year to be used in the calculation from the actual January 1, value of assets from the same year.

4.5.2.2 If the actuarial valuation submitted pursuant to the annual Pension Management Plan update indicates that the sponsor of the Plan must impose benefit restrictions, the Contractor shall provide the following information:

(i) The type of benefit restriction that will take place;

(ii) The number of Contractor employees that potentially could be impacted and the nature of the restriction (e.g., financial impact) by imposition of the required benefit restriction;

(iii) The amount of money that would need to be contributed to the Plan and the timing of such contribution to avoid legally required benefit restrictions; and

(iv) A recommendation regarding whether the additional money should be contributed to the Plan and the rationale for the recommendation.

4.5.2.3 A detailed discussion of how the Contractor intends to manage the Plan(s) to maximize contribution predictability (i.e. forecasting accuracy) and to contain current and future costs, to include the rationale for selection of all Plan assumptions (i.e., actuarial experience studies) that determine the required contributions and which impact the level and predictability of required contributions. As part of the Contractor's plan to maximize contribution predictability, the Contractor may propose funding strategies other than ERISA minimums for NNSA's consideration and approval.

The Contractor shall submit the following for NNSA to consider in deciding on the alternate funding strategy:

(i) Identify whether the current year additional amount can be absorbed within the current operating budget;

(ii) Discuss the integration of Plan's funding strategy and investment strategy taking into consideration the plan's demographic profile, liability duration, and impact of current year funding decisions on future year contribution requirements;

(iii) Discuss the strategy for achieving fully funded status and protecting against erosion of the Plan's funded status;

(iv) Discuss the strategy for specifically protecting any pension funding contributions reimbursed in excess of the minimum required contribution against the risk of significant loss;

(v) Discuss whether the plan has a prefunding or funding standard carryover balance that could be used to improve the plan's AFTAP without requiring additional contributions. Provide a rationale regarding the recommended use of the available balance(s).

4.5.2.4 An assessment to evaluate the effectiveness of the Contractor's Plan(s) investment management/results. The assessment must include at a minimum: a review and analysis of Plan investment objectives and asset allocations; results of the most recent asset liability study and investment policy review; the strategies employed to achieve the Plan's investment objectives; and the methods used to monitor execution of those strategies and the achievement of the investment objectives. The Contractor shall also identify its plans, if any, for revising any aspect of its Pension Management Plan based on the results of the review.

Within 30 days after the date of the submission, appropriate Contractor representatives will meet with the Contracting Officer and other DOE/NNSA representatives to discuss the Contractor's proposed Pension Management Plan. The Contractor must be prepared to discuss any differences between the prior fiscal year's estimated pension contributions for future fiscal years and the most recent projected pension contributions for future fiscal years and the rationale for any such discrepancies. In addition, discrepancies between the actual contributions made for the most recent fiscal year preceding the meeting and the projected contributions for that fiscal year and the rationale for any such discrepancies, and funding strategies for the Plan will be discussed.

5.0 LABOR RELATIONS (MOD 0037)

5.1 The Contractor shall comply with the National Labor Relations Act, DEAR Subpart 970.2201, and all applicable Federal and State labor laws.

5.2 (Mod 0037) No later than 60 days before the commencement of bargaining, the Contractor shall provide to the Contracting Officer in writing: 1) the proposed changes to the current collective bargaining agreement that will increase costs over and above the current collective bargaining agreement costs; 2) the proposed savings to the current collective bargaining agreement; 3) the dollar amounts associated with the proposed changes to reflect a total cost and total net cost (or savings). Cost increase figures shall be provided for each of the following distinct categories if relevant: wages, health benefits, retirement benefits and all other benefits that increase costs under the existing collective bargaining agreement. Upon the request of the Contracting Officer, provide the full financial impact of the proposed wage increases, including but not limited to the impact on overtime and shift differential costs and an estimate of overhead burden increases that will occur as a result of the proposed wage and benefit increases over the life of the collective bargaining agreement.

The Contractor will provide regional wage survey information, Benefits Value study information (if applicable), Cost Study information and any other relevant geographic economic comparators to support the collective bargaining cost figures set forth in the Contractor's proposal no later than 60 days prior to the commencement of bargaining.

Prior to the commencement of collective bargaining, the Contracting Officer will communicate in writing to the Contractor the total approved, aggregate cost ceiling for the cost associated with the successor collective bargaining agreement. Once the aggregate threshold is determined and provided to the Contractor, no further approval of economic parameters is required unless: 1) the changes would exceed the aggregate figure or, 2) the changes proposed are contrary to Departmental policy or written instructions. To the extent the Contractor assumes savings from new negotiation positions not set forth in

the Contractor's initial cost proposal, the Contractor must notify the Contracting Officer of such assumed savings by no later than 15 days after the collective bargaining agreement is executed.

5.3 The Contractor shall provide an electronic copy of the bargaining agreement and the "Report of Settlement" to the Contracting Officer 30 days after formal ratification. The Contractor shall provide information requested by the Contracting Officer regarding ratified collective bargaining agreements to which the Contractor is a party. The Contractor shall enter information, including but not limited to the executed collective bargaining agreements, into the iBenefits system quarterly or upon Contracting Officer request.

5.4 The Contractor shall notify the Contracting Officer in a timely fashion of labor relations issues that may cause a significant impact to the workforce and/or impact the ability of the Contractor to perform the work under the Contract.

5.5 The Contractor shall immediately advise the Contracting Officer of the following:

5.5.1 Possible strike situations or other actions affecting the continuity of operations including work stoppages and picketing;

5.5.2 Formal action by the National Labor Relations Board (NLRB) including but not limited to issuance of a complaint against the Contractor. Copies of complaints, settlement agreements, judgments and any other documents issued in connection with Contractor actions with respect to labor practices shall be provided to the Contracting Officer;

5.5.3 Recourse to procedures under the Labor-Management Relations Act of 1947 as amended or any other state law;

5.5.4 Any grievance scheduled for arbitration under any collective bargaining agreement that has the potential for significant economic or other impact as well as the decision of the arbitrator; and

5.5.5 Other significant issues that may involve review by other federal or state agencies.

6.0 WORKFORCE PLANNING

6.1 Workforce Planning – General

The Contractor shall annually analyze workforce requirements consistent with current mission requirements and future mission requirements identified to Contractor. The Contractor will describe in a written document how it will ensure it employs a sufficient number of employees who possess the appropriate skills to perform the current mission work and the anticipated, identified mission work.

The description of how the Contractor will ensure it employs sufficient employees to perform the work may include a discussion of the following topics: future hiring needs in certain critical skill areas, recruitment and retention of individuals possessing certain critical skills and the impact of anticipated retirements/attrition. The document will also describe the amount and type of work the Contractor anticipates performing during the following calendar year pursuant to Strategic Partnership Projects [Formerly Known as Work for Others (Non-Department of Energy Funded Work)]. This analysis shall be provided to the Contracting Officer no later than November 30th each year.

6.2 Reductions in Contractor Employment – Workforce Restructuring

6.2.1 Voluntary Separations: In order to minimize the number of involuntary separations and mitigate the impact on affected employees, the Contractor will consider in consultation with the Contracting Officer, the use of a Voluntary Separation Program (VSP) before consideration is given to conducting an Involuntary Separation Program (ISP) when workforce restructuring is necessary. The Contractor shall submit the VSP for approval by the Contracting Officer prior to implementation regardless of

the number of employees involved. No reimbursement of costs associated with VSPs will be allowable if not approved by the Contracting Officer prior to implementation.

6.2.2 Involuntary Reductions in Contractor Employment

6.2.2.1 1 If the restructuring involves between 10-99 employees in a rolling twelve month period, the Contractor shall notify the Contracting Officer no later than 15 days in advance of the action. For purposes of determining whether the Contractor's restructuring actions meet the thresholds set forth in this section 6.2.2.1 and Section 6.2.2.2, the Contractor shall exclude Bargaining Unit employees who are terminated pursuant to the provisions of a collective bargaining agreement and who do not receive severance pay upon termination.

6.2.2.2 For restructuring actions that involve separating between 50-99 employees, the Contractor shall prepare a specific workforce restructuring plan and submit the plan to the Contracting Officer for informational purposes. In addition, the Contractor shall perform an adverse impact analysis and provide a copy of the analysis to the NNSA Field Counsel for any restructuring actions that involve 50 or more employees within a 12-month period.

If the restructuring may involve the separation of 100 or more employees within a 12-month period, the Contractor shall submit a specific workforce restructuring plan for approval by the Contracting Officer, to enable compliance with Section 3161 of the National Defense Authorization Act for Fiscal Year 1993 at a minimum, no later than 90 days in advance of the date the Contractor needs to begin notification to employees in accordance with the law and its attendant timeframes to effect the separations.

6.2.2.3 All notifications to the NNSA must contain pertinent information such as reasons, costs, dates, and numbers of impacted employees.

6.2.2.4 The Contractor may submit a multi-year workforce restructuring plan for consideration and approval.

6.2.3 Any payment of benefits beyond those already approved in the Contract must be approved by the Administrator, NNSA, through the Contracting Officer.

Section J
Appendix B
Award Fee Plan

(Mod 0009, 0033, 0064, 0085, 0164, 0200)

Section J, Appendix B: Fiscal Year 2024
DOE/NNSA Strategic Performance Evaluation and Measurement Plan (PEMP)
Mission Support & Test Services, LLC

Management And Operation of The Nevada National Security Site

Contract Number: DE-NA0003624

Performance Evaluation Period: October 01, 2023 through September 30, 2024

Garrett Harencak 8/21/2023

Garrett Harencak Date
President
Mission Support & Test Services, LLC

David R. Bowman Digitally signed by David R. Bowman Date: 2023.08.22 08:05:31 -07'00'

David R. Bowman, Ph.D. Date
Field Office Manager
Nevada Field Office

Marla Thornton Digitally signed by Marla Thornton Date: 2023.08.22 08:00:01 -07'00'

Marla E. Thornton Date
Contracting Officer
Nevada Field Office

FY 2024 PERFORMANCE EVALUATION AND MEASUREMENT PLAN

DOCUMENT REVISION HISTORY

Revision	Date	Change Description

INTRODUCTION

The Nevada National Security Site (NNSS) is a site owned by the United States Government, under the custody of the Department of Energy (DOE), herein referenced as "NNSS," and is managed and operated by Mission Support & Test Service, LLC (MSTS). Pursuant to the terms and conditions of the Contract, this NNSA Performance Evaluation and Measurement Plan (PEMP) sets forth the criteria by which NNSA will evaluate MSTS' performance and upon which NNSA shall determine of the amount of award fee earned. The available award fee amounts for FY 2024 are specified in Section B, Supplies or Services and Prices/Costs, of the Contract. This PEMP promotes a strategic Governance and Management Framework in support of the NNSA's Strategic Vision. This Strategic Vision requires MSTS to fully execute mission milestones in support of key mission objectives and effectively meet significant management challenges identified by NNSA.

PERFORMANCE BASED APPROACH

The performance-based approach evaluates the MSTS performance through a set of Goals. Each Goal, and its associated Objectives and Key Outcomes (KOs) as applicable, will be measured against authorized cost, schedule, and technical performance, based on respective outcomes, demonstrated performance, and impact to DOE/NNSA missions.

MISSION

MSTS shall provide support and infrastructure for experiments and activities at the NNSS and satellite facilities. MSTS shall be responsible for a wide range of activities in support of DOE/NNSA missions that include the following: nuclear explosives operations; remote field experiments and operations; physical and environmental science; nuclear waste management systems and technology; design and fabrication of electronic, mechanical, and structural systems; remote and robotic sensing; management of multi-laboratory facilities, mining, engineering, and construction operations; chemical, explosives, and hazardous materials systems and technologies; intelligence-related work; and waste management for various categories of waste. MSTS shall be responsible for a wide-range of facilities, laboratories, and equipment that support the custom design, construction, and fielding of experimental systems ranging from small electronic and remote sensing packages to fielding complex systems in hostile environments for use anywhere in the world.

MISSION PERFORMANCE

MSTS is accountable for and will be evaluated on successfully executing program work in accordance with applicable DOE/NNSA safety, security, and sustainability requirements consistent with the terms and conditions of the Contract. Protection of worker and public safety, the environment, and security are essential and implicit elements of successful mission performance. Accordingly, MSTS shall plan mission work with safety and security as integral to mission execution and meeting the affected programmatic Goals. The model for this PEMP is to rely on MSTS' leadership to use appropriate DOE contractual requirements and recognized industrial standards based on consideration of its assurance system and supporting measures, metrics, and evidence. **MSTS is expected to manage in a safe, secure, sustainable, efficient, effective, and results-driven manner, with appropriate risk management and transparency to the government, while taking appropriate measures to minimize costs that do not compromise core objectives and mission performance.**

INNOVATIVE SOLUTIONS

MSTS will recommend innovative, technology/science-based, systems-engineering solutions to the most challenging problems that face the nation and the globe. MSTS will also provide evidence to support programmatic needs and operational goals tempered by risk. DOE/NNSA will take into consideration all major functions including safety, security, and sustainability contributing to mission success. In addition, DOE/NNSA expects MSTS to recommend and implement innovative business and management improvement solutions that enhance effectiveness and efficiency, to include partnering with external vendors and the Department of Defense's existing industrial base.

CONSIDERATION OF CONTEXT IN PERFORMANCE EVALUATION

The evaluation of performance will consider context such as unanticipated barriers (e.g., budget restrictions, rule changes, circumstances outside MSTS' control), degree of difficulty, significant accomplishments or improvements, and other events that may occur during the performance period. A significant safety or security event may result in an overall limitation to adjectival ratings. Such impacts may be balanced by the response to the incident and by other initiatives to improve overall safety or security performance. MSTS is encouraged to note significant safety and security continuous improvements.

PERFORMANCE RATING PROCESS

DOE/NNSA will review performance throughout the performance evaluation period and provide tri- annual feedback to MSTS highlighting accomplishments and/or issues. At the end of the performance evaluation period, an evaluation of MSTS' performance will be completed based on contractor oversight against the criteria in the PEMP. Sources of oversight data include, but are not limited to, DOE/NNSA formal assessments, contractor self-assessments, internal and external audits, inspections, program and project reviews, operational awareness activities, contractor assurance system, etc. The evaluation will be documented in a Performance Evaluation Report (PER) and will include the performance ratings and award fee earned for the subject performance evaluation period. DOE/NNSA will consider MSTS' end of year self-assessment report in the performance evaluation. Performance of Objectives and KOs (if any) will be assessed in the aggregate, with due consideration given to the level of progress made on achieving KOs, to determine an adjectival performance rating for each Goal. The Goals will then be considered in the aggregate to provide an overall rating and percentage of award fee earned for the contract. The performance ratings will be determined in accordance with FAR 16.401(e)(3) yielding ratings of Excellent, Very Good, Good, Satisfactory, or Unsatisfactory. Notwithstanding the overall strategic framework, any significant failure in any Goal may impact the overall rating and award fee earned. Dollar values contained in the PEMP are provided as guidelines for developing a recommendation of fee allocation to the Fee Determining Official (FDO). The final determination as to the amount of fee earned is a unilateral determination made by the FDO.MSTS may request a face-to-face meeting with the FDO to highlight its strategic performance at the end of the performance evaluation period. This meeting should occur within the first two weeks after the end of the period.

PEMP CHANGE CONTROL

It is essential that a baseline of performance expectations be established at the beginning of the performance period to equitably measure performance, and that changes to that baseline are carefully managed. Nonetheless, unforeseen circumstances and/or changes in priorities may necessitate corresponding changes to individual PEMP(s). Any change to the PEMP, including adjustments or removal of KOs, requires concurrence by the appropriate field/program/functional office, the NNSA Senior Procurement Executive, and the FDO prior to the Field Office Manager and Contracting Officer signatures. While recognizing the unilateral rights of DOE/NNSA as expressed in the contract terms and conditions, bilateral changes are the preferred method of change whenever possible.

FEE ALIGNMENT AND "AT-RISK" AWARD FEE ALLOCATION

This table is provided for information only and does not change the terms and conditions of the contract.
All goals will receive an adjectival assessment as a part of the Corporate Performance Evaluation Process (CPEP).

Fixed Fee (FF), Award Fee (AF), SPP Fixed Fee (SPP FF)

Goal	At Risk Award Fee	At Risk Award Fee Percent
Goal-1: Mission Delivery: Nuclear Weapons	$TBD M	35%
Goal-2: Mission Delivery: Global Nuclear Security	$TBD M	20%
Goal-3: Mission Innovation: Advancing Science and Technology	$TBD M	5%
Goal-4: Mission Enablement	$TBD M	25%
Goal-5: Mission Leadership	$TBD M	15%

The above template is applied to each field office using At-Risk Award Fee (AF) amounts established in each individual contract. The amounts are based on estimated values for FY 2023 and will change slightly as actual values for various categories of work are established with FY 2024 budgets.

UNEARNED FEE

DOE/NNSA reserves the right to withdraw and redistribute DOE/NNSA unearned fees.

Goal-1: Mission Delivery: Nuclear Weapons

Successfully execute the cost, scope, and schedule of the Nuclear Stockpile mission work for Defense Programs work in a safe and secure manner in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

Objectives:

Objective-1.1: Work as a team across the Nuclear Security Enterprise on stockpile program scope to 1) achieve and maintain program delivery schedules; 2) lower risk to achieving First Production Unit (FPU), Initial Operational Capability (IOC), and Final Operational Capability (FOC); 3) improve manufacturability and supply chain execution; and 4) control costs.

Objective-1.2: Execute stockpile maintenance, surveillance, assessment, and development studies/capability improvement requirements, and meet transportation and weapon containers schedules.

Objective-1.3: Work as a team to support and execute production modernization processes and activities to sustain and improve production capabilities, equipment, and infrastructure for 1) War Reserve production; 2) components (particularly pit production); 3) strategic materials capabilities; and 4) improve safety margins, technology maturation strategies, and qualification, logistics, and security plans collaboratively across the NSE.

Objective-1.4: Provide the knowledge and expertise to maintain confidence in the nuclear stockpile without additional nuclear explosive testing by developing, maturing, and applying innovative strategies and technologies to sustain a robust stockpile and improve science and engineering capabilities, facilities, and essential skills to support existing and future nuclear security enterprise requirements. Triad, LLNS, NTESS, and MSTS will collaborate to execute subcritical experiments relevant for obtaining data for developing predictive models for improving production, assessing the current stockpile and certifying the future stockpile in accordance with milestone schedules.

Key Outcome(s):

KO1.1: Provide the necessary facilities, diagnostic capabilities, and personnel to execute the Twin Peaks and Nob Hill subcritical experiments to provide data relevant to improving our predictive capability and for certification of the current and future stockpile.

Goal-2: Mission Delivery: Global Nuclear Security

Successfully execute the cost, scope, and schedule of the authorized global nuclear security mission work in a safe and secure manner to include the Defense Nuclear Nonproliferation, Nuclear Counterterrorism and Counterproliferation, and Incident Response missions in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

Objectives:

Objective-2.1:	Support efforts to secure, account for, and interdict the illicit movement of nuclear weapons, weapons-useable nuclear materials, and radioactive materials.
Objective-2.2:	Support U.S. national and nuclear security objectives in reducing global nuclear security threats through the innovation of technical capabilities to detect, identify, and characterize: 1) foreign nuclear weapons programs, 2) illicit diversion of special nuclear materials, and 3) global nuclear detonations.
Objective-2.3:	Support efforts to achieve permanent threat reduction by managing and minimizing excess weapons-useable nuclear materials and providing nuclear materials for peaceful uses.
Objective-2.4:	Support efforts to prevent proliferation, ensure peaceful nuclear uses, and enable verifiable nuclear reductions to strengthen the nonproliferation and arms control regimes.
Objective-2.5:	Sustain and improve nuclear counterterrorism, counterproliferation, and forensic science, technology, expertise and associated Nuclear Emergency Support Team (NEST) capabilities; execute response missions, implement policies and procedures in support of response and forensics missions, and assist international partners/organizations.

Key Outcome(s):

KO2.1:	Meet developmental timelines consistent with Life Cycle Plans related to testbeds critical to nonproliferation requirements and priorities.

Goal-3: Mission Innovation: Advancing Science and Technology

Successfully advance national security missions through innovation by expanding the frontiers of Science, Technology, and Engineering (ST&E). Execute transformative and leading-edge Research and Development (R&D) by creating a vibrant, creative, environment that leverages effective partnerships (including SPP) and technology transfer endeavors. Effectively manage high-impact DOE Work and Site Directed Research and Development (SDRD) and Technology Transfer, etc. in a safe and secure manner consistent with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

Objectives:

Objective-3.1: Execute a research strategy that is clear and aligns discretionary investments (e.g., SDRD) with the NNSS' strategy and supports DOE/NNSA priorities.

Objective-3.2: Ensure that research is relevant, enables the national security missions, and benefits DOE/NNSA and the nation.

Objective-3.3: Ensure that research is transformative, innovative, leading edge, high quality, and advances the frontiers of science and engineering.

Objective-3.4: Maintain a healthy and vibrant research environment that enhances technical workforce competencies and research capabilities.

Objective-3.5: Research and develop high-impact technologies through effective partnerships and technology transfer mechanisms that support the NNSS' strategy, DOE/NNSA priorities and impact the public good; and ensure that reporting, publishing, and information management requirements of federally funded scientific research and development are implemented (via DOE's Public Access Plan) and per DOE's Scientific and Technical Information Management directive (DOE O 241.1B).

Objective-3.6: Pursue and perform high-impact work for DOE that strategically integrates with the DOE/NNSA mission, and leverages, sustains and strengthens unique science and engineering capabilities, facilities, and essential skills.

Key Outcome(s): None

Goal-4: Mission Enablement

Effectively and efficiently manage the safe and secure operations of the NNSS in accordance with cost, scope and schedule while maintaining an NNSA enterprise-wide focus; demonstrating accountability for mission performance and management controls; successfully executing cyber, technical, informational, and physical security requirements, and assure mission commitments are met with high-quality products and services while partnering to improve the site infrastructure. Performance will be measured by the contractor's assurance system, NNSA metrics, cost control, business and financial operations, project baselines, implementation plans, assessment, and audit results, etc., with a focus on mission enablement.

Objectives:

Objective-4.1: Deliver effective, efficient, and responsive Environment, Safety, and Health (ES&H), Quality (including weapon quality) and radioactive waste management. Advance DOE/NNSA's climate resiliency and sustainability goals with a focus on maximizing energy efficiency and supporting Carbon Pollution-Free Electricity (CFE) objectives.

Objective-4.2: Deliver mission capabilities through the planning, design, acquisition, operation, maintenance, recapitalization, and disposition of facilities and infrastructure. Execute design and construction projects to achieve the scope on schedule and on budget.

Objective-4.3: Deliver effective, efficient, and responsive safeguards and security, including assigned enterprise initiatives.

Objective-4.4: Deliver efficient, effective, responsible, and transparent financial management operations and systems including financial integration reporting; budget formulation and execution; programmatic cost estimates; and internal controls.

Objective-4.5: Deliver efficient and effective management of legal risk and incorporation of best legal practices. Deliver timely and actionable recommendations and analysis to Freedom of Information Act and Privacy Act requests.

Objective-4.6: Deliver effective, efficient, and responsive information technology systems and cybersecurity that provides for a comprehensive mission and functional area delivery through the execution of the implementation factors established in the NA-IM IT and Cybersecurity Program Execution Guidance, and adaptive day-to-day IT and cybersecurity operations to support, protect, and defend mission/business systems and networks.

Objective-4.7: Deliver effective, efficient, and responsive site emergency management programs in support of the DOE/NNSA Emergency Management Enterprise.

Objective-4.8: Deliver efficient, effective, and compliant business operations including, but not limited to, procurement, human resources, and property systems, in support of NNSA missions. Focus areas to include achievement of small business and socioeconomic goals; timely and high-quality subcontract actions; support provided to the NSE Workforce Recruitment Strategy; and strategic management of integrated recruiting, retention, and diversity programs.

Key Outcome(s):

KO4.1: Plan and execute the Enhanced Capabilities for Subcritical Experiments portfolio projects in accordance with approved scope and baselined cost and schedule milestones; leading the U1a Complex Enhancements Project and the Zeus Test Bed Facilities Improvement

Project; ITS infrastructure ready for installation; risk management; and cost estimating and cost control.

Goal-5: Mission Leadership

Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, cultivating a Performance Excellence Culture that encompasses all aspects of operations and continues to emphasize safety and security, improving the responsiveness of the MSTS leadership team to issues and opportunities for continuous improvement internally and across the Enterprise, and parent company involvement/commitment to the overall success of the NNSS and the Enterprise.

Objectives:

Objective-5.1: Define and implement a realistic strategic vision for the NNSS, in alignment with the NNSA Strategic Vision, which demonstrates enterprise leadership and effective collaborations across the NNSA enterprise to ensure DOE/NNSA success.

Objective-5.2: Demonstrate performance results through the institutional utilization of a Contractor Assurance System and promoting a culture of critical self-assessment, transparency, and accountability through the entire organization, while also leveraging parent company resources and expertise.

Objective-5.3: Develop and implement a National Security Enterprise-wide partnership model that enhances collaboration, reinforces shared fate and enables mission success including transformation of the stockpile and the enterprise.

Objective-5.4: Exhibit professional excellence in performing roles/responsibilities while pursuing collaborative opportunities for continuous organizational and enterprise learning and demonstrated improvements that will improve productivity, grow the capacity to execute mission, and manage, rather than avoid, risk. Pursue innovations to increase agility and resilience while controlling costs. Advance the operational capabilities of the National Security Enterprise (NSE) by identifying and employing latent capacity existing in the NSE.

Objective-5.5: Demonstrate leadership in driving enhanced and sustainable formality and rigor of operations through proactive implementation of effective and efficient measures to minimize operational upsets that have potential to impact mission.

Objective-5.6: Leadership takes decisive action, as a cooperative partner of NNSA, to attract and retain the workforce needed to achieve the nuclear security enterprise missions, with particular emphasis on critical and under-resourced skill sets, reaching back to parent company resources as necessary.

Key Outcome(s): None

FAR 16.401 (e) (3) AWARD FEE ADJECTIVAL RATINGS AND SUPPLEMENTAL DEFINITIONS

Excellent	91%-100%	Contractor has exceeded almost all of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period. *This performance level is evidenced by at least one significant accomplishment, or a combination of accomplishments that significantly outweigh very minor issues, if any. No significant issues in performance exist.*
Very Good	76% - 90%	Contractor has exceeded many of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period. *This performance level is evidenced by accomplishments that greatly outweigh issues. No significant issues in performance exist.*
Good	51% - 75%	Contractor has exceeded some of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period. *This performance level is evidenced by accomplishments that slightly outweigh issues. No significant issues in performance exist.*
Satisfactory	No greater than 50%	Contractor has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award- fee plan for the award-fee evaluation period. *This performance level is evidenced by issues that slightly outweigh accomplishments.*

Unsatisfactory	0%	Contractor has failed to meet overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period. *This performance level is evidenced by issues that significantly outweigh accomplishments, if any.*

Definitions:

An **Accomplishment** is an achievement or success in the performance of contract requirements that exceeds standards or expectations. Examples might be performing full contract requirements under budget while meeting or beating schedule baselines or performing additional scope within the initial cost targets with no negative effect on requirements or other programs, indicating continued performance improvement.

An **Issue** is a point in question or a matter that raises concerns regarding successful performance of contract requirements within scope, cost (budget), and schedule baselines or concern of negative effect on requirements or other programs, indicating a decline in performance that needs attention and improvement.

Section J
Appendix C:
Transition Plan

Section J, Appendix C: Transition Plan

Section J
Appendix D:
Sensitive Foreign Nations Control

(Mod 0180)

Section J, Appendix D: Sensitive Foreign Nations Control

1. Pursuant to the Contract Section I Clause 952.204-71 entitled “Sensitive Foreign Nations Controls,” “sensitive foreign nations” is one of the countries listed below:

Afghanistan	Israel	Somalia
Armenia	Kazakhstan	South Sudan
Azerbijan	Kyrgyzstan	Sudan
Belarus	Lebanon	Syria*
China (to include Hong Kong and Macau)	Libya	Taiwan
Cuba	Mali	Tajikistan
Georgia	Moldova	Turkmenistan
India	North Korea	Ukraine
Iran	Pakistan	Uzbekistan
Iraq	Russia	Venezuela
	Saudi Arabia	Yemen

2. Due to the dynamic nature of world events, other countries may, at any time, become sensitive. Therefore, caution should be exercised with citizens of countries not listed above to assure that sensitive information, although unclassified in nature, is not inadvertently disclosed. This would include nuclear and other U.S. technology and economic information. The Contracting Officer may (i) update the above list by providing the Contractor a periodic written notice or (ii) update the above list via a unilaterally Contract modification.

3. The Contract’s Appendix F “List of Applicable Directives”, DOE Order 142.3A “UNCLASSIFIED FOREIGN VISITS AND ASSIGNMENTS PROGRAM” contains definitions associated with DOE’s Unclassified Foreign Visits and Assignments Program.

Section J
Appendix E:
Performance Guarantee Agreement(s)

(Mod 0033)

Contract No. DE-NA0003624

Section J Appendix E: Performance Guarantee Agreement(s) (Mod 0033)

Honeywell

HII Nuclear, Inc. (Mod 0033)

MSTS
MISSION SUPPORT AND TEST SERVICES LLC

Figure 11: HII Nuclear, Inc. Performance Guarantee Agreement (Mod 0033)

SECTION L

ATTACHMENT A

PERFORMANCE GUARANTEE AGREEMENT

for value received, and in consideration of, and in order to induce the United States (the Government) to enter into Contract awarded based on DE-NA0003624 for the management and operation of the Nevada National Security Site (the "Contract") dated May 12, 2017, by and between the Government and Mission Support and Test Services, LLC (Contractor), the undersigned, HII Nuclear Inc. (Guarantor), a corporation incorporated in the State of Delaware with its principal place of business at 105 Technology Drive, Suite 190, Broomfield, CO hereby unconditionally guarantees to the Government (a) the full and prompt payment and performance of all obligations, accrued and executory, which Contractor presently or hereafter may have to the Government under the Contract, and (b) the full and prompt payment and performance by Contractor of all other obligations and liabilities of Contractor to the Government, fixed or contingent, due or to become due, direct or indirect, now existing or hereafter and howsoever arising or incurred under the Contract, and Guarantor further agrees to indemnify the Government against any losses the Government may sustain and expenses it may incur as a result of the enforcement or attempted enforcement by the Government of any of its rights and remedies under the Contract, in the event of a default by Contractor thereunder, and/or as a result of the enforcement or attempted enforcement by the Government of any of its rights against Guarantor hereunder.

Guarantor has read and consents to the signing of the Contract. Guarantor further agrees that Contractor shall have the full right, without any notice to or consent from Guarantor, to make any and all modifications or amendments to the Contract without affecting, impairing, or discharging, in whole or in part, the liability of Guarantor hereunder.

Guarantor hereby expressly waives all defenses which might constitute a legal or equitable discharge of a surety or guarantor, and agrees that this Performance Guarantee Agreement shall be valid and unconditionally binding upon Guarantor regardless of (i) the reorganization, merger, or consolidation of Contractor into or with another entity, corporate or otherwise, or the liquidation or dissolution of Contractor, or the sale or other disposition of all or substantially all of the capital stock, business or assets of Contractor to any other person or party, or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against Contractor, or adjudication of Contractor as a bankrupt, or (iii) the assertion by the Government against Contractor of any of the Government's rights and remedies provided for under the Contract,

including any modifications or amendments thereto, or under any other document(s) or instrument(s) executed by Contractor, or existing in the Government's favor in law, equity, or bankruptcy.

Guarantor further agrees that its liability under this Performance Guarantee Agreement shall be continuing, absolute, primary, and direct, and that the Government shall not be required to pursue any right or remedy it may have against Contractor or other Guarantors under the Contract, or any modifications or amendments thereto, or any other document(s) or instrument(s) executed by Contractor, or otherwise. Guarantor affirms that the Government shall not be required to first commence any action or obtain any judgment against Contractor before enforcing this Performance Guarantee Agreement against Guarantor, and that Guarantor will, upon demand, pay the Government any amount, the payment of which is guaranteed hereunder and the payment of which by Contractor is in default under the Contract or under any other document(s) or instrument(s) executed by Contractor as aforesaid, and that Guarantor will, upon demand, perform all other obligations of Contractor, the performance of which by Contractor is guaranteed hereunder .

Guarantor agrees to assure that it shall cause this Performance Guarantee Agreement to be unconditionally binding upon any successor(s) to its interests regardless of (i) the reorganization, merger, or consolidation of Guarantor into or with another entity, corporate or otherwise, or the liquidation or dissolution of Guarantor, or the sale or other disposition of all or substantially all of the capital stock, business, or assets of Guarantor to any other person or party, or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against Guarantor, or adjudication of Guarantor as a bankrupt.

Guarantor further warrants and represents to the Government that the execution and delivery of this Performance Guarantee Agreement is not in contravention of Guarantor's Articles of Organization, Charter, by-laws, and applicable law; that the execution and delivery of this Performance Guarantee Agreement, and the performance thereof, has been duly authorized by the Guarantor's Board of Directors, Trustees, or any other management board which is required to participate in such decisions; and that the execution, delivery, and performance of this Performance Guarantee Agreement will not result in a breach of, or constitute a default under, any loan agreement, indenture, or contract to which Guarantor is a party or by or under which it is bound.

No express or implied provision, warranty, representation or term of this Performance Guarantee Agreement is intended, or is to be construed, to confer upon any third person(s) any rights or remedies whatsoever, except as expressly provided in this Performance Guarantee Agreement.

In witness thereof, Guarantor has caused this Performance Guarantee Agreement to be executed by its duly authorized officer, and its corporate seal to be affixed hereto on September 13, 2018.

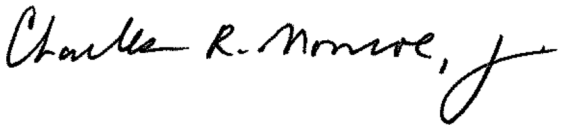
HII Nuclear Inc. NAME OF CORPORATION

(Signed)

Official Name: D.
R. Wyatt Official
Title:
Tre
asurer

ATTESTATION INCLUDING APPLICATION OF SEAL BY AN OFFICIAL OF GUARANTOR AUTHORIZED TO AFFIX CORPORATE SEAL

NAME AND POSITION OF OFFICAL EXECUTING PERFORMANCE GUARENTEE AGREEMENT ON BEHALF OF GUARANTOR



DE-NA0003624
Modification No. 0033
Attachment 2

Contract No. DE-NA0003624

Honeywell International Inc.

MSTS

MISSION SUPPORT AND TEST SERVICES LLC

SN3

Honeywell

Honeywell International Inc.
115 Tabor Road
Morris Plains, NJ 07950

PERFORMANCE GUARANTEE AGREEMENT

For value received, and in consideration of, and in order to induce the United States (the Government) to enter into Contract _____ for the management and operation of the Nevada National Security Site (the "Contract") dated October 1, 2016, by and between the Government and Honeywell International Inc. (Contractor), the undersigned, Honeywell International Inc. (Guarantor), a corporation incorporated in the State of Delaware with its principal place of business at Morris Plains, New Jersey 07950 hereby unconditionally guarantees to the Government (a) the full and prompt payment and performance of all obligations, accrued and executory, which Contractor presently or hereafter may have to the Government under the Contract, and (b) the full and prompt payment and performance by Contractor of all other obligations and liabilities of Contractor to the Government, fixed or contingent, due or to become due, direct or indirect, now existing or hereafter and howsoever arising or incurred under the Contract, and Guarantor further agrees to indemnify the Government against any losses the Government may sustain and expenses it may incur as a result of the enforcement or attempted enforcement by the Government of any of its rights and remedies under the Contract, in the event of a default by Contractor thereunder, and/or as a result of the enforcement or attempted enforcement by the Government of any of its rights against Guarantor hereunder.

Guarantor has read and consents to the signing of the Contract. Guarantor further agrees that Contractor shall have the full right, without any notice to or consent from Guarantor, to make any and all modifications or amendments to the Contract without affecting, impairing, or discharging, in whole or in part, the liability of Guarantor hereunder.

Guarantor hereby expressly waives all defenses which might constitute a legal or equitable discharge of a surety or guarantor, and agrees that this Performance Guarantee Agreement shall be valid and unconditionally binding upon Guarantor regardless of (i) the reorganization, merger, or consolidation of Contractor into or with another entity, corporate or otherwise, or the liquidation or dissolution of Contractor, or the sale or other disposition of all or substantially all of the capital stock, business or assets of Contractor to any other person or party, or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against Contractor, or adjudication of Contractor as a bankrupt, or (iii) the assertion by the Government against Contractor of any of the Government's rights and remedies provided for under the Contract, including any modifications or amendments thereto, or under any other document(s) or instrument(s) executed by Contractor, or existing in the Government's favor in law, equity, or bankruptcy.

Guarantor further agrees that its liability under this Performance Guarantee Agreement shall be continuing, absolute, primary, and direct, and that the Government shall not be required to pursue any right or remedy it may have against Contractor or other Guarantors under the Contract, or any modifications or amendments thereto, or any other document(s) or instrument(s) executed by Contractor, or otherwise. Guarantor affirms that the Government shall not be required to first

Treasury Log#: 2015_077_NSS_Energy

MSTS
MISSION SUPPORT AND TEST SERVICES LLC

Honeywell

Honeywell International Inc.
115 Tabor Road
Morris Plains, NJ 07950

commence any action or obtain any judgment against Contractor before enforcing this Performance Guarantee Agreement against Guarantor, and that Guarantor will, upon demand, pay the Government any amount, the payment of which is guaranteed hereunder and the payment of which by Contractor is in default under the Contract or under any other document(s) or instrument(s) executed by Contractor as aforesaid, and that Guarantor will, upon demand, perform all other obligations of Contractor, the performance of which by Contractor is guaranteed hereunder.

Guarantor agrees to assure that it shall cause this Performance Guarantee Agreement to be unconditionally binding upon any successor(s) to its interests regardless of (i) the reorganization, merger, or consolidation of Guarantor into or with another entity, corporate or otherwise, or the liquidation or dissolution of Guarantor, or the sale or other disposition of all or substantially all of the capital stock, business, or assets of Guarantor to any other person or party, or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against Guarantor, or adjudication of Guarantor as a bankrupt.

Guarantor further warrants and represents to the Government that the execution and delivery of this Performance Guarantee Agreement is not in contravention of Guarantor's Articles of Organization, Charter, by-laws, and applicable law; that the execution and delivery of this Performance Guarantee Agreement, and the performance thereof, has been duly authorized by the Guarantor's Board of Directors, Trustees, or any other management board which is required to participate in such decisions; and that the execution, delivery, and performance of this Performance Guarantee Agreement will not result in a breach of, or constitute a default under, any loan agreement, indenture, or contract to which Guarantor is a party or by or under which it is bound.

No express or implied provision, warranty, representation or term of this Performance Guarantee Agreement is intended, or is to be construed, to confer upon any third person(s) any rights or remedies whatsoever, except as expressly provided in this Performance Guarantee Agreement.

In witness thereof, Guarantor has caused this Performance Guarantee Agreement to be executed by its duly authorized officer, and its corporate seal to be affixed hereto on November 12, 2015.

Honeywell International Inc.

John J. Tus, Vice President and Treasurer

Treasury Log#: 2015_077_NSS_Energy

MSTS
MISSION SUPPORT AND TEST SERVICES LLC

ICP2

Honeywell

Honeywell International Inc.
115 Tabor Road
Morris Plains, NJ 07950

ATTESTATION INCLUDING APPLICATION

OF SEAL BY AN OFFICIAL OF

GUARANTOR AUTHORIZED TO AFFIX



CORPORATE SEAL

Treasury Log#: 2015_077_NSS_Energy

MSTS
MISSION SUPPORT AND TEST SERVICES LLC

KSI

Contract No. DE-NA0003624

Jacobs Engineering Group Inc.

Jacobs

MSTS

MISSION SUPPORT AND TEST SERVICES LLC

Figure 10: Jacobs Engineering Group Inc. Performance Guarantee Agreement

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

SECTION L, ATTACHMENT A
PERFORMANCE GUARANTEE AGREEMENT

For value received, and in consideration of, and in order to induce the United States (the Government) to enter into Contract _____ for the management and operation of the Nevada National Security Site (the "Contract") dated _____, by and between the Government and **Mission Support and Test Services, LLC** (Contractor), the undersigned, **Jacobs Engineering Group Inc.** (Guarantor), a corporation incorporated in the State of **Delaware** with its principal place of business at **155 North Lake Ave, Pasadena, California 91101** hereby unconditionally guarantees to the Government (a) the full and prompt payment and performance of all obligations, accrued and executory, which Contractor presently or hereafter may have to the Government under the Contract, and (b) the full and prompt payment and performance by Contractor of all other obligations and liabilities of Contractor to the Government, fixed or contingent, due or to become due, direct or indirect, now existing or hereafter and howsoever arising or incurred under the Contract, and Guarantor further agrees to indemnify the Government against any losses the Government may sustain and expenses it may incur as a result of the enforcement or attempted enforcement by the Government of any of its rights and remedies under the Contract, in the event of a default by Contractor thereunder, and/or as a result of the enforcement or attempted enforcement by the Government of any of its rights against Guarantor hereunder.

Guarantor has read and consents to the signing of the Contract. Guarantor further agrees that Contractor shall have the full right, without any notice to or consent from Guarantor, to make any and all modifications or amendments to the Contract without affecting, impairing, or discharging, in whole or in part, the liability of Guarantor hereunder.

Guarantor hereby expressly waives all defenses which might constitute a legal or equitable discharge of a surety or guarantor, and agrees that this Performance Guarantee Agreement shall be valid and unconditionally binding upon Guarantor regardless of (i) the reorganization, merger, or consolidation of Contractor into or with another entity, corporate or otherwise, or the liquidation or dissolution of Contractor, or the sale or other disposition of all or substantially all of the capital stock, business or assets of Contractor to any other person or party, or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against Contractor, or adjudication of Contractor as a bankrupt, or (iii) the assertion by the Government against Contractor of any of the Government's rights and remedies provided for under the Contract, including any modifications or amendments thereto, or under any other document(s) or instrument(s) executed by Contractor, or existing in the Government's favor in law, equity, or bankruptcy.

Guarantor further agrees that its liability under this Performance Guarantee Agreement shall be continuing, absolute, primary, and direct, and that the Government shall not be required to pursue any right or remedy it may have against Contractor or other Guarantors under the Contract, or any modifications or amendments thereto, or any other document(s) or instrument(s) executed by Contractor, or otherwise. Guarantor affirms that the Government shall not be required to first commence any action or obtain any judgment against Contractor before enforcing this Performance Guarantee Agreement against Guarantor, and that Guarantor will, upon demand, pay the Government any amount, the payment of which is guaranteed hereunder and the payment of which by Contractor is in default under the Contract or under any other document(s) or instrument(s) executed by Contractor as aforesaid, and that Guarantor will, upon

MSTS
MISSION SUPPORT AND TEST SERVICES LLC

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Section J
Appendix F:
List of Applicable Laws, Regulations, and DOE Directives

(Mod 0008, 0014, 0022, 0027, 0033, 0037, 0044, 0052, 0056, 0059, 0064, 0069, 0076, 0084, 0085, 0106, 0110, 0117, 0151, 0160, 0164, 0175, 0180, 0200, 0203)

Section J Appendix F: List of Applicable Laws, Regulations, and DOE Directives (Mod 0008, 0014, 0022, 0027, 0033, 0037, 0044, 0052, 0056, 0059, 0064, 0069, 0076, 0084, 0085, 0106, 0110, 0117, 0151, 0160, 0164, 0175, 0200, 0203)

In addition to the list of applicable directives referenced below, the Contractor shall also comply with supplementary directives (e.g., manuals), which are invoked by a Contractor Requirements Document (CRD) attached to a directive referenced below. This List excludes directives that have been granted an exemption from the CRD in whole or in part. For those Directives where by the Contractor has been granted an exemption from the CRD, the Contractor shall comply only with the Operating Requirements identified in Appendix F-1.

Directives identified in Appendix F-1 are for reference purposes only and are not inclusive of all of the Directives that will be incorporated into the contract.

DIRECTIVE NUMBER			DATE	DOE DIRECTIVE TITLE	MOD #
QP		100-1	3/1/2013	Quality Plan 100-1 (QP-100) Amendment 4, Application of Quality Requirements to UK and US Procurement Contracts and Loan Authorizations for Research, Design & Development	
NNSA	NAP	121.1A	4/26/2021	Enterprise-Wide Strategic Planning	0120
DOE	O	140.1A	6/15/2020	Interface with the Defense Nuclear Facilities Safety Board	0085
DOE	O	142.3B Chg 1 (LtdChg)	1/15/2021 3/2/2022	Unclassified Foreign National Access Program	0144
DOE	O	144.1 Admin Chg. 1	11/05/2009	Department of Energy American Indian Tribal Government Interactions and Policy	0056 0085 0180
DOE	O	150.1B	12/21/2021	Continuity Programs *Implementation Schedule:* Implementation to be completed per Implementation Project Roadmap – DOE O 150.1B (022322) by December 2023.	0164
DOE	O	151.1D Chg. 1 (Min Chg.)	8/11/2016 10/4/2019	Comprehensive Emergency Management System	0064
DOE	O	153.1A	11/17/2022	Departmental Nuclear Emergency Support Team Capabilities	0175 0180
DOE	O	200.1A Chg 2 (Ltd Chg)	8/11/2023	Information Technology Management *Implementation Schedule: Implementation to be completed per Implementation Plan 1702-PS-23-0019 (by September 30, 2025)*	0200
NNSA	SD	205.1	7/6/2017	Baseline Cybersecurity Program	0014
DOE	O	205.1C Chg 1 (LtdChg)	5/15/2019 2/3/2022	Department of Energy Cyber Security Program	0144
NNSA	SD	206.1	6/22/2018	Privacy Program	0033
DOE	O	206.1 Chg. 1	1/16/2009 Chg 1 dated 11/5/2018	Department of Energy Privacy Program	0052
DOE	O	206.2 Chg 1 (LtdChg)	2/19/2013 9/02/2022	Identity, Credential, and Access Management (ICAM)	0175 0180
NNSA	SD	206.2	4/20/2018	Implementation of Personal Identity Verification for Uncleared Contractors	0059 0180
DOE	O	210.2A	4/8/2011	DOE Corporate Operating Experience Program	
NAP		220.1	6/19/2018	Internal Affairs Program	0033
DOE	O	221.1B	9/27/2016	Reporting Fraud, Waste, and Abuse to the Office of the Inspector General	

DIRECTIVE NUMBER			DATE	DOE DIRECTIVE TITLE	MOD #
DOE	O	221.2A	2/25/2008	Cooperation with The Office Of Inspector General	
DOE	O	225.1B	3/4/2011	Accident Investigation	
DOE	O	226.1B Chg 1 (Admin Chg)	4/25/2011 5/03/2022	Implementation of Department of Energy Oversight Policy	0175 0180
NNSA	SD	226.1C	10/1/2019	NNSA Site Governance	0064
DOE	O	227.1A Chg.1	1/21/2020	Independent Oversight Program	0085
DOE	O	231.1B Admin Chg. 1	6/27/2011 11/28/2012	Environment, Safety and Health Reporting	
DOE	O	232.2A Chg1 (MinChg)	1/17/2017 10/4/2019	Occurrence Reporting and Processing of Operations Information	0064
DOE	O	241.1B Admin Chg. 1	12/31/2010 CHG 1 DATED 4/26/201 6	Scientific and Technical Information Management	
DOE	O	243.1C	2/7/2022	Records Management Program *Implementation Schedule:* Implementation to be completed per MSTS Implementation Plan for DOE O 243.1C dated May 2022. Implementation to be completed within 24 months of the date of this modification.	0164
NFO	O	251.1 Rev 1	4/24/2013 6/23/2018	NNSA/NFO Directives System	0164
NNSA	SD	251.1A	1/17/2018	Directives Management	0014
DOE	O	252.1A Admin Chg. 1	2/23/2011 3/12/2013	Technical Standards Program	
DOE	O	341.1A	10/18/2007	Federal Employee Health Services	0106 0200
NNSA	SD	350.1	2/5/2009	M&O Contractor Service Credit Recognition	
NAP		401.1	11/24/2015	Weapon Quality Policy	0064
NAP		401.1A Admin Chg 2	2/15/2022	Weapon Quality Policy	0151
NSO	O	410.XC	8/11/2011	Task Plan and Change Control Process	0052
NFO	O	410.X1 Rev 1	10/9/2013 11/15/2021	Nevada National Security Site and North Las Vegas Facilities General Use and Operations Requirements	0127
DOE	O	410.2 Admin Chg 1	8/7/2009 4/10/2014	Management of Nuclear Materials	
DOE	O	411.2	1/4/2017	Scientific Integrity	
NFO	O	412.X1 ICN-22167	6/27/2016 6/11/2019	Real Estate/Operations Permit	0059
NAP		412.1	2/11/2019	Financial Integration	0052
NAP		413.1	6/3/2019	Data Collection for Cost Estimating	0056

DIRECTIVE NUMBER			DATE	DOE DIRECTIVE TITLE	MOD #
DOE	O	413.3B Min Chg. 5 Chg. 6 (Ltd Chg) Chg. 7 (Ltd Chg)	11/29/10 4/20/18 1/12/2021 06/21/2023	Program and Project Management of the Acquisition of Capital Assets	0037 0099 0190
NNSA	SD	413.3-7	9/8/2023	Project Management for Non-Nuclear, Non-Complex Capital Asset Acquisition	0203
DOE	O	414.1D Admin Chg. 1 Ltd Chg. 2	4/25/2011 5/8/2013 9/15/2020	Quality Assurance	0099
DOE	O	415.1 Chg. 2	12/3/2012 Chg 1 dated 1/16/2013 Chg 2 dated 1/13/2017	Information Technology Project Management	
NNSA	SD	415.1A	4/27/2021	Project Oversight for Information Technology (PO-IT)	0127
DOE	O	420.1C Chg. 1(PgChg) Chg. 2 (Min Chg) Chg. 3 (Ltd Chg)	12-4-2012 2-27-2015 7-26-2018 11-14-2019	Facility Safety Reference NFO Letter AMNS:KDL-13010, dated 11-06- 2012 – APPROVAL OF THE REQUEST FOR PERMANENT EXEMPTION FROM THE FIRE PROTECTION REQUIREMENTS DESIGNATED IN DOE O 420.1B ANDDOE-STD 1066-99 FOR THE U1A COMPLEX IN AREA 1 OF THE NEVADA NATIONAL SECURITY SITE (NNSS)	0106 0180
DOE	O	420.2D	9/9/2022	Safety of Accelerators	0164
NFO	O	421.X1 Rev, 2	5/4/2020	Nuclear Facility Safety Management	0085 0180
DOE	O	422.1 Chg1 Chg2 Chg3 (MinChg) Chg 4 (LtdChg)	6/29/2010 6/25/2013 12/3/2014 10/4/2019 2/3/2022	Conduct of Operations	0164
DOE	O	425.1D Admin Chg 1 Chg2 (MinChg)	4/16/2010 4/2/2013 10/4/2019	Verification of Readiness to Start Up or Restart Nuclear Facilities	0064
DOE	O	426.2 Admin Chg. 1	4/21/2010 Chg. 1 dated 7/29/2013	Personnel Selection, Training, Qualification and Certification Requirements for DOE Nuclear Facilities	
NNSA	SD	430.1	1/28/2017	Real Property Asset Management	0033

DIRECTIVE NUMBER			DATE	DOE DIRECTIVE TITLE	MOD #
DOE	O	433.1B Admin Chg. 1	4/21/2010 Chg. 1 dated 3/12/2013	Maintenance Management Program for DOE Nuclear Facilities	
DOE	O	435.1 Chg. 1 Chg 1 Admin Chg. 2	7/9/1999 8/28/2001 1/11/2021	Radioactive Waste Management	0099
DOE	M	435.1-1 Admin Chg. 2	7/9/1999 Chg. 1 dated 6/19/01 Chg. 2 dated 6/08/2011	Radioactive Waste Management	
DOE	O	436.1	5/2/2011	Department Sustainability	0033
DOE	O	436.1A	4/25/2023	Department Sustainability *Reference: MSTS Letter 2S62-PS-23-0012 - Implementation Plan for DOE O 436.1A. Future implementation of this directive is dependent on the receipt of funding consistent with the MSTS IP.*	0203
DOE	O	440.2C, Chg. 1 Chg. 2 (Ltd Chg.) Chg 3 (Ltd Chg)	6/22/2011 9/15/2020 3/21/2023	Aviation Management and Safety	0099 0180
DOE	M	441.1-1 Admin Chg 1	3/7/2008 2/24/2016	Nuclear Material Packaging Manual	0064
DOE	O	442.1B	1/31/19	DOE Employee Concerns Program	0052
DOE	O	442.2 Chg. 1	7/29/2011 Chg. 1 dated 10/4/2016	Differing Professional Opinions for Technical Issues Involving Environmental, Safety & Health Technical Concerns	
DOE	O	443.C	11/26/2019	Protection of Human Research Subjects correct admin error directive was last updated	0069 0085
DOE	O	443.1C	11/26/2019	Protection of Human Research Subjects	0085
NFO	M	450.X2-1	5/30/2007	Underground Nuclear Testing, Test Readiness, and the Threshold Test Ban Treaty Verification Program	
NFO	O	450.X5	10/16/2019	Subcritical Experiment Program	0076
DOE	O	452.2F	7/27/2020	Nuclear Explosive Safety	0085 0180
NNSA	SD	452.3-2	1/19/2017	Phase 6.x Process	
NA SD	M	452.3-1A	2/25/2016	Defense Programs Business Process System (DPBPS)	
DOE	O	452.3	6/8/2005	Management of the Department of Energy Nuclear Weapons Complex	
DOE	O	452.4C	8/28/2015	Security and Use Control of Nuclear Explosives and Weapons	
NNSA	SD	452.4-1	1/27/2022	Nuclear Enterprise Assurance (NEA)	0164
DOE	O	452.8	7/21/2011	Control of Nuclear Weapon Data	
DOE	O	452.7 Chg. 1 (Admin Chg.)	5/29/2020	Protection of Use Control Vulnerabilities and Designs	0085

DIRECTIVE NUMBER			DATE	DOE DIRECTIVE TITLE	MOD #
DOE	O	456.1A	7/15/2016	The Safe Handling of Unbound Engineered Nanoparticles	
DOE	O	457.1A	8/26/2013	Nuclear Counterterrorism	
DOE	O	458.1 Admin Chg. 3 Chg. 4	2/11/2011 1/15/2013 9/15/2020	Radiation Protection of the Public and the Environment	0099
DOE	O	460.1D Chg 1 (LtdChg)	12/20/2016 6/10/2022	Hazardous Material Packaging and Transportation Safety	0190
DOE	O	460.2B	6/10/2022	Departmental Materials Transportation Management Implementation Schedule: Implementation to be completed per 2S62-PS-23-0011-27 – MSTS DOE O 460.2B Impact & Implementation Plan (27 months after issuance of Mod 0190)	0190 0200
DOE	O	461.1C Chg. 1 (Min. Chg.)	7/20/2016 10/4/2019	Packaging and Transportation for Office Shipment of Materials of National Security Interest	0064
DOE	O	461.2	11/1/2010	Onsite Packaging and Transfer of Materials of National Security Interest	
DOE	O	462.1 Admin Chg. 1	11/20/2008 7/10/2013	Import and Export of Category 1 and 2 Radioactive Sources and Aggregated Quantities	
NNSA	NAP	470.1	8/18/23	Enhanced Compensatory Control Measures *(Status:* The CRD is currently not applicable. Implementation of the directive requirements will be addressed when required.*)*	0200
DOE	O	470.3C Chg. 1 (Ltd Chg.)	11/23/2016 9/9/2020	Design Basis Threat (DBT) Order	0144
DOE	O	470.4B, Chg. 2 Ltd Chg. 3	1/17/2017 9/23/2021	Safeguards and Security Program	0120
NNSA	SD	470.4-2 Admin Chg. 1	6/23/2018 6/16/2021	Enterprise Safeguards and Security Planning and Analysis Program	0037 0120
DOE	O	470.5	6/2/2014	Insider Threat Program	
DOE	O	470.6 Chg. 1	9/2/2015 1/11/2017	Technical Security Program	0106
NNSA	SD	470.6	2/25/2022	Technical Security Program *Implementation Schedule*: Implementation to be completed per Implementation Plan for NNSA SD 470.6 Technical Security Plan dated July 2022 within 24 months after modification issuance.	0164
DOE	O	471.1B	3/01/2010	Identification and Protection of Unclassified Controlled Nuclear Information	
DOE	O	471.5	3/29/2011	Special Access Programs	

DIRECTIVE NUMBER			DATE	DOE DIRECTIVE TITLE	MOD #
NNSA	SD	471.6	12/09/2019	Operations Security Program NOTE: Full implementation of CRD paragraphs 1.b. through. m. will be accomplished upon receipt of additional funding to support the hiring of an additional FTE	00
DOE	O	471.6 Chg. 2 Chg. 3 (Admin Chg.) (Chg 4 (Ltd Chg)	5/15/2015 9/12/2019 8/22/2023	Information Security	0064 0200
DOE	O	471.7	2/3/2022	Controlled Unclassified Information *Implementation Schedule:* Safeguards and Security Requirements will be implemented within 18 months after modification issuance and Records Management Requirements within 24 months after modification issuance.	0164
DOE	O	472.2A	6/10/2022	Personnel Security	0151
NNSA	SD	473.3	9/10/2014	Enterprise Mission Essential Task List-Based Protective Force Training Program	0160
DOE	O	473.1A	8/30/2021	Physical Protection Program	0160
DOE	O	473.2A	8/30/2021	Protective Force Operations	0160
DOE	O	474.2A	2/7/2023	Nuclear Material Control and Accountability	0180
DOE	O	475.1	12/10/2004	Counterintelligence Program	
DOE	O	475.2B	10/3/2014	Identifying Classified Information	
NAP		476.1 Admin Chg. 1	2/13/2012 2/9/2015	Atomic Energy Act Control of Import and Export Activities	0064
DOE	O	483.1B Chg 2 (Ltd Chg)	12/20/2016 12/13/2019	DOE Cooperative Research and Development Agreements	0200
DOE	O	484.1 Chg 3 (LtdChg)	3/21/2023	Reimbursable Work for the Department of Homeland Security	0200
DOE	O	486.1A	9/4/2020	Foreign Government Sponsored or Affiliated Activities Add per Mod 0084	0084
NAP		520.1 Admin Chg1	10/10/2013	Management and Operating Contractor Business Meals and Light Refreshments	0064
DOE	O	520.1B Chg 1 (LtdChg)	1/7/2021 11/22/2022	Financial Management and Chief Financial Officer Responsibilities	0099 0175
DOE	O	522.1A	8/2/2018	Pricing of Departmental Materials and Services	0044

DIRECTIVE NUMBER			DATE	DOE DIRECTIVE TITLE	MOD #
NNSA	NAP	530.1	5/26/2023	Cost Allocation Optimization	0190
NAP		540.2	11/22/2016	NNSA M&O Off-Site Extended Duty Assignments as supplemented by DOE Acquisition Letter 2018-08 (May 3, 2018(	0064
DOE	O	550.1 Chg. 1 (Ltd. Chg.)	5/2/2019	Official Travel	0069
DOE	O	5639.8A	7/23/1993	Security of Foreign Intelligence Information and Sensitive Compartmented Information Facilities	
DOE	O	5670.1A	1/15/1992	Management and Control of Foreign Intelligence	

Section J, Appendix F-1: [Deleted] (Mod 0033, 0200)

Section J
Appendix G:
Personnel Appendix

(Mod 0027, 0033, 0052, 0076, 0151, 0160, 0198)

Section J, Appendix G: Personnel Appendix

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1.0 INTRODUCTION

The allowability of personnel and other related costs incurred pursuant to the NNSS Prime Contract is governed by the following:

a. NNSS Prime Contract DE-NA0003624

b. Federal Acquisition Regulation (FAR) Part 31, “Contract Cost Principles and Procedures”

c. U.S. Department of Energy Acquisition Regulation (DEAR) Part 931, “Contract Cost Principles and Procedures”

d. DEAR 970.30, “Cost Accounting Standards Administration”

Appendix G, “Personnel Appendix,” (hereafter Personnel Appendix) sets forth personnel and other related policies that have cost implications under this Contract and are not covered explicitly in FAR or DEAR cost principles. This Personnel Appendix identifies those costs deemed reasonable and allowable for reimbursement when incurred in the performance of Contract work. MSTS shall seek approval of the U.S. Department of Energy, National Nuclear Security Administration (NNSA) Contracting Officer prior to incurring costs not specifically identified as allowable in this Contract. MSTS shall identify and treat all unallowable costs and directly associated unallowable costs in accordance with the criteria set forth in FAR 52.230-2, “Cost Accounting Standards,” including but not limited to placing unallowable costs in appropriate allocation bases.

MSTS shall obtain prior Contracting Officer approval of changes within the scope of the Personnel Appendix when such changes are expected to increase costs to the government. In situations where changes may set a precedent among the NNSA Contractors, MSTS shall consult with the Contracting Officer regarding program cost reimbursement prior to implementation, even if there is no expected increase in cost. This requirement is not intended to prohibit MSTS from taking advantage of efficiency gains realized from new and innovative approaches in providing Human Resource services.

MSTS shall use effective management review procedures and internal controls to assure that the allowable costs set forth herein are not exceeded. In addition, MSTS shall ensure that cost items that require prior approval of the NNSA Contracting Officer are reviewed and approved prior to incurrence of costs.

Either party may request revisions to this Personnel Appendix. Both the parties agree to give consideration in good faith to any such request. When revisions to this Personnel Appendix are made, a contract modification shall be executed to effect the changes.

This Personnel Appendix is for the exclusive benefit and convenience of the parties hereto. Nothing contained herein shall be construed as granting, vesting, creating, or conferring any right of action or any other right or benefit upon past, present, or future employees of MSTS, or upon any other third party.

2.0 DEFINITIONS

1. Accredited Service

a. Employees who transfer directly to MSTS from the predecessor contractor will retain the site service date and continuous service date recognized by the predecessor contractor. Employees who are hired by MSTS with predecessor contractor service will be given credit for Nevada National Security Site (NNSS) service for benefit purposes, if there has not been a break in service longer than 3 years. Vested and credited service in the 401(k) Plan and Pension Plan are subject to Employee Retirement Income Security Act of 1974 (ERISA) service rules.

b. Transfers from parent companies:

i. *Prior to January 1, 2013*, National Security Technologies, LLC (NSTec), employees transferring directly from Northrop Grumman, AECOM, CH2M Hill, or Nuclear Fuel Services will retain the continuous or credited service date recognized by the NSTec parent companies from which they transfer for the purpose of eligibility for benefits, including service awards, paid time off (PTO), and 401(k) and pension plan vesting.

ii. *After January 1, 2013 and prior to December1, 2017*, NSTec employees who transferred directly from Northrop Grumman, AECOM, CH2M Hill, or Nuclear Fuel Services retained the continuous or credited service date recognized by the NSTec parent companies from which they transferred for the following purposes:

a. Service with a parent organization not under DOE or NNSA Management and Operating (M&O) or Site Management contract: PTO eligibility and accrual only.

b. Service with a parent organization under DOE or NNSA M&O or Site Management Contract:

- PTO eligibility and accrual
- Eligibility for leaves of absence
- Eligibility for vesting and employer contributions to market-based retirement plans (but not for determination of benefit)
- Eligibility for retiree medical, dental, and life insurance benefits (when the individual worked at least the 10 years prior to retirement under DOE or NNSA M&O or facilities management cost reimbursement contracts)
- Eligibility and/or determination of benefit for long- and short-term disability
- Determination of severance benefits (for service for which severance has not already been paid)

iii. Employees transferring directly from The Babcock & Wilcox Company without prior Nuclear Fuel Services service will be credited with continuous service as of January 5, 2009 (the date The Babcock & Wilcox Company acquired Nuclear Fuel Services), or their actual service date as

established by Babcock & Wilcox, whichever is later. Eligibility for benefits based on that credited service date will be in accordance with paragraph ii above.

iv. After November 30, 2017, MSTS employees who transferred directly from Honeywell International Inc., Jacobs Engineering Group, Inc., or Stoller Newport News Nuclear, Inc. (now HII-Nuclear, Inc [Mod 033]), retain the continuous or credited service date recognized by the MSTS parent companies from which they transferred for the following purposes:

a. Service with parent organization not under DOE or NNSA M&O or Site Management contract: PTO eligibility and accrual only.

b. Service with the parent organization under DOE or NNSA M&O or Site Management contract:

- PTO eligibility and accrual
- Eligibility for leaves of absence
- Eligibility for vesting and employer contributions to market-based retirement plans (but not for determination of benefit)
- Eligibility for retiree medical, dental, and life insurance benefits (when the individual worked at least the 10 years prior to retirement under DOE or NNSA M&O or facilities management cost reimbursement contracts)
- Eligibility and/or determination of benefit for long- and short-term disability; and determination of severance benefits (for service for which severance has not already been paid)

v. After November 30, 2017, but prior to June 19, 2023, MSTS employees who were hired directly from SOC, LLC, will retain the continuous or credited service date recognized by the Protective Force contractor for Nevada National Security Sites (NNSS) service as follows:

- PTO eligibility and accrual
- Eligibility for leaves of absence
- Eligibility for vesting and employer contributions to market- based retirement plans (but not for determination of benefit)
- Eligibility for retiree medical, dental, and life insurance benefits [when the individual worked at least the 10 years prior to retirement under Department of Energy or National Nuclear Security Administration Management and Operating contractor or facilities management cost reimbursement contracts]
- Eligibility and/or determination of benefit for long- and short-term disability; and determination of severance benefits (for service for which severance has not already been paid)

c. Employees who transfer directly to MSTS from SOC, LLC as a result of Modification No. 0160 will retain the site service date and continuous service date recognized by SOC, LLC. Employees who are hired by MSTS with SOC, LLC service will be given credit for site service for benefit purposes, if there has not been a break in service longer than 3 years. Vested and credited service in the pension plans are subject to Employee Retirement Income Security Act of 1974 (ERISA) service rules.

2. Bargaining Unit Employees (Union Employees)

Employees whose wages, hours of work, and working conditions have been negotiated into labor contracts.

3. Base Pay

The compensation of an exempt or nonexempt employee, exclusive of premium pay or other type of compensation. The base pay is expressed as an hourly, weekly, or annual rate.

4. Basic Workweek

Non-bargaining employees: A 40-hour workweek consisting of five consecutive basic workdays of 8 hours each.

5. Casual Employee

Employment status of an employee hired to provide manpower when temporary employees are needed for a specific project or to respond to an immediate need. Casual Employees have a variable work schedule, are called to work when needed, and work as many hours per week as necessary. All hours worked will be compensated on an hourly basis in the same manner as nonexempt, non-bargaining employees. A casual employee's status as exempt or non-exempt will continue to be determined in accordance with applicable laws and regulations. Casual employees may work for MSTS a maximum of 900 hours per calendar year. Any Casual employee who works less than 40 hours in a 9-month period may be administratively terminated. Casual employees are covered by legally required benefits, but do not receive or participate in any other type of employee benefit program, group insurance plans, or paid absences, unless such paid absence is required by law. Casual employees will not be eligible to receive benefits provided under the Defense Authorization Act, Section 3161, upon termination. (Mod 0106)

6. Casual Overtime

Work in excess of the basic workweek that cannot be scheduled in advance.

7. CFR

Code of Federal Regulations

8. Compensation Increase Plan (CIP)

A plan for establishing need and specifying distribution of maximum dollar amounts and/or percentage of base payroll on an annualized basis, to be allocated to employee groups for base pay increases or lump sum payments during a pay year. The amounts approved are for granting merit, promotion, adjustment, and reclassification increases.

9. Compressed Workweek

A work period designed to allow employees to fulfill work requirements in fewer days by increasing the number of hours worked in a single workday. A compressed workweek is expressed as 4/10 (four consecutive work days of 10 hours each to total 40 hours worked in a 1-week period resulting in 3 consecutive days off during each workweek), or 9/80 (9 work days totaling 80 hours worked in a 2-week period resulting in 2 consecutive days off the first week and 3 consecutive days off the second week).

10. Contractor

Refers to MSTS. The responsibilities and authorities specified in this Personnel Appendix for the "Contractor" shall be exercised by the President and Site Manager of MSTS or their authorized representative.

11. Exempt Employee

Employees who are exempt from the overtime provisions of the Fair Labor Standards Act (FLSA) and state wage and hour laws.

12. Full-Time

Employment status of an employee regularly scheduled to work 40 or more hours per workweek.

13. Furlough

The period of time in which an employee is placed in non-pay status because of lack of work, lack of funds, or other non-disciplinary reasons. Furloughs must be more than 40 consecutive work hours and cannot exceed 60 calendar days in a rolling 12-month period.

14. Incentive

A reward, financial or otherwise, that compensates the worker(s) for high and/or continued performance above standards. An incentive also is a motivating influence to induce accomplishment or performance above normal.

15. Job Worth Hierarchy

A ranking of jobs within an organization by relative value to the organization for pay purposes.

16. Merit Increase

An adjustment to individual salary based on performance ranking.

17. Nonexempt Non-bargaining Employees

Employees who are subject to minimum wage and overtime pay provisions of the FLSA and state wage and hour laws, and who are not covered by a collective bargaining agreement.

18. Overtime Pay

Total amount of pay including base pay portion for work beyond 40 hours in a workweek.

19. Part-Time

Employment status of an employee regularly scheduled to work less than 40 hours per workweek. Employees in this status are considered nonexempt for overtime purposes.

20. Promotion

The assignment of an employee to a job of greater value to the organization. This assignment is sometimes recognized by a higher job classification or pay grade.

21. Salary Range

The range of pay rates, from minimum to maximum, set for a pay grade or job classification.

22. Special Adjustment

An increase to an employee's base pay due to internal or external equity considerations.

23. Termination

When an employee quits, retires, dies, or is discharged, affected by a reduction-in-force, or removed from the payroll because of disability (as distinguished from disability absence where the employee is not removed from the payroll).

24. Variable Pay

A lump-sum, cash payment separate from base salary.

3.0 COMPENSATION (MOD 0120)

The Compensation System program costs directly attributable to compensation provided to Contractor employees will be allowable under this Personnel Appendix G. Section 3.0, Compensation, does not apply to bargaining unit employees. Section 4.0 sets forth allowable costs associated with bargaining unit employees.

3.1 Variable Pay

Variable pay is reimbursable as outlined in the annual CIP and allows the Company to maintain a competitive position in the external market to attract, retain, and motivate top talent.

Non-base payments determined concurrently with salary increases and certain non-base awards may be granted throughout the year. These awards are funded from the total non-base budget. The amount of the recurring MSTS Recruitment Plan pool each calendar year is .1% of MSTS's base payroll on December 31. The amount of the recurring MSTS Retention Plan pool each calendar year is .2% of MSTS's base payroll on December 31. The amount of the recurring, MSTS Variable Pay Performance Bonus Plan pool each Calendar Year is .7% of MSTS's base payroll on December 31.

3.2 Overtime

1. *Annual Budget for Overtime:* 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. The Contractor shall submit to the Contracting Officer overtime utilization reports no later than 1 month after the end of each quarter (end of quarter =March 31, June 30, September 30, and December 31). If the report indicates that overtime comprised 4% or more of the overall payroll, the Contracting Officer may request that the Contractor submit a plan to lower the overall usage overtime rate as a percentage of payroll for the quarter following the quarter in which overtime exceeded 4% of total payroll.

2. *General:* All overtime hours worked are subject to federal, state, or local labor laws. In some states, such as California, the wage and hour laws on overtime are more stringent than the federal regulations. In such cases, the state laws take precedence over federal laws. Authorized paid absences (PTO, Sick Leave Savings, Holidays, etc.) taken during a workweek will not be counted as time worked for purposes of computing overtime pay for the scheduled work day or workweek.

3. *Exempt Employees:* Employees in the job groups and levels depicted in the table below may be paid overtime at their base pay rate when a significant amount of overtime in excess of the regularly scheduled 40 hour workweek is scheduled, properly documented, and approved by the employee's Senior Director

or designee (Mod 0033), (Director in organizations which do not have a Senior Director). Significant is defined as at least 5 hours more than the 40 hour workweek. If eligible and approved, the employee will receive pay for hours worked in excess of 45 hours in a workweek (e.g., the employee works 48 hours in a workweek, then the employee will receive 3 hours of straight time pay). Overtime will not be approved for casual overtime required to fulfill their regular duties and responsibilities. The work must be high priority and critical in meeting our mission. Management discretion may be applied to waive the "at least 5 hours" requirement where reasonably justified by business or mission needs (Mod 0033).

JOB GROUP	LEVEL(S)	JOB GROUP	LEVEL(S)
Management	I, II	Project & Business Management	I, II, III (Mod 0076)
Scientists & Engineers	I, II, III, IV (Mod 0151)	Technical Support	VI
Technical Professionals	II, III, IV	IT Professionals	III, IV
Business Professionals	II, III, IV	Technical Management	I, II (Mod 0151)

In addition, exempt employees regardless of level who are members of one of the emergency response teams listed in Section 3.5, item 8.b. are eligible for straight-time overtime beginning with the first hour over 40 when the additional time worked is during a team's deployment for exercises or real-world events, or when responding to a nuclear facility.

Employees in the job groups and levels depicted above who are required to work on a scheduled holiday will be paid at their base pay rate for all hours actually worked, in addition to the base pay for the holiday. Time worked on a holiday will be counted in the computation of the 40-hour workweek

4. *Non-exempt Employees:* Non-exempt employees will be paid one-and-one half times their base hourly rate for any hours worked in excess of 40 hours in a workweek. Any non-exempt employee who is required to work on a paid holiday will be paid one-and-one half times their base hourly rate, in addition to the base pay for the holiday. Time worked on a holiday will be counted in the computation of the 40-hour workweek.

5. *Overtime Pay for Non-exempt Employees in Training Programs:* Attendance at lectures, meetings, training programs and similar activities outside the employee's scheduled working hours should not be counted as time worked for overtime purposes if all of the following criteria are met:

   a. Attendance is voluntary

   b. The course, lecture, or meeting is not directly related to the employee's job

   c. The employee does not perform any productive work during attendance

   If any one of these criteria is not met, overtime must be paid.

   When employees, on their own initiative, attend an independent school or college course after their scheduled work hours, the time is not hours worked for overtime purposes even if the course is job-related and the Contractor refunds the tuition and/or program cost.

6. *Overtime Pay for Casual Employees:* Casual employees will be paid one-and-one- half times their base hourly rate for any hours worked in excess of 40 in the workweek. Those who are required to work on holidays will be paid base pay only.

7. *Overtime Pay for Bargaining Employees:* Overtime pay for bargaining unit employees is specified in the labor agreements.

3.3 Shift Differential

Shift differentials may be paid to eligible employees. Shift differential rates shall be based on surveys of shift differential practices, and shall be approved by the Contracting Officer prior to implementation.

Non-exempt employees, including part-time and casual employees, and exempt employees eligible to receive straight-time overtime will be paid shift differential payments of 10% of their base salaries when they are assigned to one of the following for at least 3 consecutive workdays:

8. A scheduled work shift that begins 3 or more hours before the start of the established daytime work shift.

9. A scheduled work shift that begins 3 or more hours after the start of the established daytime work shift.

   a. Eligible employees will be paid the shift differential payment only for the days worked on other than an established daytime shift. The shift differential is not included in payment for paid absences such as PTO and holidays. Pay for such absences will be calculated on the base salary rate.

   b. Overtime pay for workdays and/or basic workweeks when employees receive shift differential pay will be calculated using base salary plus shift differential.

   c. Shift differentials and Leader pay are allowable as specified by the Collective Bargaining Agreements.

   d. Non-exempt employees who are assigned to a shift without being given 48 hours' notice of assignment or shift change are paid one and one-half times their base pay hourly rate for that portion of the newly scheduled shift which does not coincide with the hours of the employee's former shift during the first 48 hours of the new shift.

   e. Non-exempt employees working at the National Ignition Facility at Lawrence Livermore National Laboratory will be paid 7.5% for working the swing shift and 15% for the owl shift. During all leaves with pay and holidays, eligible employees are paid at the shift differential rate applicable to the shifts they would otherwise have been scheduled to work. Overtime hours are paid at the applicable shift differential rates times one and one-half, unless otherwise required by applicable law. When programmatic requirements necessitate a regular shift assignment for an extended period, exempt employees may be paid the same shift differentials if approved in advance by the MSTS President.

3.4 Call-In Pay

Non-exempt employees who are called in to work after having left their job site at the end of their regular shift to perform work before, but not continuous with, their regular shift, are provided at least 4 hours of base pay. Non-exempt employees who are assigned to a compressed workweek are paid a minimum of 5 hours' base pay. If no work is performed, then the hours paid but not worked are at straight time, except on holidays when the applicable premium rate is paid. Only time worked counts towards computing overtime.

3.5 Special Allowances (Mod 0120)

Special salary allowances may be paid to employees for certifications and/or qualifications and in specific work environments, and reimbursed in accordance with the Special Allowance Plan approved by the Contracting Officer.

1. Flight Pay Premium

a. Air crew members assigned to perform duties for a minimum of 30 minutes aboard diagnostic aircraft are paid a flight pay differential of 25% of their base pay for actual hours flown in the aircraft to the nearest hour. Flight crew members (pilots and mechanics) are not eligible for flight pay differential.

b. Crew rest time for flight crew members is paid time if the required rest time would cause the individual to receive less than their normal base salary for that week.

2. Hazard Premium

a. When non-bargaining employees are assigned to and perform work on wooden poles or towers at a height of more than 40 feet, they shall be paid time and one-half their base pay for the actual time worked at such heights.

b. When non-bargaining employees are assigned to and perform work in steel- cased drill holes at a depth in excess of 1,000 feet, they shall be paid at time and one-half their base pay rate for the actual time worked at such depths.

c. The premium set forth above shall be computed and paid in increments of 1 hour.

3. Re-Entry Premium (Tunnel/Underground)

a. Non-bargaining employees, while engaged in re-entry work and required by the Company to wear both full protective clothing (coveralls, booties, gloves, caps, etc.) and a full-face respirator, shall receive a premium of one dollar ($1.00) per hour above their base pay.

b. If a non-bargaining employee engages in re-entry work during any portion of the workday, the employee shall receive the premium for the entire shift.

4. Reporting Pay and Partial Shift Work

Nonexempt employees are paid 4 hours of base pay (or 5 hours of base pay, if they work a compressed workweek) when they report for work on their assigned shift and are not put to work, except if no work is available by reason of inclement weather or other conditions beyond the control of the Contractor, or if the employee is discharged for cause or voluntarily terminates.

If put to work for a portion of their assigned shift, nonexempt employees are paid a minimum of 8 hours or a maximum of their basic work day at their base pay rate, except if no work is available by reason of inclement weather or other conditions beyond the control of the Contractor, or if the employee is discharged for cause or voluntarily terminates.

5. Subsistence Allowances

a. Employees assigned to report at Mercury will be paid at the rate of $5.00 subsistence per day worked.

b. Employees assigned to reporting points beyond Mercury will be paid at the rate of $7.50 subsistence per day worked.

c. Employees assigned to Tonopah Test Range (TTR) will receive $7.50 subsistence per day for travel to NNSS or Las Vegas when required to return to TTR the same day. If required to stay overnight at NNSS, the employee will receive $7.50 subsistence instead of $5.00.

d. Employees assigned to Las Vegas will receive $5.00 subsistence for each day worked in Mercury; and $7.50 subsistence for each day worked at NNSS areas beyond Mercury, at TTR, and Nevada Research and Development (NRDA). To be eligible for this subsistence payment, employees must either report to or return from work at NNSS, NRDA, or TTR on their own time or using other than government furnished transportation unless required to stay overnight.

e. Employees assigned to Las Vegas will receive $5.00 subsistence for each day worked in Mercury; and $7.50 for each day worked at NNSS areas beyond Mercury, at TTR, and NRDA in accordance with the following table:

When travel occurs	What vehicle is used	Subsistence?
Before start of normal workday	Any vehicle	Yes
During workday (both directions)	Government vehicle	No
During workday (both directions)	Personal vehicle (no government vehicle available)	Yes
During workday (both directions)	Personal vehicle by choice (government vehicle is available)	No
After end of normal workday	Any vehicle	Yes
Anytime and required to spend the night at the site	Any vehicle	Yes

f. TTR employees required to stay overnight in Las Vegas will be in official travel status.

g. Non-bargaining employees who are required to work without a 12-hour break during a 24 hour period and who spend the night at the NNSS will receive

h. $10.00 per occasion meal allowance in addition to the daily subsistence allowances.

6. Evacuation Pay

a. An employee (except a nonexempt 24-hour shift Fire Department employee) evacuated temporarily from the employee's assigned work site and for whom no work is provided, but whose services are further required in support of continuing operations, will be paid at his/her base hourly rate up to a maximum of 10 hours per day for all hours not worked and which the employee would have normally worked had he/she not been evacuated.

b. If a nonexempt employee (except a nonexempt 24-hour shift Fire Department employee) is in an evacuation status and a work status on the same day, the employee will be paid their base hourly rate for a combination of the two statuses up to the hours in their basic scheduled workweek, or for the actual hours worked, whichever is longer.

c. Nonexempt 24-hour shift Fire Department employees are paid at their regular scheduled rate of pay for all time that corresponds to their basic scheduled workday while in evacuation status. Should the employee work on a scheduled non-workday while in evacuation status, the employee will be compensated for all hours worked at the applicable rate of pay for the type of work performed.

d. If no work is performed on the employee's scheduled non-workday while in evacuation status, no payment will be made for that day.

7. Death Benefit

a. In the event of the death of a non-bargaining full-time employee, the Contractor will pay the surviving spouse or other designated beneficiary, or if there is no surviving spouse or other designated beneficiary, will pay the estate of the deceased, a lump sum amount not to exceed 4 weeks at the employee's then-current base or equivalent hourly rate as well as any earned and accrued PTO due.

b. Upon the death of an employee while in travel status or on temporary duty assignment, the cost of preparation and transportation is allowable for the deceased employee, dependents of the deceased employee, and the personal effects of the deceased employee. This allowable cost will be from the place of travel assignment or temporary duty assignment to the place of the employee's permanent duty station or equivalent distance. The above is applicable providing the Contractor gave authorization for family members to accompany the employee on temporary duty assignment.

8. Emergency Response Duty Pay (Mod 0120)

a. Employees who are specifically authorized and scheduled to be available within a set number of hours for emergency response work outside their normal work hours are eligible to receive a flat-rate incentive payment of $40 for each 24-hour period of coverage.

b. Payment is limited to members of the following teams:

TEAM NAME (LOCATION)	TEAM MISSION
AMS Response Team (Andrews and Nellis)	Aerial emergency response for nuclear or radiological incidents
Consequence Management Home Team (CMHT)	Home team support for Remote Sensing Lab (RSL) and NNSA response team
Consequence Management Response Team (CMRT)	Emergency response team for nuclear or radiological incidents
Consequence Management Advance Command	Command team for nuclear or radiological incidents
Emergency Communications Network (ECN) Team (Forrestal DC and Nellis)	Supports ECN for NNSA, Render Safe, and RSL personnel and applications
Search Management Center (SMC) Rapid Deployment Team (RDT)	Rapid response team for searches and providing support to field operations.
Nuclear/Radiological Advisory Team (NRAT) (Andrews and Nellis)	Pre-crisis team that supports NNSA operations
Disposition Forensics Evidence Analysis Team (DFEAT)	Dedicated to safely disassembling an improvised nuclear device
Radiological Assistance Program – Region 0 (RAP0)	RAP regional response team assigned to the National Capital Region
Nuclear Facilities Duty Officers and Operators	Required to respond to nuclear facilities within two hours
Render Safe Support Team	Supports the JTOT and ARG missions based in Albuquerque, NM; on duty as needed
RSL Home Team	Supports RSL and Render Safe Emergency Operations
Wildland Fire Support Team	Supports MSTS Fire & Rescue in fighting wildland fires during the fire season (could be from June through September will vary by year)

Area 12 Facility Readiness and Response Team (NNSS)	Maintain facility readiness and conduct facility operations at GS test beds and critical facilities. (Mod 0120)

c. If a team is deployed for an exercise or real-world event, the flat-rate incentive payment will continue to be paid during the deployment.

d. The flat-rate incentive payment will be taxable income and appropriate deductions, including voluntary 401(k) contributions will be taken. It will not be included in overtime rate calculations.

9. Pay during Deployment

a. Employees who are eligible for duty pay receive pay for the time spent in transportation to and from deployment as a member of one of the teams listed in Section 3.5, item 8.b. for exercises or real-world responses. This provision does NOT apply to routine business travel.

b. Pay status begins from the time the employee arrives at RSL-Nellis or

c. RSL-Andrews and ends when the employee is released from duty for the day at the destination. The reverse applies for the return trip.

d. Straight time or time-and-a-half is paid depending on the employee's FLSA status and the hours worked during the current workweek.

10. Nuclear Facility Duty Officers, Operators and Radiation Control Technicians (RCTs)

a. Nuclear Facility Duty Managers, Officers, RCTs or Operators who are required to be on call and able to report within 2 hours are eligible to receive a flat-rate incentive payment of $40 for each 24-hour period of coverage.

b. The flat-rate incentive payment is taxable income and deductions, including voluntary 401 (k) contributions are taken. It is not included in overtime rate calculations.

c. Pay status begins from the time the employee arrives at the NNSS and ends when the employee is released from duty for the day at the destination. The reverse applies for the return trip.

d. Straight time or time-and-a-half is paid depending on the employee's FLSA status and the hours worked during the current workweek.

11. Physician Assistant and Nurse Practitioner On-Call Pay

a. Physician Assistants or Nurse Practitioners who are required to be on-call and able to report within 2 hours are eligible to receive a flat-rate incentive payment of $70 for each 24-hour period of coverage.

b. This flat-rate incentive payment is taxable income and deductions, including voluntary 401 (k) contributions are taken. It is not included in overtime rate calculations unless otherwise required by applicable law.

12. Certification Pay

Certification pay will require prior NNSA Contracting Officer or designee approval.

13. Site Allowance

Site allowances will be established with approval of the NNSA Contracting Officer or designee.

14. Location Pay for Temporary Assignments

Location pay for temporary assignments will be established, including amount of pay and the circumstances under which it is provided with approval of the Contracting Officer or designee.

3.6 Approval of individual compensation actions in excess of salary range

MSTS shall obtain DOE NNSA approval for any proposed salary amount paid an employee in excess of the salary range prior to payment.

3.7 Pay in lieu of notice

In the event MSTS allows an exempt employee to resign because the services of such employee cannot be productively utilized during the period of notice or if his/her presence at the work site during the notice period is not desired, the Contractor may pay the employee at his/her base pay for 2 weeks in lieu of continuing the employee's employment for 2 weeks. However, such payment shall be approved in advance by the Contracting Officer.

3.8 Severance pay

Severance pay for non-bargaining employees is governed by the document entitled "Severance Pay Plan" approved by the Contracting Officer. The benefit for eligible employees is 1 week of base pay for each year of credited service up to a maximum of 26 weeks. An eligible employee with less than 1 year of service is eligible for 1 week of base pay.

4.0 LABOR RELATIONS – COLLECTIVE BARGAINING AGREEMENTS

Costs of wages and fringe benefits to employees represented by collective bargaining units and all other costs and expenses incurred pursuant to the provisions of collective bargaining agreements and revisions thereto are allowable costs provided MSTS adheres to requirements provided in Section J Appendix A, Statement of Work, Chapter III Section 5.0, Labor Relations.

MSTS is a party to the Project Labor Agreement and collective bargaining agreements with the following titles: A Project Labor Agreement for the NNSS between MSTS and the Southern Nevada Building and Construction Trades Council and Other Signatory Unions.

1. Collective Bargaining Agreements (CBA) with the International Union of Operating Engineers, Local 501 for the maintenance engineers at the facility at 2621 Losee Road.

2. CBA with the Teamsters, Local 631 for fire and rescue.

3. CBA with Laborers' International Union of North America (LIUNA), Local 872 for the miners, tunnelers, welders, etc.

4. CBA with Culinary Workers, Local 226 and Bartenders Union, Local 165 for the food workers and custodians at the food services facilities at NNSS, RSL, U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office (NNSA/NFO), and TTR.

5. CBA with the International Association of EMTs and Paramedics, Local R14-98 for all of the paramedics.

Expenses associated with employee representation activities that are not prohibited by Section 302 of the Labor Management Relations Act of 1947 (Title 29 United States Code (USC) § 186, Restrictions on Financial Transactions"), or any other applicable law or regulation, are allowable costs.

5.0 GROUP INSURANCE AND LEGALLY REQUIRED PAYMENTS

5.1 General Provisions

1. Administrative Costs

Costs incurred in implementing, administering, and funding comprehensive DOE NNSA-approved group insurance plans are allowable. Administrative costs associated with the effective administration of the plans include such items as publicizing, enrolling, maintaining records, and providing employees with assistance in understanding and collecting their benefits.

2. Insurance

Annual renewal of the group insurance policies, certificates and accounts, cost- sharing arrangements, renewal of group services agreements, establishing new premium rates, and the implementation of changes of minor significance do not require Contracting Officer approval.

The health and welfare plans for the non-bargaining active Employees and retirees are summarized below. If MSTS pays fully or partially, costs will be listed here:

3. Medical care

The following medical plans are available:

a. ***Preferred Provider Organization (PPO) Plan:*** The PPO Plan gives access to a network of doctors and health care facilities, as well as a pharmacy benefit program. MSTS pays 80% of the premiums.

b. ***High Deductible Health Plan (HDHP):*** The HDHP uses the same in-network group of doctors and facilities as the PPO Plan, as well as a pharmacy benefits program. After annual out-of-pocket expenses are incurred, the Company will pay 100% of in-network costs. The HDHP is tied to a Health Savings Account (HSA). MSTS pays 80% of the premiums.

c. ***Health Savings Account (HSA):*** MSTS will contribute $750 for employee only HDHP coverage or $1,500 for family HDHP coverage.

d. ***Health Maintenance Organization (HMO):*** Most eligible medical and prescription drug expenses are payable at 100% after a co-payment. HMO plans are available for New Mexico; Las Vegas, NV; and Livermore, CA. MSTS pays 80% of the premiums.

4. Vision care

MSTS pays 40% of the premiums.

5. Dental care

The dental plan provides two maximum levels of coverage for eligible expenses up to a $1,500 or $2,000 calendar year maximum per person. MSTS pays 75% of the premiums.

6. Life and accident insurance

The Company provides a basic life insurance benefit equal to 1.5 times annual base pay. MSTS pays 100% of the premiums.

7. Business travel insurance

MSTS provides Business Travel Insurance The benefit, equivalent to 2 times annual base pay, is in addition to Basic Life Insurance and any Voluntary Personal Accident Insurance. MSTS pays 100% of the premiums.

8. Disability insurance

MSTS provides Basic Short-Term Disability (STD) and Basic Long-Term Disability (LTD) Insurance coverage. These plans help provide income protection as the result of a non-occupational injury or illness preventing work. MSTS pays 100% of the premiums for the two basic coverages below:

Basic STD: This plan provides 50% of weekly base pay, up to $1,200 a week for the first 26 weeks of disability starting on the eighth consecutive calendar day absent from work due to illness or injury, or the first day hospitalization or surgery.

Because this coverage is Company-paid, the benefit is taxable.

Basic LTD: This benefit is for disability of more than 180 days, and pays 50% of monthly base pay, up to $5,200 per month.

9. Retiree medical program

MSTS provides a Health Reimbursement account stipend to Medicare eligible retirees who elect medical coverage under the Medicare exchange program.

Currently, the annual contribution is $1,695 per participant. Non-Medicare eligible retirees continue to receive access to MSTS-sponsored medical plans until Medicare eligible.

Eligible Bechtel Petroleum Operations, Inc. (BPOI), retirees are eligible for coverage under the MSTS Medical Program or MSTS Retiree Medical Program in accordance with the Memorandum of Agreement (MOA) between NNSA/NFO and DOE Headquarters Office of Fossil Energy on file with NNSA/NFO. The current premium cost share, with the non-Medicare eligible retiree/surviving spouse paying approximately 25% of the established premium, will continue during the effective period of the MOA. Eligible BPOI retirees will receive an annual Health Reimbursement Account (HRA) stipend amount of $3,100 and $3,100 for the spouse. Medicare eligible former BPOI employees and their spouses who were not enrolled in any health insurance plan offered by NSTec in 2012, but, who instead received dental insurance coverage only in 2012 through NSTec, will receive an annual stipend of $750 in an HRA so that they may purchase dental insurance coverage or pay for eligible qualified expenses.

Note: No later than September 1 of each year, MSTS will provide to the NNSA/NFO Manager an estimate of the costs associated with providing the benefits to the former BPOI employees for the following calendar year. The benefits include the HRA stipend for former BPOI employees and their spouses who have reached age 65, and other medical benefits for those former BPOI employees and their spouses who have not yet reached age 65. All reasonable costs incurred by MSTS to administer the benefits for former BPOI employees must be incorporated, and may include but are not limited to actuarial and consulting costs. Any time spent performing work associated with BPOI retirees will be included. MSTS will document their charges.

5.2 Displaced Workers Medical Benefits Program (DWMBP)

MSTS will provide Displaced Workers Medical Benefits to displaced workers if provision of such benefit is set forth in a workforce restructuring plan that is approved by DOE NNSA (see Section J, Appendix A, Statement of Work, Chapter III Section 6.0 Workforce Planning; and Section 6.2).

Benefits under the DWMBP are available to displaced workers who are not eligible for health insurance coverage under another plan, e.g., another employer's health plan, the MSTS retiree medical plan, a spouse's medical plan, or Medicare. Generally, DWMBP benefits are as follows (note: NNSA may approve workforce restructuring plans that include less years of coverage):

- For the first 12-month period after the termination date, the MSTS shall continue to pay the employer portion of the medical premium and the separated employee will pay a premium equal to the monthly premium paid by active employees for the type and level of coverage the separated Employee has at the termination date.

- Beginning in the second year after the termination date, the separated employee will be responsible for one-half of the full Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) rate for this coverage, and MSTS shall pay the remainder. Beginning in the third and final year of the DWMBP, the separated employee will be responsible for paying the full COBRA. At the end of the third year the employee's coverage eligibility ends.

6.0 RETIREMENT PLANS

MSTS shall administer the following plans with the following titles:

a. ***Mission Support and Test Services LLC Employee Retirement Plan -*** This is a pension plan with 5-year cliff vesting. Employees hired after June 30, 2009 will receive a pension benefit based on a variable annuity formula. Employees hired before July 1, 2009 will receive a defined annuity for pension credits earned through December 31, 2013. The pension benefit earned after this date will be based on a variable annuity formula.

b. ***Mission Support and Test Services LLC Employee 401(k) Plan -*** This is a defined contribution plan in which MSTS marches 50% of the first 6% of compensation the employee contributes to the Plan. The employer matching component has 3-year cliff vesting.

c. ***NNSS Staff Pension Plan***

d. ***NNSS IGAN Pension Plan***

6.1 General Provisions

Reasonable costs involved in implementing, administering, and funding DOE NNSA-approved pension plans are allowable. Reasonable administrative costs associated with the effective administration of the plans include such items as publicizing, enrolling, maintaining records, and providing employees with assistance in understanding and collecting their benefits. In addition, only compensation reimbursed by DOE NNSA under the Contract is authorized to be considered as pensionable earnings for purposes of the qualified plans.

Contractor funds contributed on behalf of participating employees who cancel their participation in the plan or whose employment is terminated, which are not vested pursuant to the provisions of the plan, shall be used to offset the Contractor's contributions obligated to be made on behalf of other participants in the plan or to offset reasonable plan expenses if permitted by the plan. In the event this Contract with the Contractor is terminated, funds not committed to participants pursuant to provisions of the plans in effect at the NNSS shall be returned to DOE NNSA.

6.2 SOC Highly Compensated Employee Payments

SOC provided certain employees who were considered highly compensated employees (HCEs) (as that term is defined in the Internal Revenue Code) certain cash payments in lieu of post-2017 participation in the NNSS Staff Pension Plan. The cash payments were roughly equivalent to the present value of the accrued benefit the SOC Incumbent Employees who were HCEs would have received had they continued

to accrue benefits in the NNSS Staff Pension Plan. The costs of the payments of cash compensation in lieu of retirement benefit for the impacted Incumbent Employees shall be allowable expenses under the Contract, unless or until the Contractor proposes an alternative retirement benefit for impacted employees and submits proposed alternative in accordance with Section J, Appendix A, Chapter III, Human Resources, Section 4.4.3. SOC Incumbent Employees who were eligible to receive cash payments from SOC in lieu of participation in the NNSS Staff Pension Plan, as of the expiration date of the SOC contract (No. DENA0003676), will be identified in writing by SOC and agreed upon by MSTS. The payment shall be calculated and provided to the Contracting Officer for review and approval 60 days prior to the payments being provided to the eligible employees.

7.0 PAID TIME OFF

a. Paid Time Off (PTO).

PTO is provided to eligible employees to be used as they wish, i.e., for vacation, sick leave, personal reasons, or religious observances. With the exception of illness or other unforeseen reasons covered by any applicable sick time/leave law or ordinance, PTO is to be scheduled in advance and mutually agreed upon by the supervisor and the employee after taking work requirements into consideration.

1. Eligibility - Salaried employees are eligible to use PTO as it accrues. No minimum length of service is required. Employees in casual status do not accrue PTO.

Accredited Service Requirement	**Annual Accrual**	**Max Accrual***
From Accredited Service Date Until 5th anniversary of that date	120 Hours	480 Hours
From 5th anniversary date Until 20th anniversary date	160 Hours	640 Hours
From 20th anniversary date forward	200 Hours	800 Hours

** When an employee reaches the maximum accrual, no more PTO is accrued until time is charged to PTO and the hours go below the maximum. Employees deployed on an emergency response team (as listed in Section 3.5 item 8.b) will be allowed to continue accruing PTO over the maximum for up to 4 months after their return from deployment.*

2. The PTO Program allows Employees to accrue and use PTO under equivalent or more favorable terms and conditions provided for under applicable federal, state and/or local law. To that end, to the extent any applicable paid sick time/leave law or ordinance provides any greater rights than set forth in this program, such provisions are incorporated by reference for covered employees. To the extent an employee uses PTO for reasons other than sick time/leave, they will not be provided with additional paid time off for sick time/leave purposes irrespective of any applicable sick time/leave law or ordinance, unless otherwise required by law.

3. Part-time employees accrue PTO on a prorated basis.

4. Employees will continue to accrue PTO during all paid absences (except when using donated PTO).

5. Employees will not accrue PTO while in any unpaid employment status for more than half of their normal workweek, unless they are using PTO, VPP, or Sick Leave Savings or working to supplement Short-Term or Long-Term Disability payments.

6. Use of PTO must be approved by supervisors authorized to sign time records. PTO is used by employees in increments of one-quarter hour or more.

7. Approved holidays occurring during PTO will not be counted against PTO accounts.

8. Group insurance coverage will remain in force and premium payments will continue to be apportioned between employer and employee on the same basis as during active work time. Participation in the retirement savings plan will continue and contributions will be based on actual eligible earnings while on PTO.

9. PTO can be used to supplement Workers' Compensation and short-term disability benefits, up to 100% of base pay.

10. Upon termination or transfer to an MSTS affiliate, the employee's accrued, unused PTO funds are transferred to that entity or paid off. The funds associated with this transfer or cash out are reimbursable under this Contract.

11. Employees can donate accrued PTO to fellow employees who have exhausted all accrued PTO and are undergoing either a family medical or personal medical crisis, including other special emergencies, as approved by the Director of Human Resources.

b. Sick Leave Savings Account

1. Sick leave savings account balances effective July 1, 2006 will remain.

2. For rehires with a break in service of 3-years or less, unused sick leave that was accrued at termination will be credited to the employee's sick leave savings account.

3. The sick leave savings account is supplemental to other benefits. It is not a vested benefit to which employees are entitled upon termination or reclassification from salaried to casual status. Consequently, the sick leave savings account will not be paid off upon termination.

c. Holidays

Section 7.0 – PAID TIME OFF, Paragraph c. – Holidays, Subparagraph 1. Is modified by adding "Juneteenth" to the list of holidays available to choose from as part of the 80 hours authorized annually. (Mod 0120)

1. Eligible employees will be granted 80 hours of holiday pay each calendar year for the following holidays:

   - New Year's Day
   - Martin Luther King Day
   - Presidents' Day
   - Memorial Day
   - Juneteenth
   - Independence Day
   - Labor Day
   - Veterans Day
   - Thanksgiving Day
   - Day after Thanksgiving Day

- Christmas Day

2. When recognized holidays fall on a Saturday, the preceding Friday will be recognized as the holiday. When recognized holidays fall on a Sunday, they will be observed the following Monday.

3. For those employees working alternate work schedules/hours, a specific schedule will be established each calendar year.

4. At least 30 days prior to the end of each calendar year, the Contractor will notify the NNSA Contracting Officer of the holidays to be observed.

5. To be eligible for holiday pay, the employee must be in paid status on the workday either preceding or following the holiday. No pay will be granted for a holiday that falls on the day preceding the first date of employment, nor for a holiday that falls after the last day worked.

6. If a scheduled holiday occurs when an employee is on an approved paid absence (e.g., PTO, jury duty, etc.), the employee is entitled to holiday pay and no charge is made against their PTO.

d. Bereavement Leave

1. In connection with a death in the immediate family, a bereavement leave of up to 3 days with pay is granted to eligible employees with time record signature approval. No minimum length of service is required.

2. The paid leave can be used at the time of the death or within a reasonable period following the death.

3. "Immediate family" is defined to include the following:

   a. Spouse or registered domestic partner

   b. Mother or father, mother-in-law or father-in-law, stepmother or stepfather, or foster mother or foster father

   c. Son or daughter, son-in-law or daughter-in-law, stepson or stepdaughter, or foster son or foster daughter

   d. Brother or sister, brother-in-law or sister-in-law, stepbrother or stepsister, or foster brother or foster sister

   e. Grandparents or spouse's or registered domestic partner's grandparents

   f. Grandchildren or spouse's or registered domestic partner's grandchildren

   g. For bereavement leave, this definition is not limited to an Employee's natural or legal immediate family, and in the absence of a natural or legal relationship includes those persons considered by family, friends, and the community to bear such a relationship to the Employee, including a legal guardian.

4. Bereavement leave is paid at the employee's base rate of pay at the time of absence for the number of hours the employee otherwise would have worked that day.

   Bereavement leave is not counted as hours worked for purposes of calculating overtime.

e. e. Jury/Witness Duty

1. Eligible employees who have been called to be selected or to serve on a jury impaneled by a civil authority, or who have been called to testify as witnesses in legal proceedings to which the employee is not a party either voluntarily or under subpoena, will be granted time off with pay. Time off with pay will not exceed the number of hours in their scheduled workday. Verification of an employee's attendance at court is required.

2. Compensation of any type received by the employee for the performance of court duty, excluding subsistence or travel allowances, shall be remitted to the Contractor by the employee.

f. Paid Absences Due to Emergency Conditions

1. MSTS senior officer or manager assigned at a location has the responsibility to decide whether a natural or civil emergency condition exists to the extent it prevents employees from reporting to work, or requires that they leave the work location during scheduled work hours.

2. When normal attendance requirements are waived or modified due to emergency situations, employees will be paid for the hours of excused absence at their base pay rate not to exceed the number of hours in their standard workday.

3. Natural emergency conditions include, but are not limited to, extreme weather conditions, utility failures, and life-threatening accidents. Civil emergencies include riots, demonstrations, and bomb threats. This policy is to be used in short-term situations and would not necessarily apply in the event of major catastrophes which might cause the disruption of operations for an extended period of time.

g. Time Off for Voting

MSTS can grant an eligible employee time off with pay for purposes of voting in a duly constituted election in accordance with applicable state laws.

h. Grievances and Arbitration Leave

A union steward will be allowed time off with pay to perform the functions required of him/her in any grievance or arbitration proceeding. An employee called by the Contractor in such proceedings shall be paid for time lost.

i. Workers Compensation

1. MSTS will pay an employee "injury time" for absences from work as the result of a job-incurred injury or illness at 100% of base pay; unless/until the employee receives statutory workers compensation benefits. When the employee receives statutory workers compensation benefits, the Contractor supplements these benefits with "injury time" up to 75% of base pay, not to exceed 6 months or 26 weeks from the date of injury. Once an employee qualifies for statutory workers' compensation benefits, injury time paid at 100% will be adjusted retroactively to the 75% level as a supplement to the statutory benefit.

2. Employees may choose to supplement statutory workers' compensation benefits, including "injury time," up to 100% of base pay with their sick leave savings or PTO. The sick leave savings account can be used on the first day of absence if the absence is the result of a work-related injury (as defined by applicable Workers Compensation regulations). In such cases, payments to the employee from the sick leave savings account will be reduced by the amount of Workers Compensation benefits for which the employee is eligible, even if the employee fails to file a Workers Compensation claim.

j. Military Leave

1. Employees who are members of the armed forces of the United States or National Guard, and who have short-term military obligations for training purposes or civil emergencies will be granted 15 working days of leave per fiscal year to satisfy their obligations. The amount of pay received from MSTS during such leave is the difference, if any, between the employee's base pay at MSTS and the employee's military base pay.

2. Employees called to active military duty under presidential or congressional order will receive up to one-half of their base rate of pay for at least 180 days after their call to active duty. Employees may use earned and/or accrued PTO to extend this 180-day period. In no instance will Contractor payments of salaries or wages and pay received for active military duty exceed employee's base pay rate earned prior to the call to active duty. For these purposes, active duty pay includes base pay, all specialty pay, and all allowances except housing, subsistence, travel, and uniform allowances. Employees will receive enrolled benefits for dependents for a period of 180 days that can be extended by earned and or accrued PTO. Employees will continue to accrue credited service for pension during the 180-day period.

k. Defense of Employees Involved in Work-Related Claims and Legal Actions

1. If a claim or legal action is brought against an employee as the result of the employee's conduct while performing duties under this contract and within the employee's scope of employment, MSTS is allowed the cost of defending the employee, including appeals and cost of any judgment; provided, however, that the prior approval of the NNSA Contracting Officer or designee and the consent of the employee to be defended shall be obtained before any such defense is undertaken.

2. The provisions of the contract clause entitled "Litigation and Claims" shall have the same application to claims and legal actions against employees under this section as it has to those claims and legal actions that are brought directly against MSTS. Before costs of any retained legal counsel is allowed, the selection of such counsel must have the concurrence of the NNSA Contracting Officer or designee.

3. When involved in any claim or legal action covered by this section, an employee is, with the prior approval of the NNSA Contracting Officer or designee, allowed time off with base pay on scheduled work days for consultation with counsel, trial attendance, and such other matters as are reasonably incident to the claim or legal action.

l. Administrative Investigative Leave

Employees removed from an MSTS work site while pending investigation are placed on administrative investigative leave until the investigation has been completed, subject to approval by the Director of Human Resources or designee.

m. Service Credit and Leave Balances

MSTS carried over the length of service credit and leave balances for Incumbent Employees accrued as of the date of the Base Term.

7.1 Military Leave of Absence

MSTS shall submit a plan for a Military Leave of Absence for training that is consistent with the provisions established in 5 USC 6323, "Military Leave; Reserves and National Guardsmen." The Contractor shall submit a plan for active duty military leave that, at minimum, complies with all applicable provisions of the Uniformed Services Employment and Reemployment Rights Act (USERRA).

Such plan shall be subject to Contracting Officer approval if it provides more benefits than are required by law.

7.2 Security Leave (Suspension of Access Authorization)

If the access authorization of an employee is suspended by direction of the Contracting Officer, MSTS shall transfer the employee to work not requiring access authorization if such work is available, without reducing the employee's base compensation. If MSTS determines that no work is available in an un-cleared area to which the employee may be transferred, the MSTS will prepare a written report, for the review and concurrence of the Contracting Officer that sets forth the reasons for the determination.

1. Subject to the Contracting Officer's concurrence that no such work is available, MSTS may place the employee on leave with pay at his//her base compensation. If an employee who is continuing to receive compensation files a timely request for hearing pursuant to Title 10 Code of Federal Regulations (CFR) Part 710, "Criteria and Procedures for Determining Eligibility for Access to Classified Matter or Special Nuclear Material," such base compensation shall be continued until MSTS receives notification in writing from the Contracting Officer of the Hearing Officer's recommendation.

    a. If the recommendation of the Hearing Officer is for revocation of access authorization, MSTS may compensate the employee as set forth herein.

        1. In the event the employee was transferred to another position where such access authorization is not required, compensation may, thereafter, be the base compensation applicable to the new position, and such compensation shall continue until final disposition of the case under DOE procedures as set forth in 10 CFR 710.

        2. In the event a job transfer was not arranged (i.e., the employee was placed on a leave with pay), the employee shall be placed on leave without pay effective the date MSTS received written notification of the Hearing Officer's recommendation. The employee shall remain on leave without pay until final disposition of the matter.

        3. If at any stage of the access authorization procedure following a suspension, or at the conclusion of the administrative review process provided under 10 CFR 710, the employee's access authorization is reinstated by the Contracting Officer, MSTS will offer the employee reinstatement in the same or a comparable position to the one held prior to suspension, if available. The employee may be reimbursed for the difference between the employee's base wage or salary and actual earnings, including earnings from other employment, during the period of suspension.

        4. If the recommendation of the Hearing Officer is to continue the administrative review process for revocation of access authorization, the employee's base compensation may be continued until a final decision is rendered by the Assistant Secretary for Defense Programs.

7.3 Paid Sick and Safe Leave for Non-Bargaining Casual Employees

The Contractor may provide paid sick and safe leave to non-bargaining Casual employees who work in a location that has enacted a paid sick and safe leave law, in accordance with the law of the relevant jurisdiction. For ease of administration, the Contractor may provide non-bargaining Casual employees who work in a location that has enacted a paid sick and safe leave law paid leave on an accrual basis in an amount equivalent to one hour for every 30 hours worked, beginning on January 1, 2021, or the start of employment in a casual status, whichever is later. If the amount of leave required exceeds these amounts, federal, state, or local regulations will be followed. Even if not required by the law of the relevant jurisdiction, the Contractor may permit non-bargaining Casual employees to carry over accrued, unused paid sick and safe leave from year to year. The Contractor may not pay out this sick and safe accrued benefit at termination, unless required by the law of the relevant jurisdiction. (Mod 0106)

8.0 TRAINING AND EDUCATION

Training and education shall be directly related to the employee's current position or to another position to which the employee may reasonably be moved.

MSTS has established written procedures outlining a system of approval for all requests for training and education. The system provides an approval structure for in-house and outside training programs and educational assistance. Local colleges and universities are utilized as primary sources.

8.1 Training

1. Internal Training Programs - Internal training programs may include, but are not limited to, orientation, job training, supervisory training, and executive development. Such training programs may be conducted during employee's workday or after hours. Reasonable costs of in-house training including necessary equipment, materials, and instructor personnel are allowable.

2. External Training Programs - Employees may be selected by MSTS to participate in job related training courses, technical meetings, professional society meetings, seminars, conferences, and other specialized training courses away from the site(s) facilities. Allowable costs for such training courses may include employee's regular pay, travel and subsistence expenses, and the cost of tuition, fees, and course materials. Business travel and conference management shall be managed in accordance with the DOE NNSA conference management requirements.

8.2 Education Program

Employee Education Training Assistance Program (EETAP)

1. Non-bargaining employees who are scheduled for at least 30 hours per week and who are active or on medical/family leave on the course start date and through the completion of the course, are eligible.

2. Courses must be part of a program of study related to the employee's current position or to a probable future assignment in the Contractor's organization. In addition, these courses must be offered by an accredited institution of higher learning and approved before the employee enrolls in the course. The employee's supervisor will review the requested program of study, and if endorsed, provide a statement to the Staff Development and Training Office accompanying the employee's request. The endorsement should indicate how the program of study is related to the employee's current or probable future position and the NNSS mission.

3. The Contractor will pay or reimburse for eligible costs, less financial assistance from other sources (grants, assistantships, fellowships, scholarships, VA assistance, etc.), when the employee achieves a grade of C- or better, or "Pass" in a pass-fail course. The Contractor will provide a maximum of $5,250 per employee each fiscal year, unless written approval of the NNSA Contracting Officer or designee is obtained in advance. The employee must furnish records of course completion and eligible costs incurred, including the amount of any rebate on tuition or fees received from the institution, which will be deducted from the reimbursement or repaid to the Contractor by the employee.

4. Eligible costs include tuition, required textbooks, applicable state and local taxes, and required direct charges billed by the institution for instruction, such as laboratory fees, initial registration fees, and health fees.

5. Ineligible costs include late charges, equipment, tools, general supplies, supplemental non-required textbooks, medical insurance, tuition for courses that are audited, and parking fees.

6. Employees must reimburse the Contractor if they do not successfully complete the course with a grade of C- or better (or "Pass" in a pass-fail course). If the employee voluntarily terminates employment, participates in a self-select voluntary separation program, or is terminated for cause, the employee must

repay 100% of EETAP funds received within the 12 months prior to the termination date or 24 months if a degree program was completed with EETAP funds.

9.0 TRAVEL, RELOCATION, AND SUBSISTENCE

MSTS may pay transportation, lodging, meals, and incidental expenses for employees required to travel in conjunction with the performance of work under this Contract. Travel costs shall be allowable to the extent they are incurred in accordance with the FAR, DEAR, and Federal Travel Regulations (FTR) and do not exceed the maximum per diem rates in effect at the time of travel set forth in the FTR, prescribed by the General Services Administration.

MSTS may deviate from this Personnel Appendix in specific instances where it is determined and approved by the Contracting Officer to be economically advantageous to DOE NNSA and to the extent such deviations conform to regulations and law.

Relocation expenses shall be incurred in accordance with the provisions, limitations and exclusions of the FAR and the policy provisions in Section 9.2 below. Relocation provisions are applicable to Exempt Employees and are allowable and will be reimbursed in accordance with the FTR.

9.1 Travel

Travel costs shall be allowable to the extent that they are incurred in accordance with DEAR 970.3102-05-46, “Travel Costs,” and FAR 31.205-46, “Travel Costs.” Travel- related costs shall be reasonable and allowable to the extent they comply with the rules for per diem rates set forth in the Federal Travel Regulations in effect at the time of travel.

9.2 Relocation

Relocation expenses for en route travel, transportation of household goods, house hunting trips, temporary living, residence-related payments (home sale, home purchase, mortgage interest differential payments, rental differential payments, and costs of canceling an unexpired lease), and tax assistance shall be incurred in accordance with the provisions, limitations, and exclusions of FAR 31.205-35, “Relocation Costs,” except as noted below. Current FTR rates and methods of calculation will be used for those expenses left undefined in the FAR

a. Relocation expenses are authorized when the new work location is more than 75 miles from the current work location, except changes in work location between the Las Vegas area and the NNSS.

b. Shipment of Autos, House Trailers and Mobile Homes

1. Costs for shipment by freight forwarder of one auto for new hires, college hires, or transferring employees will be reimbursed with the following limitations:

a. The shipment is advantageous and cost effective to the government, and the General Manager or designee approves shipment.

b. Vehicles must be in operating condition. Shipment of antique autos is not authorized regardless of operating condition.

c. Assignment location must be more than 500 miles from point of origin.

d. No reimbursement will be made for storage charges at point of origin or destination.

e. Transportation is limited to vehicles having a gross size for shipping purposes of not more than 20 measurement tons (800 cubic feet).

All necessary and customary expenses directly related to the transportation of a privately owned vehicle may be allowed, including crating and packing expenses, shipping charges, and port charges for readying the vehicle for shipment at port of embarkation and for use at port of debarkation.

When it is in the best interests of the government, transferring employees who travel by plane to their new location may ship two vehicles with the approval of the General Manager or designee.

2. Costs for the shipment of a single-unit house trailer or mobile home, moved by the employee or commercial carrier and used as the principal residence, will be reimbursed. The employee is responsible for the cost of insurance for valuation of the mobile home above the carriers' maximum liability, or charges designated in the tariffs as "Special Service."

c. Allowance for Miscellaneous Expenses

Miscellaneous residence relocation expenses (eligibility limited to Employees buying, selling, or leasing a permanent residence) up to $1,000 are paid as a lump sum, in lieu of actual costs, to cover other necessary and reasonable expenses incurred during the relocation. Disconnecting and connecting household appliances; automobile registration; driver’s license and use taxes; cutting and fitting rugs, draperies, and curtains; forfeited utility fees or deposits, up to a total of $5,000 (including the $1,000 lump sum) may be reimbursed with receipts for all miscellaneous expenses.

d. Labor costs incurred during the relocation of transferring employees during any work day travel period, based on an average of 400 miles per day, are allowable.

9.3 Temporary Assignments

Employees on an assignment at least 75 miles away from their normal work location that lasts longer than 6 months and less than 12 months are eligible for a Temporary Change of Station in accordance with the FTR.

9.4 Personnel Borrowed

It is recognized that the technical and staffing requirements of the Contractor will vary during the performance of this Contract. The technical and staff support capabilities of the Contract and its affiliates were proposed and recognized in the competitive selection process. Therefore, the Contractor may obtain direct support from affiliates to meet technical and staffing requirements on an as-needed basis. The process and procedure for utilizing support from affiliates shall be approved by the Contracting Officer.

Services from approved Contractor affiliates will be at cost without additional fee or profit. Allowable cost will include direct costs and all allocable affiliate indirect costs in accordance with applicable Defense Contract Audit Agency (DCAA) cost principles and cost accounting standards. Temporary assignments of Contractor affiliate personnel to the NNSS Site or other sites identified in this Contract shall bear indirect costs based upon a DCAA recommended/approved offsite rate that excludes home office facilities-related costs. However, in the event a DCAA recommendation/approved offsite rate does not exist for a specific Contractor affiliate, the Contractor affiliate shall not be required to develop an offsite rate unless the temporary assignment exceeds 6 months.

Contractor affiliates providing such services and personnel shall perform the work in accordance with applicable terms and conditions of this Contract.

9.5 MSTS Personnel Loaned

MSTS may loan, at no cost to the Government, individuals working under this Contract to other operations of the parent companies (Honeywell International, Inc., Jacobs Engineering Group, Inc., and Stoller Newport News Nuclear, Inc. (now HII-Nuclear, Inc) [Mod 033]) or their affiliates on a non-

interference basis as determined by MSTS. Loans longer than 6 months require Contracting Officer or designee approval.

The receiving organization will reimburse MSTS for full costs plus NNSA adders as appropriate. Travel costs of such loaned personnel will be the responsibility of the requesting company.

9.6 MSTS Personnel Loaned to Outside Organizations

With the prior approval of the NNSA Contracting Officer or designee, MSTS can temporarily assign MSTS employees to locations and organizations other than their assigned organization. Such assignments could be to federal, state, and Local government, non-profit organizations, private sector partners, or other customers. Such assignments must be in the best interest of the NNSA and the Contractor.

The term of these assignments will be determined to best meet the needs and obligations of the specific request, but normally will be 2 years or less. Up to 100% of the cost of the assignment to the Contractor will be reimbursed, as provided in the approval letter.

Employees on temporary assignment will remain employees of MSTS.

10.0 RECRUITING

The costs of recruitment of personnel including cooperative education programs, summer internship programs, nominal costs for promotional items for recruitment purposes, employment advertising, services of staffing sourcing vendors, services of employment agencies at rates not in excess of standard commercial rates, participation in corporate recruiting activities, campus recruiting, career fairs, and operation of recruiting stations are allowable.

Applicants who are requested by the Contractor to report for a pre-employment interview shall be allowed transportation expenses. Reasonable actual costs of lodging not to exceed per diem and meals and incidental expenses (M&IE) shall be allowed.

a. Recruiting Costs

The reasonable and necessary costs incurred for the recruitment of personnel will be allowed. Costs include, but are not necessarily limited to, advertising in newspapers and technical journals, preparation of recruiting materials, and travel for recruiting personnel and technical representative.

b. State and Nonprofit (No-fee) Minority Agencies

MSTS will, to the maximum extent feasible, utilize the services of the local State and nonprofit (no-fee) Minority Agencies in the recruiting of personnel, and will provide those agencies with current listings of job openings for which outside recruiting is being conducted.

c. Other Recruiting Methods

MSTS can utilize employment agencies or employment consultants in the recruiting of personnel and can travel to educational institutions, attend job fairs, or sponsor "Open Houses" in special recruitment areas and invite prospective employees whose skills are in short supply to the point of hire and/or permanent duty station for a pre-employment interview.

d. Physical Examinations

The reasonable costs of employment physical examinations for new hires, rehires, and employees returning to work after an absence of more than 5 days due to illness or injury, including substance abuse testing, are allowable.

e. Pre-employment Verification Standards

The reasonable costs of pre-employment personnel investigations are allowable. All costs associated with the processing of a security clearance where the contract requires the employee to have such clearance, are allowable.

f. Special Employment Programs

MSTS implements special employment programs for students at the undergraduate, graduate, and postgraduate levels. These programs enhance and support normal recruitment by providing a broader base for support of NNSA programs, enable the development of long-term relationships with students to create a pipeline of qualified employees, and facilitate educational cooperation between institutions. A description and summary of MSTS's special employment programs to include number of participants, schools recruited, and conversion rates shall be provided to the Contracting Officer by October 30 of each year for the prior fiscal year.

1. Undergraduate Student (UGS) Program

The UGS Program provides students with relevant work experience related to their chosen field of study in disciplines relevant for the NNSS. These internships give them exposure to our mission and opportunities to support development of a pipeline of qualified employees.

a. Duration

Students are offered 90-day internships with an option to continue working part-time during the academic year if feasible. The employment relationship remains "at-will" and can be terminated at any time by either party.

b. Eligibility

1. Students must be enrolled in a minimum of 12 undergraduate credit hours per semester towards a Bachelor of Science (BS)/Bachelor of Art (BA) or Associate of Science (AS)/Associate of Art (AA).

2. Students must have completed the first year of a Bachelor's (if pursuing BS/BA or Associate's degree program (if pursuing AS/AA).

3. For engineering and scientific disciplines, students must have completed the first year of a Bachelor's degree program in a calculus-based Science, Technology, Engineering and Mathematics (STEM) field.

4. In addition, for engineering disciplines, the engineering program must be accredited by the Accreditation Board for Engineering and Technology.

5. Students must have and maintain a cumulative grade point average (GPA) of 3.0 on a 4.0 scale.

c. Benefits

1. Students are employed as Casual employees and are provided with legally required benefits, Business Travel Accident Insurance, and Special Activity Accident Insurance, the Employee Assistance Program, and Subsistence if applicable.

2. Students are not eligible for EETAP and severance pay when the employment relationship ends.

3. Students are provided limited relocation benefits as follows:

    a. Public transportation or automobile mileage for the most direct route if work location is more than 100 miles from school.

    b. Up to 5 days lodging and M&IE at the standard Continental United States (CONUS) rate for settling in.

2. Post-Baccalaureate Program

The Post-Baccalaureate Program is an additional program to strengthen the early acquisition of talent and provide a bridge from undergraduate to post-graduate levels of study.

a. Duration

Individuals are offered meaningful and value-added employment for NNSS for up to 12 months while determining whether to enroll in a graduate program. The employment relationship remains "at-will", and can be terminated at any time by either party.

b. Eligibility

1. Prior participation in MSTS UGS Program.

2. Completion of Bachelor's degree in technical or scientific discipline within the last 12 months.

3. Must not have been accepted or be enrolled in a graduate program.

c. Benefits

1. Participants are employed as Limited-Term employees and are provided with legally required benefits.

2. Participants will be eligible for Limited-Term MSTS Employee benefits.

3. Participants are not eligible for EETAP or severance pay when the employment relationship ends.

4. Participants are provided limited relocation benefits as follows:

    a. Public transportation or automobile mileage for the most direct route if work location is more than 100 miles from school.

    b. Up to 5 days lodging and M&IE at the standard CONUS rate for settling in.

3. Graduate Research Assistant (GRA) Program

The GRA Program provides technical and scientific students with relevant work experience related to their chosen field of study in disciplines relevant for the NNSS. These appointments give them exposure to our mission and opportunities to support development of a pipeline of qualified employees.

a. Duration

1. Up to 90-day appointments (generally during the summer) with option for renewal based upon program requirements. The employment relationship remains "at-will", and can be terminated at any time by either party.

2. One year appointment with option for renewal based upon program requirements. The employment relationship remains "at-will", and can be terminated at any time by either party.

b. Eligibility

1. Students must be enrolled in and successfully complete a minimum of 6 graduate credit hours per semester towards a technical or scientific discipline.

2. Students must have and maintain a cumulative GPA of 3.2 on a 4.0 scale.

c. Benefits

1. Students with up to 90-day appointments are employed as Casual employees and are provided with legally required benefits, Business Travel Accident Insurance, Special Activity Accident Insurance (NEST), the Employee Assistance Program, and Subsistence if applicable.

2. In addition to legally required benefits, students with 1-year appointments are employed as Limited-Term employees and will be eligible for Limited Term MSTS Employee benefits.

3. Students are not eligible for EETAP and severance pay when the employment relationship ends.

4. Students are provided limited relocation benefits as follows:

a. Public transportation or automobile mileage for the most direct route if work location is more than 100 miles from school.

b. Up to 5 days lodging and M&IE at the standard CONUS rate for settling in.

4. Cooperative Education (Co-Op) Program

The Co-Op Program enhances other student programs by providing students with the opportunity to earn academic credit during a structured job experience as follows:

a. Duration

Up to 6 months. The employment relationship remains "at-will", and can be terminated at any time by either party.

b. Eligibility

1. Enrolled in a formal cooperative education program as an undergraduate or graduate master's program through an accredited college or university.

2. Satisfactorily completed at least 1 year of study.

c. Benefits

1. Students are employed as Casual employees and provided with legally required benefits, Business Travel Accident Insurance, Special Activity Accident Insurance, the Employee Assistance Program, and Subsistence if applicable.

2. Students are not eligible for EETAP or severance pay when the employment relationship ends.

3. Students are provided limited relocation benefits as follows:

a. Public transportation or automobile mileage for the most direct route if work location is more than 100 miles from school.

b. Up to 5 days lodging and M&IE at the standard CONUS rate for settling in.

5. Post-Doctoral (Postdoc) Program

The Postdoc Program offers the opportunity for appointees to perform research, present and publish research, advance knowledge in basic and applied science, and strengthen national scientific and technical capabilities.

a. Duration

Participants can be employed for up to 2 years, with the possibility of 1 additional year, based on the organization's needs. The employment relationship remains "at-will," and can be terminated at any time by either party.

b. Eligibility

In order to be considered for a Postdoc appointment, the candidate must be nominated and sponsored by an MSTS Senior Principal or Distinguished Scientist or Engineer, Director, or Senior Director. Candidates may be considered for a Postdoc position within 3 years of receiving the PhD.

c. Benefits

1. Participants are employed as Limited-Term employees and are provided with legally required benefits.

2. Participants will be eligible for MSTS employee benefits.

3. Participants are not eligible for EETAP or severance pay when the employment relationship ends.

4. Participants are eligible for limited relocation benefits as follows:

a. House hunting trip

b. En route expenses

c. Shipment and temporary storage of household goods

d. Shipment of one vehicle

e. Settling-in allowances

f. Residence relocation allowance

11.0 SPECIAL EMPLOYEE ACTIVITIES

11.1 Recreation and Morale Building Benefits

A recreation and morale building program may be proposed by the Contractor for Contracting Officer approval.

11.2 Employee Recognition Programs

An employee recognition program may be proposed by the Contractor for Contracting Officer approval.

12.0 COMMUNITY OUTREACH

The Contractor may authorize employees to participate in educational and community outreach in accordance with their Community Outreach Plan approved by the Contracting Officer. The salaries, wages, and fringe benefits of employees while engaged in such approved activities will be treated as allowable costs. Educational and community outreach does not include activities conducted by elected and officially appointed officials that take place during an employee's regularly scheduled work day. Hours associated with educational and community outreach outside of the employee's normal work schedule shall not be compensated by the Contractor. The Contractor shall submit a report annually, no later than November 1, to the Contracting Officer on the types of usage and number of hours authorized. Some examples of permissible educational and community outreach include, but are not limited to:

- Promotion of STEM in the educational setting (elementary school through higher education institutions)
- Science Bowl and Science Fairs
- Blood bank drives
- Charity drives
- United Way campaigns

Section J
Appendix H:
Key Personnel

(Mod 0085, 0144, 0151, 0161, 0175, 0190, 0200)

Section J, Appendix H: Key Personnel

Name	Position
Garrett Harencak	President
Roger R. Rocha	Vice President & Chief Operating Officer, Mission Operations
David J. Funk	Vice President, Enhanced Capabilities for Subcritical Experiments Execution
Neile L. Miller	Vice President, Government/Customer Relations and Business Development
John S. Contardi	Senior Director, Stockpile Experimentation and Operations (SEO)
Joel D. Leeman	Senior Director, Infrastructure
Anthony Mendez	Senior Director, Security and Emergency Services
Joseph C. Murdock	Senior Director, Mission Assurance
James F. McDonnell	Senior Director, Mission Development
Darcie Dennis-Koller	Senior Director, Global Security

Section J
Appendix I:
Small Business Subcontracting Plan and Small Business Participation

(Mod 0022, 0044, 0064, 0085, 0164, 0190)

Section J, Appendix I: Small Business Subcontracting Plan and Small Business Participation

SUBCONTRACTING PLAN TEMPLATE

This plan follows the format for addressing the fifteen elements as shown at Federal Acquisition Regulation (FAR) 52.219-9(d) (JAN 2017). Failure to provide an acceptable plan as prescribed by contracting officer will render the offeror ineligible for contract award (FAR 19.702(a)(1)).

SOLICITATION or CONTRACT NUMBER: DE-NA0003624

Contractor Name and address: Mission Support and Test Services

Approximate Value of Contract: $4,575,949,613.00 (includes all priced options) Contract Period of Performance (if applicable):

(X) Individual Subcontracting Plan ( ) Master Subcontracting Plan ( ) Commercial Plan

(1) GOALS

State goals as a percentage of total planned subcontracting dollars (required) and as a percentage of total contract dollars (optional, per the contracting officer) that will go to all Small Business (SB) concerns, Historically Underutilized Business Zone (HUBZone) SB concerns, Small Disadvantaged Business (SDB) concerns, Woman-Owned SB (WOSB) concerns, Veteran- Owned SB (VOSB) concerns, and Service-Disabled Veteran-Owned SB (SDVOSB) concerns.

Total Base Contract for all Periods: 01-DEC-2017 THROUGH 30-N0V-2022

Approximate Contract Period Value: $2,361,422,812.00

Total Value of all planned subcontracting: $825,000,000.00

Base Contract Period	(%) Total Planned Subcontracting dollars	(%) Total Contract Dollars *(If required by CO)*	Notes
a. SB:	70%	24%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
b. VOSB:	12%	4%	
c. SDVOSB:	3%	1%	
d. HUBZone:	3%	1%	
e. SDB:	8%	3%	(Includes ANCs and Indian tribes)
f. WOSB:	8%	3%	

Base Contract Term YEAR 1: 01-DEC-2017 THROUGH 30-SEPT-2018

Approximate Contract Period Value: $599,408,140.00

Total Value of all planned subcontracting: $138,500,000.00

Base Contract Period	(%) Total Planned Subcontracting dollars	(%) Total Contract Dollars *(If required by CO)*	Notes
g. SB:	70%	16%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
h. VOSB:	12%	3%	
i. SDVOSB:	3%	1%	
j. HUBZone:	3%	1%	
k. SDB:	8%	2%	(Includes ANCs and Indian tribes)
l. WOSB:	8%	2%	

Base Contract Term YEAR 2: 01-OCT-2018 THROUGH 30-SEPT-2019 (Mod 0044)

Approximate Contract Period Value: $418,241,000.00

Total Value of all planned subcontracting: $180,000,000.00

Base Contract Period	(%) Total Planned Subcontracting dollars	(%) Total Contract Dollars *(If required by CO)*	Notes
	72%	28%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
n. VOSB:	12%	5%	
o. SDVOSB:	4%	2%	
p. HUBZone:	3%	1%	
q. SDB:	10%	4%	(Includes ANCs and Indian tribes)
r. WOSB:	10%	4%	

Note: *Reference NFO letter AMBC: AH 9031 dated December 12, 2018 directing FY19 assignment of SB goals.*

Base Contract Term YEAR 3: 01-OCT-2019 THROUGH 30-SEPT-2020 (Mod 0064)

Approximate Contract Period Value: $422,523,410.00

Total Value of all planned subcontracting: $200,000,000.00

Base Contract Period	(%) Total Planned Subcontracting dollars	(%) Total Contract Dollars *(If required by CO)*	Notes
s. SB:	72%	28%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
t. VOSB:	12%	5%	
u. SDVOSB:	4%	2%	
v. HUBZone:	3%	1%	
w. SDB:	10%	4%	(Includes ANCs and Indian tribes)
x. WOSB:	10%	4%	

Base Contract Term YEAR 4: 01-OCT-2020 THROUGH 30-SEPT-2021 (Mod 0085)

Approximate Contract Period Value: **$426,647,644.00**

Total Value of all planned subcontracting: **$200,000,000.00**

Base Contract Period	(%) Total Planned Subcontracting dollars	(%) Total Contract Dollars *(If required by CO)*	Notes
s. SB:	72%	28%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
t. VOSB:	12%	5%	
u. SDVOSB:	4%	2%	
v. HUBZone:	3%	1%	
w. SDB:	10%	4%	(Includes ANCs and Indian tribes)
x. WOSB:	10%	4%	

Base Contract Term YEAR 5: 01-OCT-2021 THROUGH 30-SEPT-2022

Approximate Contract Period Value: $425,685,951.00

Total Value of all planned subcontracting: **$200,000,000.00 (Mod 0120)**

Base Contract Period	**(%) Total Planned Subcontracting dollars**	**(%) Total Contract Dollars** *(If required by CO)*	**Notes** **(Mod 0120)**
ee. SB:	70%	33%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
ff. VOSB:	12%	6%	
gg. SDVOSB:	4%	2%	
hh. HUBZone:	3%	1%	
ii. SDB:	10%	5%	(Includes ANCs and Indian tribes)
jj. WOSB:	10%	5%	

Base Contract Term YEAR 5+: 01-OCT-2022 THROUGH 30-NOV-2022

(Term is only 2 months to complete the 5 Year agreement. Contract started in December 2017)

Approximate Contract Period Value: $69,016,667.00

Total Value of all planned subcontracting: $44,166,666.67

Base Contract Period	**(%) Total Planned Subcontracting dollars**	**(%) Total Contract Dollars** *(If required by CO)*	**Notes** **(Mod 0120)**
kk. SB:	70%	45%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
ll. VOSB:	12%	8%	
mm. SDVOSB:	4%	3%	
nn. HUBZone:	3%	2%	
oo. SDB:	10%	6%	(Includes ANCs and Indian tribes)
pp. WOSB:	10%	6%	

Option Year 1: 01-DEC-2022 THROUGH 30-SEPT-2023

Approximate Contract Period Value:

$362,686,051.00 Total Value of all planned

subcontracting: $220,833,333.33

Option Year 1	(%) Total Planned Subcontracting dollars	(%) Total Contract Dollars *(If required by CO)*	Notes
a. SB:	70%	43%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
b. VOSB:	12%	7%	
c. SDVOSB:	4%	2%	
d. HUBZone:	3%	2%	
e. SDB:	10%	6%	(Includes ANCs and Indian tribes)
f. WOSB:	10%	6%	

Option Year 2 - 01-OCT-2023 THROUGH 30-SEPT-2024

Approximate Contract Period Value: $1,049,615.00

Total Value of all planned subcontracting: $480,000,000.00

Option Year 2	(%) Total Planned Subcontracting dollars	(%) Total Contract Dollars *(If required by CO)*	Notes
a. SB:	70%	32.01%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
b. VOSB:	12%	5.49%	
c. SDVOSB:	4%	1.83%	
d. HUBZone:	3%	1.37%	
e. SDB:	8%	3.66%	(Includes ANCs and Indian tribes)
f. WOSB:	8%	3.66%	

Option Year 3 - 01-OCT-2024 THROUGH 30-SEPT-2025

Approximate Contract Period Value: $443,917,249.00

Total Value of all planned subcontracting: $165,000,000.00

Option Year 3	(%) Total Planned Subcontracting dollars	(%) Total Contract Dollars *(If required by CO)*	Notes
a. SB:	70%	26%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
b. VOSB:	12%	4%	
c. SDVOSB:	3%	1%	
d. HUBZone:	3%	1%	
e. SDB:	8%	3%	(Includes ANCs and Indian tribes)
f. WOSB:	8%	3%	

Option Year 4 - 01-OCT-2025 THROUGH 30-SEPT-2026

Approximate Contract Period Value: $448,410,962.00

Total Value of all planned subcontracting: $165,000,000.00

Option Year 4	(%) Total Planned Subcontracting dollars	(%) Total Contract Dollars *(If required by CO)*	Notes
a. SB:	70%	26%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
b. VOSB:	12%	4%	
c. SDVOSB:	3%	1%	
d. HUBZone:	3%	1%	
e. SDB:	8%	3%	(Includes ANCs and Indian tribes)
f. WOSB:	8%	3%	

Option Year 5 - 01-OCT-2026 THROUGH 30-NOV-2027

Approximate Contract Period Value: $519,937,045.00

Total Value of all planned subcontracting: $165,000,000.00

Option Year 5	(%) Total Planned Subcontracting dollars	(%) Total Contract Dollars *(If required by CO)*	Notes
g. SB:	70%	22%	(Includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB, ANCs, and Indian tribes when applicable.)
h. VOSB:	12%	4%	
i. SDVOSB:	3%	1%	
j. HUBZone:	3%	1%	
k. SDB:	8%	3%	(Includes ANCs and Indian tribes)
l. WOSB:	8%	3%	

(2) STATEMENT OF DOLLARS

The following dollar values correspond to the percentage goals in (1).

Total Base Contract for all Periods: 01-DEC-2017 THROUGH 30-N0V-2022

	Total planned subcontracting dollars:	$ 825,000,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 577,500,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 99,000,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 24,750,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 24,750,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 66,000,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 66,000,000.00

Base Contract Term YEAR 1: 01-DEC-2017 THROUGH 30-SEPT-2018

	Total planned subcontracting dollars:	$ 138,500,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 96,950,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 16,620,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 4,155,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 4,155,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 11.080,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 11.080,000.00

Base Contract Term YEAR 2: 01-OCT-2018 THROUGH 30-SEPT-2019

	Total planned subcontracting dollars:	$ 165,000,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 115,500,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 19,800,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 4,950,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 4,950,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 13,200,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 13,200,000.00

Base Contract Term YEAR 3: 01-OCT-2019 THROUGH 30-SEPT-2020

	Total planned subcontracting dollars:	$ 165,000,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 115,500,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 19,800,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 4,950,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 4,950,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 13,200,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 13,200,000.00

Base Contract Term YEAR 4: 01-OCT-2020 THROUGH 30-SEPT-2021

	Total planned subcontracting dollars:	$ 165,000,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 115,500,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 19,800,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 4,950,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 4,950,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 13,200,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 13,200,000.00

Base Contract Term YEAR 5: 01-OCT-2021 THROUGH 30-SEPT-2022

	Total planned subcontracting dollars:	$ 165,000,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 115,500,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 19,800,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 4,950,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 4,950,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 13,200,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 13,200,000.00

Base Contract Term YEAR 5: 01-OCT-2022 THROUGH 30-NOV-2022

	Total planned subcontracting dollars:	$ 26,500,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 18,550,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 3,180,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 795,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 795,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 2,120,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 2,120,000.00

Option Year 1: 01-DEC-2022 THROUGH 30-SEPT-2023

	Total planned subcontracting dollars:	$ 165,000,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 115,500,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 19,800,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 4,950,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 4,950,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 13,200,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 13,200,000.00

Option Year 2 - 01-OCT-2023 THROUGH 30-SEPT-2024

	Total planned subcontracting dollars:	$ 165,000,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 115,500,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 19,800,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 4,950,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 4,950,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 13,200,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 13,200,000.00

Option Year 3 - 01-OCT-2024 THROUGH 30-SEPT-2025

	Total planned subcontracting dollars:	$ 165,000,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 115,500,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 19,800,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 4,950,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 4,950,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 13,200,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 13,200,000.00

Option Year 4 - 01-OCT-2025 THROUGH 30-SEPT-2026

	Total planned subcontracting dollars:	$ 165,000,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 115,500,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 19,800,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 4,950,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 4,950,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 13,200,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 13,200,000.00

Option Year 5 - 01-OCT-2026 THROUGH 30-NOV-2027

	Total planned subcontracting dollars:	$ 165,000,000.00
a.	Dollars planned to be subcontracted to SB (includes HUBZone SB, SDB, WOSB, VOSB, SDVOSB,):	$ 115,500,000.00
b.	Dollars planned to be subcontracted to VOSB:	$ 19,800,000.00
c.	Dollars planned to be subcontracted to SDVOSB:	$ 4,950,000.00
d.	Dollars planned to be subcontracted to HUBZone SB:	$ 4,950,000.00
e.	Dollars planned to be subcontracted to SDB (includes ANCs and Indian tribes):	$ 13,200,000.00
f.	Dollars planned to be subcontracted to WOSB:	$ 13,200,000.00

(3) DESCRIPTION OF PRINCIPAL TYPES OF SUPPLIES AND SERVICES TO BE SUBCONTRACTED AND TYPES OF BUSINESSES SUPPLYING THEM

Work Area	Description	SB	SDB	WOSB	HUBZone	VOSB	SDVOSB
Engineering and Construction	Standard engineering, design, and construction activities	X	X	X	X	X	X
Engineering and Technology	Specialty engineers, scientists, and advanced instrumentation and diagnostics experts	X	X	X		X	X
Project Management	Project management support services and project controls	X	X	X	X	X	X
Nuclear Operations and Safety	Nuclear operations support, nuclear and criticality safety support, and independent reviews	X	X			X	X
Security	Personnel security activities and vulnerability assessments	X	X	X		X	X
Environmental Services	Environmental restoration, waste management, and studies	X	X	X		X	X
ES&H Services	Compliance monitoring and assessment; training	X	X	X	X	X	X
Business Services	IT, financial, and HR support; training; supplies and services	X	X	X	X	X	X
Support Services	Food services, housing, transportation, maintenance, logistics and warehousing operations, and other site services	X	X	X		X	
Commodities and Products	Aircraft parts, chemicals, advanced instrumentation, test diagnostic equipment, and computer hardware /software	X	X	X		X	X

(4) METHOD USED TO DEVELOP GOALS

MSTS will submit proposed individual subcontracting plan goals 60 days prior to the beginning of each fiscal year during the term of this contract, or by such other date authorized in writing by the Contracting Officer. The goals will be negotiated once each fiscal year and the agreement between MSTS and the Contracting Officer will be communicated in writing. This submittal will include subcontracting goals for SB, Small Disadvantaged Business (SDB), Women-owned Small Business (WOSB), HUBZone Small Business (HUBZ), Veteran-owned Small Business (VOSB), and Service-disabled Veteran-owned Small Business (SDVOSB); all are collectively referred to as "small business concerns". Goals are based on separate dollars and percentages for each small business concern category as specified in FAR 19.704.

Subcontracting dollars with Alaskan Native Corporations (ANC) and Indian Tribes are counted towards achievement of 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.

In order to establish realistic and meaningful goals for this plan, we considered the site's historical performance in each category, upcoming FY projects forecast, market research for SB in performance categories, review of SB outreach opportunities, our parent companies' lists of qualified subcontractors, and our ability to quickly expand our SB supplier list by qualifying more SBs.

MSTS' goal is to subcontract with all SB concerns in all potential categories to the maximum extent possible. The proposed goals outlined in section 1 are based on the estimated budget and forecast of procurement requirements, including those for Large Business (LB) concerns.

(5) METHOD USED TO IDENTIFY POTENTIAL SUBCONTRACTING SOURCES (Check all that apply)

_X_ Company Source Lists

_X_ System for Award Management (SAM) database

_X_ Veteran Service Organizations

_X_ National Minority Purchasing Council Vendor Information Service

_X_ U.S. Department of Commerce Minority Business Development Agency's Research and Information Division

_X_ SB, HUBZone SB, SDB, and WOSB Trade Associations

_X_ SBA's Lists of Certified SDB and HSB Concerns

_X_ SB and Minority Business trade fairs or conferences

_X_ Other: Explain –

Sources to be utilized to locate small business concerns by MSTS will include:

- ☐ Federal Business Opportunities
- ☐ Las Vegas Latin Chamber of Commerce
- ☐ North Las Vegas Latin Chamber of Commerce
- ☐ Las Vegas Asian Chamber of Commerce

- ☐ Las Vegas Women's Chamber of Commerce
- ☐ Las Vegas Metro Chamber of Commerce
- ☐ Las Vegas Urban Chamber of Commerce
- ☐ DOE Office of Small Disadvantaged Business Utilization (OSDBU)
- ☐ Clark County Business Development Division
- ☐ Nevada Minority Supplier Development Council
- ☐ Nevada Procurement Technical Assistance Center (PTAC)
- ☐ Nevada Development Authority
- ☐ Henderson Chamber of Commerce
- ☐ Clark County Chamber of Commerce
- ☐ Pahrump Chamber of Commerce
- ☐ Nevada Governor's Office of Economic Development

(6) INDIRECT COSTS (Check which applies.)

_X_ Indirect costs ***have not*** been included in establishing subcontracting goals.

___ Indirect costs ***have*** been included in establishing subcontracting goals.

If included, describe how you determine the proportionate share of indirect costs incurred with:

SB (Including ANCs and Indian tribes):

VOSB:

SDVOSB:

HUBZone SB:

SDB (Including ANCs and Indian tribes):

WOSB:

(7) ADMINISTRATION OF SUBCONTRACTING PROGRAM

The following individual employed by the offeror will administer this subcontracting plan: Primary Point of Contact:

Name:	Marilyn C. Ferguson
Address:	PO Box 98521 M/S NLV018 Las Vegas, NV 89193
Email Address:	FERGUSMC@NV.DOE.GOV
Telephone:	(660) 460-1003
Title:	Procurement/Small Business Program Manager
Description of Duties:	• Works with contracts, purchasing, and marketing personnel to search for and develop qualified small business concerns as sources of supply. • Works with and provides input to the Director, as deemed necessary, to properly administer this plan. • Coordinates with the small business community, industry associations, and government. • Assists small business concerns in meeting requirements of contracting in MSTS's business marketplace. • Acts as an intermediary between customers, the Small Business Administration, and the MSTS management.

Secondary Point of Contact:

Name:	Alexzandria R. Williams
Address:	PO Box 98521 M/S NLV018 Las Vegas, NV 89193
Email Address:	WILLIAAR@NV.DOE.GOV
Telephone:	(702) 295-0962
Title:	Small Business Liaison/Sr. Procurement Specialist
Description of Duties:	• Develop and promote company/division policy statements that demonstrate MSTSs support for awarding contracts and subcontracts to SB, SDB, WOSB, HUB, VOSB, SDVOSB. • Ensuring that procurement procedures are designed to permit the maximum possible participation of SB, SDB, WOSB, HUB, VOSB, SDVOSB. • Buyer socioeconomic training. • Review of internal processes governing supplier source selection. • Review of internal processes for compliance with Small Business reporting and subcontracting.

(8) EQUITABLE OPPORTUNITY TO COMPETE

MSTS assures that small business concerns will have an equitable opportunity to compete for subcontracts. MSTS solicitations will be arranged to allow for timely preparations of bids, quantities, specifications, and delivery schedules so as to facilitate the participation of SB.

MSTS personnel are encouraged to seek the use of approved small business sources and encouraged to develop new qualified sources on new business opportunities.

Outreach Efforts to Obtain Sources:

MSTS will publicize subcontract opportunities when possible through participation in small business publications, trade fairs, federal procurement conferences, industry conferences and local affiliations.

MSTS will collaborate with the following organizations:

- Las Vegas Latin Chamber of Commerce
- Las Vegas Urban Chamber of Commerce
- North Las Vegas Latin Chamber of Commerce
- Las Vegas Asian Chamber of Commerce
- Las Vegas Women's Chamber of Commerce
- Clark County Business Development Matchmaking Events
- Nevada Procurement Technical Assistance Center
- Nevada Minority Supplier Development Council
- DOE Matchmaking Events
- MSTS will use the SAM.GOV database to research sources and use the information as representation of a small business concern's size for the purpose of maintaining a small business source list. If the SAM.GOV information is to be referenced, then the subcontractor must provide a written statement certifying that the information in SAM.GOV is complete and accurate as of the date of proposal for the subcontract.

In addition to participation in various outreach programs, MSTS will provide assistance to develop small business concerns in the following areas as appropriate:

- Provide assistance through Mentor Protégé agreements utilizing the DOE Mentor Protégé Program
- Bidders conferences to discuss and advise on specifications, statements of work and interpretation of requirements
- Site quality surveys to evaluate system and provide assistance to meet quality assurance requirements
- Post-award assistance to ensure requirements are fully understood and to assist in purchase order performance
- Financial assistance in the form of progress payments, where appropriate.

- In-house small business symposia attended by procurement, projects, engineering, and facilities, to discuss and advise on new programs and upcoming requirements.

Internal Efforts to Guide and Encourage Purchasing Personnel:

- Buyer goal performance and achievement.
- Organizational commitment and accountability at all levels.
- Presenting workshops, seminars and training programs to staff.
- Implementing a Small Business Strategy Team to identify issues and solutions pertaining to small business performance within procurement and among site customers.
- Establishing, maintaining and using small business source lists, guides, and other data for soliciting subcontractors.
- Contacting minority and small business development organizations
- Partnering with applicable community organizations to host small business outreach events.

(9) INCLUSION OF FAR CLAUSE 52.219-8, "UTILIZATION OF SMALL BUSINESS CONCERNS," IN SUBCONTRACTS

Place a check by each statement as assurance that the following will be done (Proposed subcontracting plans with unchecked boxes are considered unacceptable):

_X_ I agree to include clause at FAR 52.219-8, "Utilization of Small Business Concerns," in all subcontracts that offer further subcontracting opportunities.

_X_ I will require all subcontractors (except SB concerns) that receive subcontracts in excess of $700,000 ($1.5 million for construction) to adopt a subcontracting plan that complies with the clause at FAR 52.219-9, Small Business Subcontracting Plan.

(10) REQUIREMENT TO COOPERATE IN STUDIES AND SUBMISSION OF REPORTS

Place a check by each statement as assurance that the following will be done (Proposed subcontracting plans with unchecked boxes are considered unacceptable):

_X_ (i) I agree to cooperate in any studies or surveys as may be required.

_X_ (ii) I agree to submit periodic reports so the government can determine the extent of compliance with the subcontracting plan.

_X_ (iii) I agree, after November 30, 2017, to include subcontracting data for each order when reporting subcontracting achievements for indefinite-delivery, indefinite- quantity contracts intended for use by multiple agencies.

_X_ (iv) I agree to:

Submit the Individual Subcontract Report (ISR) and/or the Summary Subcontract Report (SSR), in accordance with paragraph l of the clause at FAR 52.219-9 using the Electronic Subcontracting Reporting System (eSRS) at http://www.esrs.gov.

The reports shall provide information on subcontract awards to SB concerns (including ANCs and Indian tribes that are not SBs), VOSB concerns, SDVOSB concerns, HUBZone SB concerns, SDB concerns

(including ANCs and Indian tribes that have not been certified by SBA as SDBs), WOSB concerns, HICUs, and MIs.

Reporting will be in accordance with the clause at FAR 52.219-9, or as provided in agency regulations.

Submit the ISR semi-annually during contract performance for the periods ending March 31 and September 30, and to submit a report within 30 days of contract completion. I shall submit the reports within 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, I agree to submit a revised ISR within 30 days of receiving the notice of the ISR rejection.

Submit the SSR annually by October 30 for the twelve-month period ending September 30. When an SSR is rejected, I agree to submit a revised SSR within 30 days of receiving the notice of SSR rejection.

_X_ (v) I agree to ensure that my subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using eSRS.

_X_ (vi) I agree to provide this prime contract number, its DUNS number, and the email address of our company 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.

_X_ (vii) I agree to require that each subcontractor with a subcontracting plan provide the prime contract number, its own DUNS number, and the email address of the subcontractor's official responsible for acknowledging receipt of or rejecting the ISRs, to its subcontractors with subcontracting plans.

(11) DESCRIPTION OF TYPES OF RECORDS TO BE MAINTAINED (Check if in agreement. (Proposed subcontracting plans with unchecked boxes are considered unacceptable):

_X_ I agree to maintain the following records to show compliance with this subcontracting plan:

a. Source lists, guides, and other data that identify SB, VOSB, SDVOSB, HUBZone SB, SDB, and WOSB concerns.

b. Records on organizations contacted to locate SB, VOSB, SDVOSB, HUBZone SB, SDB, and WOSB sources.

c. Records on each subcontract solicitation resulting in an award of more than

d. $150,000, indicating:

1. Whether SB concerns were solicited and, if not, why not

2. Whether VOSB concerns were solicited and, if not, why not

3. Whether SDVOSB concerns were solicited and, if not, why not

4. Whether HUBZone SB concerns were solicited and, if not, why not

5. Whether SDB concerns were solicited and, if not, why not

6. Whether WOSB concerns were solicited and, if not, why not

7. If applicable, the reason award was not made to a SB, SDVOSB, VOSB,

8. HUBZone SB, SDB, or WOSB concern

e. Records of outreach efforts to contact:

1. Trade associations

2. Business development organizations

3. Conferences and trade fairs to locate SB, HUBZone SB, SDB, SDVOSB, and WOSB sources

f. Records of internal guidance and encouragement provided to buyers through:

1. Workshops, seminars, training, etc.

2. Monitoring performance to evaluate compliance with the program's requirements.

g. On a contract-by-contract basis, records to support award data submitted to the government, including the name, address, and business size of each subcontractor (does not apply to commercial plans).

Describe other types of records that will be maintained as part of the subcontracting program/plan requirements and goals, if applicable:

(12-15) Other Assurances

_X_ (12) I agree to 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 I 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. The small business concerns used in preparing the bid or proposal include —

a. Any small business concern identified as a subcontractor in the bid or proposal or associated small business subcontracting plan, to furnish certain supplies or perform a portion of the contract; or

b. Any small business concern whose pricing or cost information or technical expertise was used 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 I am awarded the contract.

_X_ (13) I agree to provide the contracting officer with a written explanation if I fail to acquire articles, equipment, supplies, services or materials or obtain the performance of construction work as described in the preceding statement of this section. I will submit this explanation to the contracting officer within 30 days of contract completion.

_X_ (14) l agree to not prohibit a subcontractor from discussing with the contracting officer any material matter pertaining to payment to or utilization of a subcontractor.

_X_ (15) I agree to pay my small business subcontractors on time and in accordance with the terms and conditions of the subcontract, and to notify the contracting officer if I pay a reduced or an untimely payment to a small business subcontractor.

This subcontracting plan was prepared by:

Signature: (Signed)
Printed name: Sharon R. Nanez
Title: Procurement Manager
Phone number: (702) 295-2649
Date prepared: June 7, 2018

Section J
Appendix J:
Diversity Plan Guidance

(Mod 0052, 0076, 0144)

Section J, Appendix J: Diversity Plan Guidance (Mod 0052, 0076, 0144)

DIVERSITY PLAN GUIDANCE

In accordance with Section I clause DEAR 970.5226-1, Diversity Plan, this Appendix provides guidance to assist the Contractor in understanding the information being sought by the Department of Energy, National Nuclear Security Administration (DOE/NNSA) for each of the diversity elements within the clause. The Contractor shall submit a Diversity Plan to the Contracting Officer for approval within 90 days after the effective date of this Contract and shall submit an update to its Plan annually.

Where the following elements are already addressed by the Contractor as an Appendix to the Contract or in a current Contractor policy or procedure, the Contractor need only cross-reference the applicable Contract appendix or provide a copy of the policy or procedure to the Contracting Officer. The Contractor must address the linkage between the following elements and the contractor's organizational business and management strategies for diversity, including the contractor's vision and definition of diversity in their Diversity Plan:

(a) Contractor's Work Force

This Contract includes clauses on Equal Employment Opportunity (EEO) and Affirmative Action (AA). The Plan or policy shall address how the Contractor has or plans to establish and maintain result-oriented AA and EEO programs in accordance with the requirements of these clauses, and how the Contractor's organization includes, or plans to include elements/dimensions of diversity that might enhance such programs.

(b) Educational Outreach

The Plan or policy shall address the Contractor's strategies to foster relationships with Minority Educational Institutions and other institutions of higher learning (e.g., Historically Black Colleges and Universities, Hispanic serving institutions, and Native American institutions) to increase their participation in federally sponsored programs through subcontracting opportunities, research and development partnerships, and mentor-protégé relationships. The contractor's plan may also discuss cooperative programs which encourage under-represented students to pursue science, engineering, and technology careers.

(c) Community Involvement and Outreach

The Plan or policy shall address the Contractor's community relations activities in support of diverse elements of the local community, for example: Support for science, mathematics, and engineering education; support for community service organizations; assistance to governmental and community service organizations for equal opportunity activities; community assistance in connection with work force reduction plans; Strategic partnerships with professional and scientific organizations to enhance recruitment into all levels of the organization; and Use of direct sponsorship or making individual employees available to work with a specific community activity. Also, the contractor's plan may discuss cooperative programs which encourage under-represented students to pursue science, engineering, and technology careers.

(d) Subcontracting

The Plan shall address outreach activities and achievements for enhancing subcontracting opportunities for small businesses, small disadvantaged businesses (e.g., small businesses owned and controlled by socially and economically disadvantaged individuals, Native American Tribes, Alaska Native Corporations, Native Hawaiian Organizations, or Community Development Corporations), small business firms located in historically underutilized business zones, woman-owned small businesses, and veteran-owned (including service-disabled veteran-owned) small businesses. The Plan may also discuss actual or planned participation in the Department's Mentor-Protégé Program.

Refer to Section I clause FAR 52.219-9, Small Business Subcontracting Plan, Alternate II and other small business related clauses for additional guidance and requirements.

(e) Economic Development including Technology Transfer

The Plan shall address the Contractor's outreach efforts that relate to small business concerns for the purpose of assisting the economic development of, or transferring technology to, such a business.

(f) Prevention of Profiling Based on Race or National Origin

The Plan shall address the Contractor's approach to preventing prohibited profiling practices, including strategies for early detection of potential profiling in the Contractor's business activities (e.g., personnel actions, security clearances).

Section J
Appendix K:
Program Management and Cost Reports

Section J, Appendix K: Program Management and Cost Reports

The Contractor shall submit periodic cost, schedule, and technical performance plans and reports in such form and substance as required by the Contracting Officer. Reference Section J, Appendix A, Statement of Work, Chapter I, paragraph 3.3. Cost reports will include at a minimum:

1. Monthly general management reports to summarize schedule, labor and cost plans and status, and provide explanations of status from variance plans. Management reports should contain the performance measurement baseline and actual cost and must be compatible with format as required by DOE / NNSA reporting. The analysis of funds expenditure shall include a report of monthly and cumulative costs by performance element. The monthly reports provide information regarding budgeted costs versus actual costs, scheduled performance against milestones and estimated cost at completion. All reporting requirements shall be implemented where they apply and consistent with instructions from the Contracting Officer where they do not.

2. Annual cost reporting on mission direct and functional support activities. The Contractor shall also provide monthly functional cost metric information as part of the DOE (STARS) accounting system.

The Contractor shall provide the Contracting Officer, or designated authorized representatives, access to information and documents comprising the Contractor's reporting system. The Contractor shall include these reporting requirements in all subcontracts that are cost-reimbursement type contracts when:

3. The value of the subcontract is greater than $2 million, unless specifically waived by the Contracting Officer, or

4. The Contracting Officer determines prior to award that the subcontract effort is, or involves, a critical task related to the Contract**.**

Section J, Appendix L:
Amended and Restated Special Financial Institution Account Agreement for use with The Payments Cleared Financing Arrangement
(Mod 0009, 0175)
(Appendix L last updated by Mod 0175 – 3/7/2023)

Section J, Appendix L: Amended and Restated Special Financial Institution Account Agreement for use with The Payments Cleared Financing Arrangement (Mod 0009, 0175)

This Agreement is entered into for the purposes of amending and restating the existing agreement entered into on the 10th day of November, 2017 between the UNITED STATES OF AMERICA, represented by the United States Department of Energy National Nuclear Security Administration (hereinafter referred to as "DOE"), and Mission Support and Test Services LLC, a legal entity existing under the laws of the State of Delaware (hereinafter referred to as the "Contractor") and JPMorgan Chase Bank, N.A., a national chartered financial institution, located at 875 15th St. NW, Floor 8, Washington, DC 20005 (hereinafter referred to as the "Financial Institution").

RECITALS

a. On the effective date of December 1, 2017, DOE and the Contractor entered into Agreement(s) No. DE-NA0003624, or a Supplemental Agreement(s) thereto (collectively referred to herein as the "Agreements"), providing for the transfer of funds on a payments-cleared basis.

b. DOE requires that amounts transferred to the Contractor be deposited in a special demand deposit account at a financial institution covered by the Department of the Treasury ("Treasury") - approved Government deposit insurance organizations that are identified in I TFM 6-9000. These special demand deposits must be kept separate from the Contractor's general or other funds, and the parties are agreeable to so depositing said amounts with the Financial Institution.

c. The special demand deposit accounts shall be designated as follows:

Zero Balance Accounts Funded by the Department of the Treasury:
Mission Support and Test Services LLC, Letter of Credit Account (Account # 206685031)

Mission Support and Test Services LLC, Payroll Account (Account# 206685171)

Mission Support and Test Services LLC, Accounts Payable Account (Account# 206683911)

Manually Funded Account:
Mission Support and Test Services LLC, Flex Account (Account# 206683812)

COVENANTS

In consideration of the foregoing. and for other good and valuable considerations, it is agreed that—

1. The Government shall have title to the credit balance in said accounts to secure the repayment of all funds transferred to the Contractor, and said title shall be superior to any lien, title, or claim of the Financial Institution or others with respect to such accounts.

2. After receipt by the Financial Institution of directions from DOE, the Financial Institution shall act thereon and shall be under no liability to any party hereto for any action taken in accordance with the said written directions. Any written directions received by the Financial Institution from the Government upon DOE stationery and purporting to be signed by, or signed at the written direction of, the Government may, insofar as the rights, duties, and liabilities of the Financial Institution are concerned, be considered as having been properly issued and filed with the Financial Institution by DOE.

3. DOE, or its authorized representatives, shall have access to financial records maintained by the Financial Institution with respect to such special demand deposit accounts at all reasonable times and for all reasonable purposes, including, but without limitation to, the inspection or copying of such

financial records and any or all memoranda, checks, payment requests, correspondence, or documents pertaining thereto. Such financial records shall be preserved by the Financial Institution for a period of 6 years after the final payment under the Agreement.

4. In the event or the service of any writ of attachment, levy of execution, or commencement of garnishment proceedings with respect to the special demand deposit accounts, the Financial Institution shall promptly notify DOE at:

   U. S. Department of Energy/National Nuclear Security Administration
   Nevada Field Office
   Contracting Officer
   232 Energy Way
   North Las Vegas, NV 89030

5. DOE shall authorize funds that shall remain available to the extent that obligations have been incurrent in good faith there under by the Contractor to the Financial Institution for the benefit of the special demand deposit accounts.

   The Financial Institution agrees to honor upon presentation for payment all payments issued by the Contractor and to restrict all withdrawals against the funds authorized to an amount sufficient to maintain th.e average daily balance in the special demand deposit accounts in a net positive and as close to zero as administratively possible. The Financial Institution agrees to service the accounts in this manner based on the requirements and specifications contained in this Agreement No. 196641, dated November 10, 2017. The Financial Institution agrees that per-item costs, detailed in Exhibit A, Attachment A ("Schedule of Financial Institution Processing Charges"), will remain constant during the term of this Agreement. The Financial Institution shall calculate the monthly fees based on services rendered and invoice the Contractor. The Contractor shall issue a check or automated clearinghouse authorization transfer to the Financial Institution in payment thereof.

6. The Financial Institution shall post collateral in accordance with 3 1 CFR 202 with the Federal Reserve Bank in an amount equal to the net balances in all of the accounts included in this Agreement (including the noninterest-bearing time deposit account), less the Treasury-approved deposit insurance.

7. This Agreement, with all its provisions and covenants, shall be in effect for a term of eight (8) years, beginning on the 1st day of December, 2017, and ending on the day of 301\ day of November, 2025. Upon written notice to the Financial Institution, the DOE and Contractor shall have the right to extend the term of this Agreement up to two (2) one-year option years as defined below:

   a. Base period of performance: December 1, 2017 -November 30, 2025

   b. Option Year 1 period of performance: December 1, 2025 - November 30, 2026

   c. Option Year 2 period of performance: December 1, 2026- November 30, 2027

8. DOE, the Contractor, or the Financial Institution may terminate this Agreement at any time within the agreement period upon submitting written notification to the other parties ninety (90) days prior to the desired termination date. The specific provisions for operating the account during this ninety (90) day period are contained in Covenant 11.

9. DOE or the Contractor may terminate this Agreement at any time upon thirty (30) days' written notice to the Financial Institution if DOE or the Contractor, or both parties, find that the Financial Institution has failed to substantially perform its obligations under this Agreement or that the Financial Institution is performing its obligation in a manner that precludes administering the program in an effective and efficient manner or that precludes the effective utilization of the Government's cash resources.

10. Notwithstanding the provisions or Covenants 8 and 9, in the event that the Agreements, referenced in Recital (a), between DOE and the Contractor are not renewed or are terminated, this Agreement between DOE, the Contractor, and the Financial Institution shall be terminated automatically upon the delivery of written notice to the Financial Institution.

11. In the event of termination, the Financial Institution agrees to retain the Contractor's special demand deposit accounts for an additional ninety (90) day period to clear outstanding payment items. This Agreement shall continue in effect for the ninety (90) day additional period, with exception of the following:

    1. Term Agreement (Covenant 7)

    2. Termination of Agreement (Covenant 8 and 9)

    All terms and conditions submitted by the Financial Institution that are not inconsistent with this ninety (90) day additional term shall remain in effect for this period.

12. The Financial Institution has submitted the forms entitled "Subcontractor's Proposal Letter" and "Schedule of Financial Institution Processing Charges" These forms have been accepted by the Contractor and the Government and are incorporated herein with the following Exhibits:

Exhibit A	Prices, Quantities and Data
Exhibit B	Statement of Work
Exhibit C	General Conditions

IN WITNESS WHEREOF the parties hereto have caused this Agreement, which consists of 23 pages, including the signature pages, to be executed as of the day and year first above written.

December 1, 2022
Date Signed

By: [redacted]
(Typed Name of Contracting Officer)

[redacted]
(Signature of Contracting Officer)

WITNESS

[redacted]
(Typed Name of Witness)

[redacted]
(Signature of Witness)

Note: In the case of a corporation, a witness is not required. Type or print names under all signatures.

Mission Support and Test Services LLC
(Name of Contractor)

By: [redacted]
(Name of Contractor's Representative)

[redacted]
(Signature of Contractor's Representative)

Chief Financial Officer
(Title)

232 Energy Way, North Las Vegas, NV 89030
(Address)

12/01/2022
(Date Signed)

(Name of Witness)

JPMorgan Chase Bank, N.A.
(Name of Financial Institution)

[redacted]
(Name of Financial Institution Representative)

[redacted]
(Signature of Witness)

(Signature of Financial Institution Representative)

Note: In the case of a corporation, a witness is not required. Type or print names under all signatures.

Vice President, Federal Payments Solutions
(Title)

875 15th St. NW. Floor 8, Washington, DC 20005
(Address)

12/2/2022
(Date Signed)

NOTE

The Contractor shall cause the following Certificate to be executed under its seal, provided that the same individual shall not execute both the Agreement and the Certificate.

CERTIFICATE

I, Roger R. Rocha, certify that I am the Vice President/COO of the limited liability company (LLC) named as Contractor herein; and that said Agreement was duly signed by Stephen M. Beeler, Chief Financial Officer for the, and in behalf of, said LLC by the authority of its governing body and is within the scope of the LLC's authorities.

[redacted]

(Seal of the Limited Liability Company)(Signature)

NOTE

Financial Institution, if a corporation, shall cause the following Certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Agreement and the Certificate.

CERTIFICATE

I,_____, certify that I am the_____of the corporation named as Financial Institution herein; that_____, who signed this Agreement on behalf of the Financial Institution, was then_____of said corporation and that said Agreement was duly signed for the and in behalf of said corporation by authority of its governing body and is within the scope of its corporate powers.

_____

(Corporate Seal) (Signature)

	Exhibit A.pdf		Exhibit B.pdf		Exhibit C.pdf

Section J, Appendix M:
Community Commitment Plan
(Mod 0033)
(Appendix M last updated by Mod 0033 – 10/31/2018)

Section J, Appendix M: Community Commitment Plan (Mod 0033)



MSTS President Mark Martinez chats with students at the Nevada Science Bowl.

NEVADA NATIONAL NNSS SECURITY SITE

Community Commitment Plan

Leveraging Mission Support and Test Services (MSTS) LLC as a constructive partner in Nevada National Security Site (NNSS) and satellite facility communities

Background

On December 1, 2017, MSTS took over the Management and Operating Contract for the NNSS. Section H-23 of the new contract, DE-NA0003624, requires that MSTS submit a Community Commitment Plan describing planned activities as to how it will be a constructive partner in its communities.

The plan was prepared consistent with the intent of DEAR 970.5226-3, which states that community commitment should recognize "the diverse interests of the region and its stakeholders," and "engage regional stakeholders in issues and concerns of mutual interest." The plan was developed based on establishing MSTS' relationships with the following stakeholders:

- **Local businesses, including small business, chambers of commerce and economic development organizations**
- **Nevada System of Higher Education, UNLV, UNR and other universities**
- **K-12 school districts and their Science, Technology, Engineering and Math programs**
- **Nonprofits in Nevada, California, New Mexico, the Washington, D.C. area**

Strategy Focus Areas

MSTS' strategy focus areas include: community leadership; economic development; education with an emphasis on science, technology, engineering and mathematics (STEM); and employee volunteerism/ contributions.

Community Leadership

MSTS leadership and employees will participate on local boards and organizations.

MSTS leaders are currently participating on the following key boards and organizations:

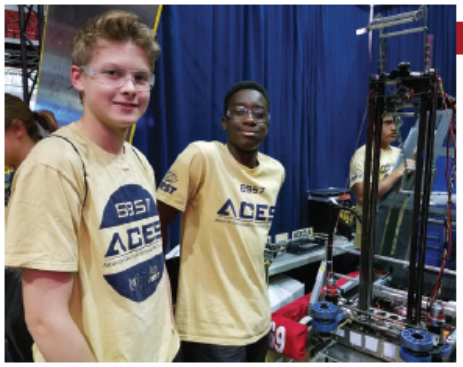
- National Atomic Testing Museum
- University of Nevada, Las Vegas, Engineering Advisory Committee member
- Clark County School District, STEM Education and Awareness
- University of Nevada, Reno, High Density Advisory Board
- Vegas PBS
- Las Vegas Metro Chamber of Commerce
- Las Vegas Global Economic Alliance

Economic Development

MSTS is committed to providing a fair and competitive environment for small businesses. The company places great importance upon the competitiveness of the marketplace and the timely procurement of products and services that meet the highest standards of quality and reliability.

MSTS will display a "Good Faith Effort" regarding its commitment to actively support the federal government's initiatives and laws that enhance and increase the participation of small disadvantaged businesses, veteran-owned small businesses, service-disabled veteran-owned small businesses, small businesses, women-owned small businesses, and historically underutilized business zone small businesses in the subcontracting process. The goals and objectives of the MSTS programs will continue to remain an essential part of the commitment of our parent companies, Honeywell International, Jacobs Engineering, and HII Nuclear Inc.

The NNSS Management and Operating contractor has funding of over $500 million per year, the majority of the funding staying in Nevada. MSTS is currently the largest high-tech employer in the region, with nearly $400 million paid last fiscal year in salaries and benefits, and over $30 million spent on procurements in the state.



Corporate Contributions Strategy

MSTS is committed to invest fee to benefit the communities in which we work and live. To address the greatest challenges faced in our communities, the contributions will leverage resources in two critical focus areas:

Education, including STEM – Includes Nevada Science Bowl, FIRST Nevada, Clark County School District Partnership Program, UNLV College of Engineering Senior Design Project Award, etc.

Community Giving/Volunteerism – Includes American Red Cross, United Way of Southern Nevada, Rebuilding Together Southern Nevada, National Atomic Testing Museum, etc.

Corporate involvement will be geared to the following areas:

Education, focusing heavily on STEM—Approximately 65 percent of allocated budget

- Build on relationships with UNLV and UNR, the Nevada System of Higher Education, and other universities. This may include financial support such as campuses improvements, fellowship or scholarship opportunities, and award programs.
- Financial support for the Nevada Science Bowl.
- Financial support for the FIRST programs.
- Financial support for the Future City competition.
- Financial support for the established Clark County School District focus school partnerships.
- Sponsorship of traveling exhibits, displays, or kiosks that educate the public on current NNSS mission. These exhibits could be displayed in local museums, community centers, public arenas and other areas as appropriate.
- Provide scholarships to high school/undergraduate students. These scholarships can be provided to school districts/ colleges within the areas in which we work. Also evaluate a program to provide scholarship opportunities to children of our employees.
- Sponsor participation in science-related camps/activities within our communities, including participation in science fairs/ events, educational science broadcasts and science demonstrations in public arenas.
- Sponsor partnerships with local schools that offer STEM emphasis.

Community Giving/Volunteerism—Approximately 35 percent of allocated budget

- Participate in sponsorship opportunities with United Way of Southern Nevada, in conjunction with the annual employee giving campaign.
- Support employee volunteerism for community agency activities (Three Square Food Bank; Clean the World; Rebuilding Together; non-profit walks/runs; blood drives, etc.).
- Establish sponsorship opportunities with other community organizations that have ties to the NNSS mission (such as American Red Cross of Southern Nevada, with an annual Hero Award for firefighters; veterans' organizations, etc.).
- Sponsor branding opportunities for the NNSS in our local communities (Nellis AFB Aviation Nation; Opportunity Village Magical Forest, etc.).
- Support local community drives, both over the holidays as well as during the rest of the year.
- Support partnership with the National Atomic Testing Museum, including corporate membership activities.
- Evaluate opportunities to recognize and reward employee volunteerism by contributing a set amount to approved non-profits of choice, based on employee volunteer hours.
- Interact with the Las Vegas Metro Chamber of Commerce, supporting the chamber's activities such as Leadership Las Vegas positions and their Military Affairs Committee activities.

Conclusion

Evaluating the plan's effectiveness will ensure that all corporate investments offer opportunities for employee involvement, recruiting and brand recognition. The ultimate goal is to get our local communities to recognize the NNSS contributions to our areas, both as a positive economic impact as well as being recognized as the largest high-tech employer in southern Nevada. Additional information regarding MSTS' impact on the community can be referenced:

- Small Business Subcontracting Plan and Small Business Participation, Section J, Appendix I of the contract DE-NA0003624
- Community Outreach Plan, Appendix G, Section 12 Community Outreach





Section J, Appendix N:
Construction Wage Rate Determinations and (5) Associated Wage Determinations
(Mod 0069, 0076, 0159, 0184)
(Appendix N last updated by Mod 0184 – 7/12/2023)

Section J, Appendix N: Construction Wage Rate Determinations and (5) Associated Wage Determinations (Mod 0069, 0159, 0184)

a. NV20230001 Mod. No. 4 (04/21/2023) (15 pages)
b. NV20230024 Mod. No. 3 (04/21/2023) (9 pages)
c. NV20230027 Mod. No. 3 (06/16/2023) (9 pages)
d. NV20230034 Mod. No. 3 (04/21/2023) (7 pages)
e. NV20230038 Mod. No. 6 (06/09/2023) (11 pages)

 NV20230001.txt	 NV20230024.txt	 NV20230027.txt	 NV20230034.txt	 NV20230038.txt

Section J, Appendix O:
CLIN 0003 Capital Asset Projects
Description/Specifications/Statement of Work
(Mod 0089, 0140, 0125, 0194, 0195)
(Appendix O last updated by Mod 0195 – 10/25/2023)

Section J, Appendix O: CLIN 0003 Capital Asset Projects Description/Specifications/Statement of Work (Mod 0089, 0140 – 5/6/2022, Mod 0125 – 9/8/2022, Mod 0194 – 9/11/2023, Mod 0195 – 10/25/2023)

(Mod 0195 – 10/25/2023)

a. DESRIPTION OF CHANGES: This modification is for the settlement of the Request for Equitable Adjustment (REA) dated 16 March 2023 for this project (Contract#DE-NA0003624, SubClin 0003A, Modification 0089). The government and contractor have agreed on the terms herein and this modification settles this REA in its entirety. Adjustments to the period of performance and contract value are described in paragraph B, below.

b. CONTRACT PRICE AND PERIOD OF PERFORMANCE: As a result of this modification, the total contract price is increased by $1,982,335.00 from $38,900,000.00 to $40,882,335.00. The Period of Performance is changed from 996 calendar days from the issuance of Notice to Proceed (NTP) on January 7, 2021, to 1,275 days from issuance of NTP. In effect, the contract completion date is changed from September 30, 2023, to July 5, 2024.

c. SCOPE OF WORK ADDED BY MODIFICATION: CD-2/3 and CD-4 documents shall be updated as necessary to reflect the period of performance that is changed by modification.

d. NOTICE OF CHANGE IN RESERVATION OF FUNDS: Total funding for this contract price is increased by $1,982,335.00 from $38,900,000.00 to $40,882,335.00.

e. CONTRACTOR'S STATEMENT OF RELEASE: The contractor waives and releases all claims, liens, and payments, express or implied, attributable to the facts and circumstances described in the REA dated March 16th, 2023, including related subcontractor claims and liens.

   The contractor further agrees that any and all costs, including interest, which are attributable to, or which might now or in the future be allocable to, the facts and circumstances described in the REA dated March 16th, 2023, are incorporated into the equitable adjustment via this modification to the contract.

   It is expressly understood that the Government has no obligation to provides funds in addition to those reserved in writing. No other changes are made because of this modification.

   All other terms and conditions remain unchanged.

(Mod 0194 – 9/11/2023)

a. DESRIPTION OF CHANGES: This modification CANCELS Modification # 0187 in its entirety. Further, this modification incorporates no changes to the scope of work and is only an adjustment to the period of performance as described in paragraph B, below.

b. CONTRACT PRICE AND PERIOD OF PERFORMANCE: By reason of this modification, the total Contract Price remains unchanged at $38,900,000.00. The Period of Performance is changed from 941 calendar days from the issuance of NTP (issued on January 7, 2021) to 996

days from issuance of NTP. In effect, the contract completion date is changed to September 30, 2023.

c. SCOPE OF WORK ADDED BY MODIFICATION: CD-2/3 and CD-4 documents shall be updated as necessary to reflect the period of performance that is changed by modification.

d. NOTICE OF CHANGE IN RESERVATION OF FUNDS: Total funding for this contract remains unchanged at $38,900,000.

The Government has no obligation to provide funds in addition to those reserved in writing. No other changes are made because of this modification.

All other terms and conditions remain unchanged.

(Mod 0125 – 9/28/2022)

a. DESRIPTION OF CHANGES: This modification incorporates revision to the scope of work as requested in Contractor Initiated Change Request (CICR) No. 001- Tweezer North Termination (TNT) received on December 9, 2021 and as incorporated in Section 3.6.10 and 3.6.11 of the scope of work.

The original Scope of Work included all material labor and equipment necessary to design, construct and operate the 138kV power line, including a 144-fiber optic line from the Tweezer Substation to the U1a planned Crater Substation. Tweezer substation to U1a is approximately 15,800 linear feet (LF) or approximately 3 miles. The planned Crater Substation requirement was removed from the U1a planning and therefore the 138kV power line spur was not needed.

The additive portion of work associated with CICR-1 includes the design, construction, and operation of power line continuing from approximately FAC-184 north to a tie in point at approximately FAC-187. Specific to the additive work are 2 tangent type poles and 1 dead end type poles.

1. The contractor shall furnish all management, supervision, labor, materials, supplies, equipment, and expertise required for completion of the work covered by this change.

2. All tasks to be performed for the TNT shall be performed in accordance with the contract statement of work (SOW) and modifications memorialized in Modification No. 0125.

3. Modifications to the conformed 138 kV contract documents are memorialized in this modification.

b. CONTRACT PRICE AND PERIOD OF PERFORMANCE: By reason of this supplemental agreement, the total Contract Price remains $38,900,000.00. There is a deduction to the scope of work and price in the amount of -$554,767 and an additive scope of work and price in the amount of $554,767. This results in a no cost modification change. There is no adjustment to the contract price and period of performance (POP) by reason of this change. The total contract price

remains $38,900.000 and the POP remains 941 calendar days from the NTP issued on January 7, 2021. The contract completion date remains August 6, 2023.

c. SCOPE OF WORK ADDED BY MODIFICATION

All work added to the contract though modification shall be performed in accordance with the contract. This includes management, design, permitting, environmental, safety, construction, commissioning, turn over to operations, and demolition.

All additional work proposed and added by modification to the original contract shall have a WBS specific to the newly modified work. The WBS shall follow the accepted WBS system for the project and have a distinct identifier for all new work activities. The fragnet schedule shall be developed and submitted in accordance with the associated modification SOW and prices that use the WBS and distinct additional work identifier, which distinguishes it as part of a specific modification. This fragnet shall be able to be incorporated into the approved cost loaded schedule. The fragment/schedule shall include all costs associated with newly modified work activities. Costs activities shall be equal to the proposed price in the Price Proposal Sheet and equal to the WBS level as included in the Price Proposal Sheet. The approved final detailed revised fragnet schedule shall be in accordance with section 01 32 01 Project Schedule of the contract and shall be submitted within 20 business days of the modification award date.

Deliverables and activities added by a specific modification shall be submitted in accordance with the specific modification.

CD-2/3 and CD-4 documents shall be updated as necessary to reflect the additional scope of work added by modification. All updates shall be coordinated, performed, and completed so that they do not delay the project or construction. CD-2/3 and CD-4 documents shall be updated as necessary to reflect the additional scope of work added by modification. All updates shall be coordinated, performed, and completed so that they do not delay the project or construction.

Technical specifications for materials specific and unique to a modification are required to be submitted in accordance with this contract. Specifications for materials and equipment that are equal to or the same as the original designed materials or equipment and are previously approved, do NOT require resubmission for approval.

Value engineering (VE) and waiver for not meeting the VE requirements are not required for work added by modification.

d. NOTICE OF NO CHANGE in RESERVATION of FUNDS: Total funding for this contract remains at $38,900,000.

e. CONTRACTOR'S STATEMENT OF RELEASE: The contractor hereby accepts the adjustments in the contract price and/or contract performance period set forth in this Supplemental Agreement-Modification No. 125 to Contract No. DE-NA0003624 for the 138kV PTSR project, as the complete, equitable and final adjustment has no further liability whatsoever, directly or indirectly, in regard to any claims, known or unknown, including claims for delay and/or disruption, for any additional adjustments to the contract by reason of these changed requirement/conditions.

The contractor further agrees that any and all costs, including interest, which are attributable to, or which might now or in the future be allocable to, the items identified in paragraph A, above are incorporated into the equitable adjustment for this modification to the contract.

It is expressly understood that the Government has no obligation to provide funds in addition to those reserved in writing. No other changes are made because of this modification. All other terms and conditions remain unchanged. (Mod 0125 – 9/8/2022)

(Mod 0140 – 5/6/2022)

a. DESRIPTION OF CHANGES: The purpose of this modification is to cancel modification 0121, 0131and 0138.

1. Modification No. 0121 is hereby canceled in its entirety and all tasks to be performed for the NTVa in Modification No. 0121 are hereby canceled.

2. Modification No. 0131 and 0138 are hereby canceled due to system administrative error.

3. The contractor hereby agrees to the following as it pertains to modification 0121:

   a. No costs were incurred, and no work was performed as a result of Modification No. 121 NTVa.

   b. The Contractor hereby agrees that this supplemental agreement provides for a full equitable adjustment including:

      1. Claims, interest, requests for equitable adjustment or other disputes known and unknown associated with the directed changes identified in Modification No. 121 NTVa.

      2. Any impact costs, including costs involving delays and disruptions, extended overhead, or other direct or indirect costs associated with the change identified in Modification No. 121.

      3. Attorney, legal or other fees associated with the directed changes in Modification No. 121.

4. The 138kV PTSR work shall be performed in accordance with the contract statement of work (SOW) and all other contract requirements as of the prior 138kV Modification No. 109, without regard to Modification No. 121, which shall have no force or effect under Contract No. DENA0003624 138kV PTSR.

b. CONTRACT PRICE AND PERIOD OF PERFORMANCE: There is no adjustment to the contract price and time by the reason of this change. The total contract price remains $38,900,000 and the period of performance remains 941 calendar days from the NTP issued on January 7, 2021. The contract completion date remains August 6, 2023. (Mod 0140 – 5/6/2022)

DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

1. Project Description

The work of this project includes the design and installation of new 138 kV transmission power lines, installation of communication and security fiber optic lines, access road, and demolition of existing transmission power lines and poles tie into existing system.

More specifically, the project shall replace existing fiber optic (F/O) communication cabling route with the 138 kV transmission line. The communication cabling shall include 144 strands of single mode fiber optic cable and compatible with wavelength equipment. The new 138 kV transmission line will be designed to be ±100 feet, parallel to the existing 138 kV transmission line, where possible. The design of the structures shall be similar to the structures used for the Hill 200 Project. The 138 kV PTSR project shall be managed to meet environmental, safety, and health hazards requirements through documented and approved analysis of work scope and practices as required. Steps will need to be taken to develop an appropriate Avian Protection Plan to protect migrating and predatory birds. The project at Nevada National Security Site (NNSS) shall ensure the conservation and protection of biological resources in accordance with the site's controlling procedure, CD-P420.001, Conservation and Protection of Biological Resources. Protection of cultural resources must be accomplished in accordance with site procedure CD- P420.002, Protection of Cultural Resources.

1.1 Background

The NNSS safely conducts high-hazard operations, testing, and training in support of National Nuclear Security Administration (NNSA), the U.S. Department of Energy (DOE), the U.S. Department of Defense, and other agencies. The NNSS helps ensure the security of the United States and its allies by supporting the stewardship of the nuclear deterrent, providing emergency response capability, and training, and contributing to key non-proliferation and armscontrol initiatives. Its immense size (over 1,360 square miles) and remote location needs a reliable, robust, and dependable utility infrastructure (power, roads, information technology, water, etc.) to support mission requirements.

The NNSS Enterprise Risk Management system has identified aging infrastructure as the highest risk at the site. Specific risks have been further evaluated based on existing and projected deficiencies across the mission critical nuclear and high-hazard facilities and supporting infrastructure. The vulnerability of the existing degraded 138 kV Site Power System (SPS) has been evaluated as one of the highest specific site risks. Further, the current NNSS communications network is composed of obsolete copper wire-based technology. Closing the capability gap on achieving highly reliable power and communications to NNSA mission-critical facilities drives the mission need for this project. This project will ensure the reliable capability for electrical power and distribution of vital communications across the NNSS such that the mission-critical experimental and support facilities can meet their DOE an NNSA objectives of sustaining the safety, reliability, and performance of the nuclear stockpile.

The Mission Need for this project is to restore reliability for the power distribution system. The existing NNSS 138 kV Power Transmission System (PTS), which was originally constructed about 1963, provides primary transmission and secondary power distribution to various complexes, facilities, buildings, and other infrastructure site-wide through a loop configuration. The existing capacity of the PTS is adequate to support both ongoing and anticipated future mission work. However, the system is aging and experiencing degradation due to the harsh desert environment of the NNSS and requires replacement to provide reliable power to nationally important nuclear facilities. The 138 kV PTSR also carries the site's fiber optic (F/O) backbone

and the F/O cable that supports the site's Supervisory Control and Data Acquisition (SCADA) system. Replacement of the PTS offers the opportunity to also upgrade the site's communication system by installing new higher- capacity F/O cable co-located with the new transmission conductors. The NNSS needs reliable electrical power and distribution of vital communications across the site such that the mission critical experimental and support facilities can meet their NNSA and other national security agency mission objectives of sustaining the safety, reliability, and performance of the nuclear stockpile.

1.2 Pre-Conceptual Engineering Documents for Reference

Preliminary design documents have been prepared to support Critical Decision -1 (CD-1) assessment and approval, demonstrating technical feasibility and constructability for the project.

The following preliminary engineering documents are available and or provided to the Contractor for reference:

1.2.1 Design Plans

The “preliminary” design plans (estimated at 15-30% complete) were generated for the 138 kV PTSR project under Mission Support Test Services (MSTS) by Burns and McDonald dated 1/19/2018.

These plans are included with this contract for reference and as a general guide for the Designer of Record (DOR) in their preparation of a complete design. The final design drawings prepared using computer aided design & drafting (CADD) shall be inaccordance with this contract.

1.2.2 Specifications

The limited selection of “preliminary” technical specifications are included with this contract that were prepared with the “preliminary” design documents under MSTS by Burns and McDonald. These specifications are included for reference and general guidance and are not considered final for this Project. It is the responsibility of the DOR to prepare a complete set of technical specifications specific for the 138 kV PTSR project. The final technical specifications shall be prepared in accordance with the requirements of this contract.

1.2.3 Basis of Design

The preliminary Basis of Design (BOD) document is included with this contract that was prepared with the preliminary design plans and specification under MSTS by Burns and McDonald. It is the responsibility of the DOR to prepare and finalize a Basis of Design specific to their design for the 138 kV PTSR Project. The BOD shall be submitted to the Government with each design submittal package indicated in this SOW.

1.2.4 Electronic Files

Other electronic files may be available for use in preparing the design documents that are the responsibility of the DOR to review and reference as necessary. It is the Contractor’s obligation to ensure that the electronic files considered, used and referenced as part of this project are accurate, correct and appropriate for the design of the 138 kV PTSR Project.

DOR shall review and consider the following documents in preparing the 138 kV PTSR project:

- NNSS 138-kV Pre-Conceptual Design Submittal
- NNSS 138-kV Line Replacement Pre-Conceptual Design Report
- NNSS 138-kV PTSR Pre-Conceptual Design Specification Sections BM-6000, SPC-E01 thru SPC- E10
- 20180412_ExitBrief_138kV_IPR_CD-1 Technical Slides
- 20180319_LOIs_138kV_CD1_IPR_Draft ACD (Consolidated NFO Comments)
- PPEP-0400.001, Preliminary Project Execution Plan for PTSR Project

1.2.5 NNSA Reference Documents

The Contractor is responsible for obtaining, reviewing and using the appropriate and necessary NNSA and DOE Orders/Guidelines in preparing the 138 kV PTSR project design, performing construction activities and managing the project. The following lists some of the expected documents that will/may relate to the project include but are not limited to this list:

1. DID-ENG-004, Conceptual Design Report
2. DID-ENG-0011, Feasibility Study
3. DID-ENG-0018, Technology Readiness Assessment
4. DID-PM-0018, Risk Management Plan
5. DID-PM-0003, Configuration Management Plan
6. DID-PM-0025, Nuclear Quality Assurance Program Plan
7. DID-PM-0031, Quality Assurance Plan
8. DID-PRG-0003, Key Performance Parameters
9. DID-PRG-0006, Performance Baseline
10. DID-SAF-0001, Conceptual Safety Design Report
11. DOE O 413.3B, Program and Project Management for the Acquisition of Capital Assets
12. DOE G 413.3-21A, Cost Estimating Guide
13. OP-ENGR-009, Engineering Design Process
14. 10 CFR Part 851 Appendix A, Section 1(a)1
15. 10 CFR Part 851 Appendix A, Section 1(d)
16. Bulletin 1724E-200 Design Manual for High Voltage Transmission Lines (Latest Edition)

17. United States National CAD Standard® (NCS).

18. Uniform Drawing System (UDS)

19. NNSA Business Operations Procedure (BOP)

    a. a. BOP 413.1 Admin Chg. 1, Value Management (VM)

    b. BOP 413.2 Admin Chg. 1 Program Requirements Document for Construction Projects

    c. BOP 413.3 Independent Cost Estimates Procedure

    d. BOP 413.7 Project Management for the Acquisition of Capital Assets

    e. BOP 413.8 Energy Systems Acquisition Advisory Board Equivalent (ESAAB-E) Process BOPs are located and available to the contractor at the following link. CO will provide access to the contractor upon request:

    https://directives.nnsa.doe.gov/nnsa-directives-browse#c10%3D%26b_start%3D0%26c4%3DBusiness%2BOperating%2BProcedure%2B(BOP)%26c1%3DOffice%2Bof%2BEnterprise%2BProject%2BManagement

2. Progress/Compliance

2.1 Project Management, Planning, and Reporting Services

The Contractor shall conduct project planning activities, including the development, implementation, and maintenance of project schedules, events, status of resources, report(s) on the activities, and progress toward accomplishing project objectives more specifically identified in the subparagraphs below. The Contractor shall prepare and submit the following reports, at minimum, to the Government to monitor progress and ensure compliance:

- Weekly Meetings
- Monthly Progress Report
- Project Management Team (PMT) Meetings
- Program Reviews
- Outlines and Drafts

The various reports shall be submitted to the Government for review and acceptance for content and layout. Contractor generated reports and meeting requirements will be dynamic and change in level of content depending on project activities and construction cycle. Any Contractor errors or omissions to the report that require changes and/or amendments will be at no cost to the Government.

2.2 Schedule and Planning Requirements

The Contractor shall create and maintain a Critical Path Method (CPM) schedule in accordance

with general condition requirements of this contract.

2.2.1 Work Breakdown Structure (WBS) Requirements

The contractor shall prepare and submit a WBS as specified in this contract for Government for approval. The WBS shall be submitted for review prior to the Initial Project Kickoff meeting. The WBS shall be consistent across the project work elements including design, construction, invoicing, price-loaded schedule of values and schedule activities. All tasks and work activities required under this contract shall be included in the WBS. The Contractor shall include and maintain a WBS dictionary describing each component of the WBS with milestones, deliverables, activities, scope, and sometimes dates, resources, and quality.

2.3 Self-Certification

The Contractor shall develop and implement a self-certification, verification and validation process to confirm to the Government that the technical contract requirements and responsibilities have been met. Technical submittals including supporting documents shall be checked and certified by appropriately qualified person(s) before the documents are submitted to the Government.

2.4 Meeting and Charrette Services

2.4.1 Site Visits

The Contractor shall coordinate and support all its sub-tier contractors' on-site visits related to the project to conduct reviews, inspections of the site and infrastructure, and or to verify project requirements.

2.4.2 Design Review Meetings

The Contractor shall coordinate and conduct Design Review meetings for the [60%, and 90%] design submittals with the Government. The Contractor shall ensure that all appropriate engineering/design/construction personnel attend these reviews. Review conference and meetings shall include project managers, DOR, discipline leads, quality control, scheduling, construction PM, NNSS operations managers/leads and safety personnel.

Review meetings will be the responsibility of the contractor to host; announcing and publishing location, date(s) and time with a minimum of 30 calendar days prior to the meeting date. The table below provides guidance as to approximately when design review conferences and meeting shall occur.

Deliverable	Time
NTP	
Preliminary Design (60%) Submittal	NTP + 36 weeks
NNSA Preliminary Design (60%) Review	3-week review
Preliminary Design Review (60%) Onsite Meeting	NTP + 39 weeks (1-week duration)
Design Development (90%) Submittal	NTP + 47 weeks
NNSA Design Development (90%) Submittal Review	1-week review
Design Development (90%) Onsite Meeting	NTP + 49 weeks (1-week duration)
Final A/E Design Documents Submittal	NTP + 52 weeks
Submit Issue for Construction	

2.4.3 Travel

Review conferences / meetings will be held at or near the NNSS site in North Las Vegas, Nevada. Review Meetings are tentatively planned to be 5 days with travel and visitor badging conducted on Mondays. Departures should be planned for Friday's after 12 PM (noon) PST).

3. Project Scope Work

3.1 General Scope of Work Services

The Design-Build Contractor work is defined as all services, labor, materials, equipment, supervision and other efforts to be provided and performed by the Contractor including, but not limited to, the following general categories:

3.1.1 Prepare and update documents per CD -2/3 requirements of DOE O 413.3B

3.1.2 Provide Design Engineering Services.

3.1.3 Coordinate with project stakeholder the most practical alignment meeting project and stakeholder requirements.

3.1.4 Provide engineering economic analysis, cost estimates and value engineer with project stakeholders.

3.1.5 Incorporate Geotechnical challenges and considerations including any necessary environmental licensing, impact mitigation, and ROW considerations in determining route selection of design facilities / transmission lines.

3.1.6 Provide Scheduling

3.1.7 Provide environmental studies as necessary for compliance with site environment compliance documents and impact mitigation.

3.1.8 Provide environmental mitigation.

3.1.9 Provide surveying and mapping necessary for design and construction.

3.1.10 Prepare and obtain any permits required from Federal, State, and Local agencies having jurisdiction within the project boundaries or otherwise needed.

3.1.11 Provide design and technical specifications for the project.

3.1.12 Prove for removal of hazardous materials.

3.1.13 Prepare and provide design construction drawings and plans including tie in to existing

system and facilities.

3.1.14 Provide design services during construction including submittal and RFI review.

3.1.15 Provide all construction activities necessary to complete the contract.

3.1.16 Provide quality inspection and testing

3.1.17 Provide verification and validation

3.1.18 Provide construction safety and security

3.1.19 Maintain Red Line Drawings of actual field construction conditions and installation

3.1.20 Prepare CADD As-built Construction Drawing based on redline drawing of actual field construction conditions.

3.1.21 Provide design and technical specifications for a new replacement fiber optic cable and SCADA systems to be installed on the new steel poles included all design tie-in to existing systems and or facilities.

3.1.22 Provide coordination, testing, commissioning and turn-over of all new installed systems complete and operating.

3.1.23 Provide and implement Traffic Plans as necessary to support construction activities.

3.1.24 Provide design, technical specifications and coordination associated with traffic plan including road closures/detours related to construction.

3.1.25 Provided design and construction of permanent improvements necessary as part of right-of-way, including but not limited to improvements related to maintenance of access.

3.1.26 Contractor shall ensure positive drainage for all improvements

3.1.27 Comply with site controlling documents including but not limited to Health Safety, Environmental, Biological, Cultural Historical Regulatory, and local governing site documents.

3.1.28 Implementation of Contractor's warranty for the Project after construction completion

3.1.29 Coordination with jurisdictional authorities (governments, public, and private entities)

3.1.30 Other efforts necessary or appropriate to complete the design and construction of the project, and to ensure the project achieves the key performance parameters, supporting NNSS site operations, especially in the Mission Corridor.

3.1.31 Prepare CD–4 documents per requirements of DOE O 413.3B

The Contractor shall provide design and construction for the installation of the new 138 kV power transmission line, installation of communication and security fiber optic lines, access road and demolition of existing transmission power lines and poles complete in place tie in of new system to the transmission system. The Contractor shall be responsible for establishing and controlling the plan and profile of the transmission line alignment. The Contractor shall

identify, design, install, and maintain a temporary protective layer over operating utilities to protect the utility from degradation or damage through the construction period.

3.2 Services and Requirements

The Contractor shall provide Design-Build services for the 138 kV PTSR Project meeting the requirements for the key performance parameters and satisfying CD-4 of DOE O 413.3B achieving an operational system in its entirety at the National Nuclear Security Site (NNSS), Mercury, Nevada.

The Contractor is responsible for reviewing the Basis of Design documents, "Preliminary" Engineering Drawings, Technical Specifications, and other CD-1 documents for the preparation and completion of the 138 kV PTSR Project design and construction.

3.2.1 Location of Services

The location for the services shall be at the National Nuclear Security Site (NNSS), Mercury, Nevada.

3.2.2 Period of Performance

The work shall proceed after the issuance of the Notice to Proceed (NTP) by the Government. Period of performance shall be as follows:

941 calendar days for design, construction and all phases of project requirements CD-2 through CD-4

3.2.3 Codes and Standards

The Contractor shall review and analyze current design, industry and regulatory design, construction code, requirements for applicability to this design and construction project. The Contractor shall comply with all applicable (1) federal, state, and local environmental statutes, instructions, manuals, handbooks, regulations, guidance, policy letters, and rules (including all changes and amendments), and (2) Presidential Executive Orders, in effect on the date of issuance of this contract. Location- specific documents required in support to carry out this contract will be provided by NNSA.

3.2.3.1 Design Drawing Layer Naming Convention

The Contractor shall incorporate and use a layer naming convention. If a NNSA layer naming conventions is not available, the DOR shall use the American Institute of Architects (AIA) CAD Layer Guidelines and or the latest version of the United States National CAD Standard® (NCS) for developing the layer naming conventions.

3.2.3.2 Organization, Drafting Conventions, Symbols Convention

The DOR shall incorporate and use drawing conventions. If an approved convention is not available, the Contractor shall us the Uniform Drawing System (UDS) for standardizing computer-aided-drafting design (CADD) services. The designer must adhere to the requirements established to ensure consistence in organizing and managing the design drawings across the disciplines and drawings.

3.2.4 Interface Coordination and Design Integration

The Contractor shall be responsible for coordinating the interfaces and performing design integration with adjacent utilities, systems, site operations, and the Government.

3.2.5 CD-2/3 and CD-4 Document Preparation Requirements

The Contractor shall prepare and update the requirements listed in the table below in accordance with DOE O 413.3B Appendix A Tables 2.2 CD -2 Requirements, Table 2.3 CD-3 Requirements and Table 2.4 CD-4 Requirements. Items indicated in the sections "Post CD-2 Approval" "Post CD-3 Approval" and "Post CD-4" of Table 2.2, Table 2.3 and Table 2.4 respectively are INCLUDED in this SOW.

Submissions shall be in accordance with the progress submittals commencing after receipt of Notice to Proceed. Each document shall be included in the CPM schedule developed as part of the overall Contractor's schedule. Documents shall be included in the Contractor's CPM and have a FINAL (milestone) deliverable dates as noted below until there is a mutually agreed to CPM schedule. The Contractor shall follow and update the referenced PEP POAM for CD-2/3 and CD-4 throughout the design and construction of the 138 kV PTSR Project.

CD-2/3 REQUIREMENTS FOR 138 kV PTSR PROJECT (LINE ITEM PROJECT)

Deliverable	Completion Date (NLT)
Quality Management Plan Update	NTP + 36 weeks
Construction Project Hazard Analysis	NTP + 36 weeks
Commissioning Plan Update	NTP + 36 weeks
Construction Test and Inspection Plan Permitting Requirement Document	NTP + 36 weeks
Waste Management Plan	NTP + 36 weeks
Hazard Analysis Report	NTP + 36 weeks
Transition to Operations Plan	NTP + 36 weeks
Operations & Maintenance Training Plan WBS Dictionary and Basis of Estimate Update	NTP + 36 weeks
Baseline Estimate	NTP + 36 weeks
Baseline Schedule	NTP + 36 weeks
Project Controls Plan	NTP + 36 weeks
Review Quality Assurance Program	NTP + 36 weeks
Keep PDS Current	NTP + 36 weeks
Project Execution Plan	NTP + 49 weeks
Acquisition Strategy Update	NTP + 49 weeks
Risk Management Plan Update	NTP + 49 weeks
Risk Assessment Report Update	NTP + 49 weeks
Risk Register Update	NTP + 49 weeks
Perform IPR to validate PB	NTP + 49 weeks
Update ICE/ICR for CD-2/3 Readiness	NTP + 49 weeks
Procurement Subcontracting Plan	NTP + 49 weeks
Complete NEPA	NTP + 49 weeks
Establish a Performance Baseline	NTP + 49 weeks
Ensure compliant EVMS	NTP + 49 weeks
Lessons Learned regarding up-front project planning and design. Lessons learned, and best practices will be captured throughout the project.	NTP + 10 weeks
At the completion of the project, a final lessons learned report will be prepared, distributed, and placed in the project records within 60 days of CD 4 approval. The report will be a	CD4 Approval + 8 Weeks

compilation of the lessons learned issued during the project.

After completing CD 2/3 the Contractor shall conduct the following:

1. Submit all CD documents, and if there are changes to the PB, submit BCP documents to PM.

2. Continue monthly PARS II reporting (excluding earned value data).

3. Continue Monthly Project Review (MPR) with the PME or their designee.

   a. The contractor may provide an abridged MPR briefing template in the proposal or state the standard NNSA APM template will be sued for the MPR updates

4. Within 60 days, submit Lessons Learned regarding up-front project planning and design to PSO and PM.

CD-4 REQUIREMENTS FOR 138 kV PTSR PROJECT (LINE ITEM PROJECT)

Deliverable	Completion Date (NLT)
Issue a Project Transition to Operations Plan	NTP + 100 weeks
Readiness to Operate Assessment	NTP + 100 weeks
Final Commission Plan	NTP + 100 weeks
Final Hazard Analysis Report	NTP + 100 weeks
Environmental Management System (DOE O436.1, as appropriate	NTP + 100 weeks
Post CD-4 Approval:	09/2023
Lessons Learned regarding project execution and facility start-up	CD4 approval + 8 weeks
Initial Project Closeout Report	CD4 approval + 8 weeks 12/2023

The Contractor shall submit the required documents for CD 2/3 and 4 in accordance with the above description. The Government will provide the appropriate reviews within 30 days of receipt of the appropriate documents and provide back to the contractor a consolidated, de-conflicted set of comments.

3.2.6 Site Design Data

The Contractor shall perform all necessary field reconnaissance, surveys, and site investigations required to obtain engineering information and design data for the accomplishment of the contract documents of the project in accordance with requirements of this SOW.

3.2.7 Field Measurements

The Contractor shall make its own field investigations to verify dimensions and other information shown on Government furnished reference drawings. The Contractor is responsible for the accuracy of all field measurements necessary for the completion of this contract.

3.2.8 Environmental, Biological and Other Documents

Before completing project required reports and construction drawings, the Contractor shall

review and ensure compliance with all regulatory requirements, including but not limited to NEPA, environmental, biological, State Historical Preservations Office (SHIPO), EIS, and NNSS governing documents. Compliance shall be demonstrated through preparation of compliance reports, to be submitted with each design deliverables and monthly during construction activities. The Contractor is responsible for coordinating and preparing all required environmental documents and meeting environmental regulations. The Contractor is responsible for coordinating, completing and obtaining permit related to the construction of the Project.

3.2.9 Material Surveying and Sampling

All survey(s) and sampling activities shall comply with all applicable Federal, State, and local laws, regulations, codes and procedures. If applicable, the Contractor shall document type and quantities of hazardous materials present on Site. Information gathered from the hazardous materials survey(s) will be incorporated into the design for purposes of potential demolition activities. If hazardous materials are present, the Contractor shall prepare a Hazardous Materials Report to be provided with the Preliminary Design Submittal documents. The Contractor shall coordinate with the appropriate entities when desert tortoises are being encountered.

3.2.10 Field Surveying and Topographic Mapping

The Contractor shall provide all field surveying and topographic mapping necessary to prepare the final design documents. The Contractor shall provide all necessary field surveying necessary for construction. Any available photogrammetric data used for preparing the “preliminary” design documents is for the Contractor’s reference. The Contractor is responsible for the accuracy of data acquired and used in the design and construction of the project.

3.2.11 Geotechnical

The Contractor shall review available geotechnical data available. However, the Contractor is responsible for obtaining any additional geotechnical data necessary to prepare the final design documents. The geotechnical data used for design shall be indicated in the basis of design document and submitted with the design submittals. The Contractor is responsible for the accuracy of geotechnical data acquired and used in the design and construction of the project.

3.2.12 Structures Reports

The Contractor shall review available structural reports and design data available. The Contractor shall prepare a Structures Reports providing the basis for the design of 138 kV PTSR structural elements. The Contractor shall also include a Pole Selection Report for each different pole. The Pole Selection Report will be subject to Government review and acceptance. The Governments review period for the Pole Selection Report is ten (10) working days.

3.3 Design

The Contractor shall provide the design for the 138 kV PTSR project using licensed professional engineers and designers in accordance with State and Government rules and regulations. All areas of design shall be under the supervision of Professional Registered Engineer. Design shall be

based on new materials. The contractor's design shall make all efforts to use commercial off the shelf goods and materials. One-of-a-kind or long-lead items shall be identified during the design process prior to the 60% design review submittal such that the overall construction schedule is not increased. The DOR for each discipline, including geotechnical, civil, landscape, structural, mechanical, electrical, and commissioning shall be identified and accounted for on the record drawings. Each respective DOR shall stamp, sign, and date each design drawing under their responsible discipline in accordance with Government and State rules and regulations on the Final/Issue for Construction design documents.

3.3.1 Design Criteria

The Contractor shall review the conceptual design report for design criteria that is contained in Nevada National Security Site (NNSS) 138 kV Transmission Line Replacement – Mission Corridor Conceptual Design Report 03/26/18. The DOR shall use the existing criteria to determine applicability of each criterion for preparing and updating the design criteria and Basis of Design as necessary to ensure the latest code of record and design criteria are utilized in the design of this project. The Contractor shall prepare and submit the design criteria used as the basis for design and construction of the 138 kV PTSR project.

3.3.2 CD-1 Documentation and Reports

CD-1 documentation and reports are available for the Contractor's reference and usage. The Contractor shall review CD-1 documents to confirm technical feasibility and constructability related to their own design development and construction. The Contractor shall prepare the Construction Drawings, Technical Specifications and Reports necessary to complete the 138 kV PSTR Project.

The Contractor shall review CD-1 specifications documents and determine applicability of each specification section, to Contractor's final design and construction methods, and determine what additional technical specifications are required.

3.3.3 Technical Specifications

The Contractor's registered professional engineers and DOR shall prepare the technical specification for the 138 kV PTSR Project. The DOR shall be responsible for the compatibility of the design to the planned construction and compliance with the contract provisions. The construction technical specifications shall be prepared in accordance with latest Construction Specifications Institute

(CSI) MasterFormat and SectionFormat. The DOR shall remove all unnecessary and non-project related information from the technical specification.

The technical specification shall identify submission requirement, such as shop drawings, product data, samples, installer qualification statements, manufacturer's instructions, source and field and quality control submittals necessary prior to commencing construction activities.

The use of "or equal" Clauses for products or materials identified in the technical specifications are allowable to set an acceptable standard, or by specifying by brand or manufacturer's name, followed by the phrase "or equal." When using the "or equal" phrase, more than one acceptable brand or manufacturer's name shall be identified, and the specifications shall state, "Product brand is for informational purposes only and shall not be

construed as the only product available." Also, the salient features shall be described. The Designer shall provide the documentation upon which the design was based with the design analysis. It is the DOR responsibility to ensure the product identified as "or equal" are truly equal across all technical requirements of the product.

The Contractor shall develop a 138 kV PSTR Submittal Log identifying all submittals required in the project technical specifications and by the SOW. The Submittal Log shall indicate whether the submittals are to be submitted to the Government for "Review", "Information Only", or "Self- Certification". The Submittal Log shall be submitted to the Government with each Design Submission Review and with Monthly Reports during construction.

The Contractor shall prepare construction submittals, including shop drawings, in accordance with of this Scope of Work.

The Contractor shall submit submittals timely, allowing 21 calendar days for review, acceptance and return of submittal documents. Submittals not submitted timely for Government review will be at the risk of the Contractor. The Government is not responsible for delays caused by untimely submissions of submittals.

3.3.4 Value Engineering

Contractor shall initiate, conduct, complete, and implement Value Engineering. Value Engineering shall be completed prior to the 60% preliminary design submittal. The Contractor shall document the value engineering process, methodologies, and procedures. Additional Contractor-initiated value engineering opportunities can be introduced, conducted, and implemented through final design and construction efforts.

3.3.5 Demolition

The Contractor shall prepare a Demolition Plan as part of the design documents. The demolition plan, design and technical specifications shall provide for the demolition of the utility system including the demolition sequence of the utility system. The demolition plan and design shall require removal of buried poles to a depth of 2-4 feet below existing finished grade. The design and technical specifications shall account for any material removed as part of the demolition that is not salvageable and shall be removed in accordance with Federal, State, and local site rules and regulations at no cost to the Government.

3.3.6 Recycle and Disposal of Material

The Contractor shall identify salvage and recycle materials and equipment removed/demolished to minimize waste as part of this contract. With the exception of materials specifically indicated or specified to be salvaged or turned over to the Government, all refuse, excess or waste materials resulting from construction operations shall be the responsibility of the Contractor and shall be recycled and/or disposed of in accordance with Federal, State, and local site rules and regulations.

All disposals shall be done in accordance with Federal, State, and local laws, rules, regulations, and requirements at no cost to the Government.

3.3.7 Clearing and Grubbing

The Contractor shall clear and grub the site as necessary. The clearing and grubbing plan and

technical specifications shall ensure work is not performed outside the limits of the right-of-way or designated work area or utility easements, minimizing disturbance to natural ground cover.

The design and technical specifications shall include ground restoration requirements.

3.3.8 Access Roads

The Contractor shall design, construct, and maintain temporary access roads for its needs and those that may be required by local jurisdictions and emergency response authorities. The Contractor shall also design, construct, and maintain new permanent access roads required by the project. The Contractor shall coordinate with the local jurisdictions for the location of permanent access roads. Permanent access and maintenance roads shall be able to carry maintenance and emergency vehicles.

The design criteria shall be based on site requirements, location and anticipated vehicle usage.

The Contractor shall coordinate design and construction with appropriate site personnel and local agencies having jurisdiction. Additional permanent access roads may be required by emergency response authorities.

3.3.9 Drainage

The Contractor shall prepare design drawings and technical specifications to construct and maintain temporary drainage associated with and a result of this project. The Contractor shall design and construct all permanent drainage systems, such as drainage laterals, to ensure the successful drainage of the project. The drainage shall meet requirements of Federal, State, and local jurisdictions rules, regulations, and requirements. The Contractor shall coordinate the design and construction with the local jurisdictions for all drainage.

3.3.10 Utilities

The Contractor shall ensure that existing and planned future utilities are not in conflict with the design and construction of the 138 kV PTSR project. The Contractor shall relocate and/or protect existing utilities in accordance with the requirements of the local agencies having jurisdictions of the in-situ utility and this contract. The Contractor shall coordinate with local jurisdictions and the utility owners throughout the project. The Contractor shall prepare the necessary designs and construct those utilities in conflict with the 138 kV PSTR project.

3.3.11 Grounding and Bonding

The Contractor is responsible for design, installation, and testing, which includes providing the testing procedures for acceptance of all grounding and bonding for the facilities constructed.

3.3.12 Reliability, Availability, and Maintainability

The Contractor shall design, build, and document the project to achieve the required Reliability, Availability and Maintainability (RAM) and accessibility of the project.

3.3.12.1 Reliability.

The Reliability criteria for the project include design life and codes and standards to be applied.

The Reliability criteria include seismic design standards; flood level considerations; and maintainability features to achieve the required service life of the system and structures per the

Design Criteria, directive drawings, contract documents, and quality control and assurance processes.

3.3.12.2 Availability

The Contractor shall design, build, and document the project so that the availability of system during the hours of operation of the NNSS site for the duration of its design life is maximized.

Design shall include any planned unavailability of the system for inspection and maintenance.

3.3.12.3 Maintainability

The Contractor shall design and construct the system to minimize preventive and corrective maintenance requirements. The Contractor shall ensure that all required maintenance can be performed during a defined maintenance window. The designer shall provide all maintenance requirements and schedule, including time for crews to perform work for future planning. The following additional maintainability requirements shall be ensured in the design and construction:

3.3.12.3.0 Design Life and Maintainability – Components which have a shorter design/service life than the whole structure or system; for example, isolators, or grounding shall include design features to be replaceable or maintainable within the standard maintenance requirement time frame. The time fame shall be defined in operations and maintenance manual.

3.3.12.3.1 Accessibility – The design shall include accessibility provisions aimed at providing rapid access to equipment and structural elements which requires routine maintenance inspection, cleaning or replacement without the need for special tools or equipment.

3.3.13 Commissioning (Cx) During Design

The Contractor shall provide commissioning services for high voltage power transmission lines to prepare the commissioning design, technical specifications, testing documents, and prepare concurrence to operate system certificate. The Cx contractor shall have performed a minimum 5 similar commissioning projects on 64 kV and above transmission lines within the last 5 years. The Contractor shall submit the Cx firm's qualification to the Government for review and concurrence.

If the Cx firm is deemed unqualified for the project commissioning the Contractor shall use a different firm at no cost to the Government.

The Cx contractor shall contribute to the development of the appropriate sections in the Basis of Design (BOD) document. The Cx contractor validate the operation of each system to be

commissioned and shall participate in design review meetings beginning prior to the Preliminary (60%) Design Review Meeting. The contractor shall submit a Commissioning CX report.

3.4 Design Submittal Requirements

The contractor's submittals shall include all explicit, noted, implied, and referenced items in this contract. The submittals will be reviewed for completeness using the Conceptual and Preliminary Design Implementation Guidance for NNSA Capital Line Projects guidance letter and 138 kV Submission Requirements Matrix. Submissions not meeting the requirements outlined in the attached memorandum and the attached 138kV PTSR Submission Requirements Matrix will be returned and will require resubmission at no cost or time to the Government. Each progressive design submittal should build upon the previous information to provide a clear basis of design development and design philosophy fitting to the project.

3.4.1 General Submittal Requirements

The Contractor shall provide Design Submittals to the Government as indicated in this Scope of Work (SOW), and other documents referenced in the Contract Documents. The Contractor shall include in the baseline schedule each Design Submittal and Government review period.

The Contractor shall submit all required items listed utilizing the appropriate form provided by the Contracting Officer as cover sheet/transmittal.

3.4.1.1 Text Documents: All text document submittals shall be delivered in both hardcopy and electronic formats: two (2) hardcopies, hardcopies shall include one (1) loose- leaf copy with additional copies shall be bound volumes, electronic text document files shall be submitted on CDs (non-rewritable) in the native file format (MS Word, MS Excel, MS Project, etc.) and in a .pdf version of the original.

3.4.1.2 Drawing Documents: All drawing document submittals shall be provided in both hardcopy and electronic formats: Two (2) hardcopies, hardcopies shall include one (1) full-size set of bound drawings with additional copies shall be 11x17 sets of bound drawings, electronic files shall be submitted on CDs (non-rewritable) to include the AutoCAD DWG files and pdf version of each drawing file.

3.4.1.3 Review: The Government will require ten (10) business days for review of each submittal. The Submittals found to be incomplete or not in compliance with the SOW and basic contract will be returned to the Contractor for correction and resubmission. Under such circumstances the Government will have an additional review period to commence upon receipt of the revised submittals, and there will be no extension to the Period of Performance (POP). The DOR is required to respond in writing to all review comments and submit their annotated responses prior to the Submittal Review Conference. The Contractor shall hold Submittal Review Session as part of the 60% and 90% Design Review Meetings. Review comments with responses by the DOR shall be included in the Design Analysis as an appendix in the subsequent design submittal. All comments must be either accepted and incorporated into the following design submittal or satisfactorily rebutted.

3.4.1.4 Comment Annotations: Annotate all Government furnished comments, noting either the concurrence to incorporate the comment's direction, or the DOR's exception to any

comments. Provide for every exception a concise, specific explanation of the exception. The DOR shall record all actions in response to all comments. Provide the comments at the review conference.

3.4.1.5 Comment Actions: If any comments change the scope of services required, identify such to the CO for resolution. Upon resolution, any modifications to the design shall become an integral part of the project requirements identified in this SOW. If a submittal contains numerous errors or deficiencies, and/or does not meet the specified requirements, the DOR shall re-submit corrected copies of the submittal. Each submittal must receive concurrence from the COR before proceeding to the next submittal point.

3.4.2 Preliminary Design Submittal (60%)

ENGR.009 and contains the minimum requirements indicated in the 138 kV Submission Requirements Matrix.

Specification submissions shall show changes to the master by using the "Track Changes" function.

Each progressive design submittal should build upon the previous information to provide a clear basis of design development and design philosophy fitting to the project.

The Contractor shall submit minutes of meetings within 5 working days of completion of meeting to project stakeholders.

The Contractor may commence construction on temporary features after the 60% Design Review submittal and meetings are complete. And all technical submittals, permits and requirements must be accepted and approved for the related temporary work. The Contracting Officer Representative will provide written notification to the Contractor acknowledging the requested work on temporary construction features.

Any Contractor errors or omissions to the design that require changes or amendments will be at no cost to the Government.

3.4.3 Design Development Submittal (90%)

The Contractor shall submit a design submittal that incorporates the responses to the preliminary design submittal review comments and design refinements to the preliminary design submittal. The design development submittal shall be at the 90+% completion level and in accordance with MSTS OP-ENGR.009 and contains the minimum requirements as indicated in the 138 kV Submission Requirements Matrix leaving only reviewer comments to be addressed at the final design submittal.

All value engineering shall be completed by the end of this phase, and no functional changes are anticipated after the design development review. Submissions shall show changes to master by using "Track Changes" function. Each submission shall indicate changes from previous submission, not all changes to master.

The Contractor shall submit minutes of all meetings within 5 working days of completion to project stakeholders.

Construction may commence after the review and acceptance of the submittal is complete and receiving written notification from the COR. Any work performed without notification from

the Government will be at the sole risk of the Contractor.

3.4.4 Final Design / Issue for Construction Submittal

The Contractor shall submit a Completed Final Design Submittal of the design that incorporates the responses to the Design Development Submittal review comments. The completed final design submittal should include comprehensive drawings, specifications, design analysis, in accordance with MSTS OP-ENGR.009 procedure and the 138 kV Submission Requirements Matrix. The completed final design submittal shall be sealed by the DORs in accordance with State and Governmental rules and regulations. The purpose of the construction document phase is to add the level of detail required for construction of the project, coordinate the trades, and finalize the project's documentation for construction. Once the IFC design has been issued and accepted by the Contractor, the Government will be provided the IFC design in ten (10) working days.

3.5 Post Design Phase

The Contractor shall provide post design services as necessary during construction to include design changes due to field conditions for the 138 kV PTSR project at National Nuclear Security Site (NNSS), Mercury, Nevada. Post design services include but are not limited to:

3.5.1 Submittal Support

Provide verification, review and approve of construction related documents including, shop drawings, samples, diagrams, layouts, conceptual, descriptive literature, illustrations, performance and test data, and similar materials furnished by the construction contractor to ensure compliance and conformance with design documents.

3.5.2 Red Line Review

The contractor shall ensure the DOR reviews the contractor's as-built red line drawings monthly.

Upon completion of the project, Contractor will submit to the Government within thirty

(30) working days, a complete set of the as-built drawings

3.6 Construction Phase

The Contractor shall provide construction services necessary to construct and install a complete and operating 138 kV PTSR project in accordance with the design, technical specification, contract including but not limited to those described below. All construction shall use new materials in accordance with federal and local site rules and regulations.

3.6.1 Construction Inspections

As necessary, the contractor shall ensure the DOR performs on-site construction observation services to ensure construction is compliant with the design documents. Provide a site visit report for each site visit that includes a description and photographs of work being performed.

3.6.2 Safety and Security

The Contractor shall be responsible for all work-site safety and security activities. The

Contractor shall ensure that the principles of Integrated Safety Management are integrated into its operations and that its" Contractor Assurance System (CAS) reflects Contractor integrated performance related to these systems. The Contractor shall ensure that they maintain an approved NNSS Worker Safety and Health Program for the covered workplace. This includes preparing and submitting Site-Specific Health and Safety Plan and Site-Specific Security Plan prior to commencing construction activities. The Contractor may use and reference existing site Health, Safety and Security plans and augment these plans to incorporate specific 138 kV PTSR health, safety, and security requirements. Safety and security documents shall be dynamic and be updated by the contractor as necessary. A copy shall remain at the construction site available to all construction personnel. Any updates or revisions related to safety and security shall be copied to the CO and COR.

3.6.3 Hazardous Material Handling

The Contractor shall remove and dispose of all hazardous material in accordance with Federal, State, and local site laws rules, and regulations.

3.6.4 Utility Work and Coordination

The Contractor shall be responsible for coordinating, delineating, and protecting utilities into the design and construction. The Contractor shall coordinate and incorporate utility shutdowns with stakeholders in accordance with site requirements and regulations.

The Contractor is responsible for (cost and repair) any utility line break as a result of their construction activities. The Contractor shall notify the appropriate site authorities and COR if a utility line is broken as a result of construction activities as soon as practical, or within a maximum 8 hours after the event. All excavation shall be performed in accordance with Federal, State, and local site rules and regulations.

3.6.5 Construction-Phase Submittals

Construction-phase submittals are defined as those submittals required under the construction technical specifications, such as shop drawings, product data, samples, installer qualification statements, manufacturer's instructions, and source and field quality control submittals.

The Contractor shall also maintain status on all submittals required under the construction technical specifications in the Construction Submittal Log. The Construction Submittal log shall be submitted monthly.

The construction-phase submittals shall be subject to Government review and concurrence. As part of the Contractor's self-certification, the Contractor's qualified person(s) and DOR shall confirm that the design intent is being met and that submittal is in compliance with the contract requirements.

3.6.6 Commissioning (Cx) During Construction

A formal Commissioning (Cx) process will be employed in accordance with this contract and shall align with the InterNational Electrical Testing Association (NETA) standard ATS-2017, Standard for Acceptance Testing Specification for Electrical Power Equipment and Systems, approved by American National Standards Institute (ANSI) to assure the new power and communications transmission system above is installed, tested, operated, and maintainable according to the operational requirements of the stakeholders.

Commissioning is a systematic process of ensuring that systems perform interactively according to the design intent and the owner's operational needs. This is achieved through a complete Commissioning process, beginning at the design phase with documented design and operating intent, and continuing through construction and acceptance phases, with actual verification of performance.

3.6.6.1 Commissioning activities during the design phases are intended to achieve the following specific objectives:

3.6.6.1.1 Provide a plan for the implementation of the Commissioning process, including the initial scope of systems to be commissioned for the project

3.6.6.1.2 Ensure that the design and operational intent are clearly documented

3.6.6.1.3 Provide a design review focusing on system performance, maintainability, and adherence to design intent

The Contractor shall use the same commissioning agent used during design development for construction. The commissioning agent shall observe the system install for compliance at a minimum of three (3) times during construction and be on site during all system testing.

The Contractor shall coordinate all activities associated with the testing and commission of the system with stake holders and agencies having jurisdictions. The Contractor shall notify stakeholders a minimum of 30 calendars prior to commencing any testing and commissioning. In addition, the Contractor shall notify stakeholders 7 calendar days and 48 hours prior to testing and commissioning to ensure there are no interferences with site operations.

The Cx firm shall prepare and submit to the Government a draft and final Commissioning Report documenting the Cx process, observations, testing procedures, testing results and concurrences that the system is ready for turnover and operation.

3.6.7 Demolition

The Contractor shall not commence demolition of operational systems until the new system is complete, tested and turned over for operations under CLIN 0001 of the current M&O contract and in accordance with the Demolition Plan.

3.6.8 As-Builts

The Contractor shall prepare and submit as-built drawings, signed and sealed, CADD drawings in accordance with contract requirements. As-built drawings shall fully reflect the final, completed, as- built condition, inclusive of works completed by others in support of the project and verified by the Contractor. The Contractor shall survey the installed utilities to verify the actual placement and include information on the CADD as- built drawings.

The Contractor shall prepare and submit as-built specifications, signed and sealed. As- built specifications shall fully reflect the final, completed, as-built condition, inclusive of works completed by others in support of the project and verified by the Contractor. The Contractor shall submit electronic files to the Contracting Officer and COR with as-Built specifications (with tracked changes) and original marked up as-built specifications (hard copies).

The Contractor shall prepare and submit as-built construction-phase submittals. As-built construction-phase submittals shall fully reflect the final, completed, as-built condition. Changes from such submittals shall be documented in the Construction Submittal Log. The Contractor shall keep a current set of prints with "Red Lines" on site at all times noting any deviations or clarifications generated by DOR supplemental instructions and RFI responses. Before completion of construction, the Contractor shall provide the DOR with Red Lines maintained in the field.

3.6.9 Environmental, Biological & SHIPO Mitigations

The Contractor shall be responsible for complying with all Environmental, Biological, SHIPO, and other similar requirements for this project. The Contractor is responsible for the review, coordination, permitting, design, construction, implementation, and monitoring of the conditions, avoidance, minimization and mitigation measures, project design features, and other environmental commitments included in these documents.

The Contractor shall submit a list of all mitigation related measures and features as part of the Environmental Management Plan (EMP) prior to commencing construction to allow the Government to verify completeness and concurrence with the list.

The Contractor's shall comply with requirements as specified in the NNSS site guiding documents, rules and regulations.

3.6.10 Construction Options

All work associated with the 138kV PTSR from Tweezer to U1A was incorporated into the base contract via Mod 0089. As a result, there are no options in the 138 kV PTSR base contract.

3.6.11 Contractor Initiated Change Request (CICR-001) Tweezer North Termination (TNT)

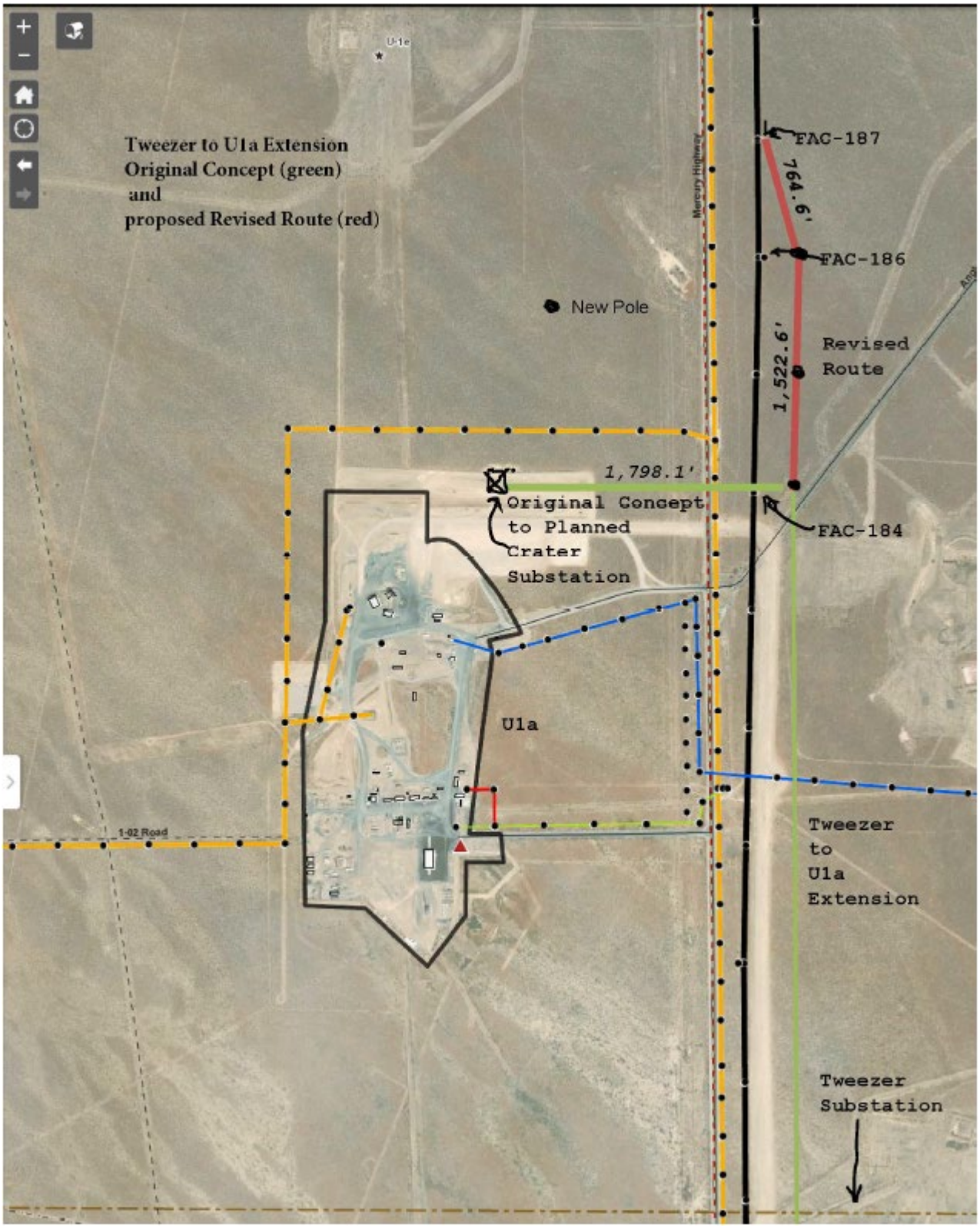
The original Scope of Work includes all material labor and equipment necessary to design, construct and operate the 138kV power line, including a 144 fiber optic line from the Tweezer Substation to the U1a planned Crater Substation. Tweezer substation to U1a is approximately 15,800 linear feet (LF) or approximately 3 miles. The planned Crater Substation requirement was removed from the U1a planning and therefore the 138kV power line spur was not needed.

See Image 1, approximately from points B to C1.

The additive portion of work associated with CICR-1 includes the design, construction, and operation of power line continuing from approximately FAC-184 north to a tie in point at approximately FAC-187. Specific to the additive work are 2 tangent type poles and 1 dead end type poles. See Image 1, approximately from points B to C2.

IMAGE 1- TNT Deductive and Additive Scope

(image, obtained from MSTS in CICR-001 received on 12/9/21, page 1) Added identifiers: A, B, C1, and C2.


Tweezer to U1a Extension
Original Concept (green)
and
proposed Revised Route (red)
FAC-187
764.6'
FAC-186
New Pole
Revised
Route
1,522.6'
1,798.1'
Original Concept
to Planned
Crater
Substation
FAC-184
U1a
1-02 Road
Tweezer
to
U1a
Extension
Tweezer
Substation

PART I – SECTION H, SPECIAL CONTRACT REQUIREMENTS

All Special Contract Requirements in Section H of the contract shall apply to the sub-line item 0003A. In addition, special contract requirements below shall be applicable only to SubCLIN 0003A.

H-28 DIFFERING SITE CONDITIONS

FAR Clause 52.236-2 (Differing Site Conditions (APR 1984)), differing site conditions include, but are not limited to, the following types of circumstances:

- Discovery of historical, archeological, or human remains which are subject to preservation/treatment in accordance with federal, state, or local laws, regulations or policies
- Discovery of habitats for species protected under federal, state, or local laws, regulations, or policies
- Discovery of radioactive material
- Discovery of toxic or hazardous materials
- Discovery of unexploded ordnance/explosives

H-29 AVAILABILITY OF UTILITIES

The Contractor may directly utilize, and may allow its subcontractor(s) to utilize government- furnished utilities and similar services (including but not limited to: water, sewer, electricity, telephone, internet, trash, and waste disposal, etc.) to the extent utilities and other similar services are available and accessible for use at the NNSS. There shall be no charge to the Contractor or Subcontractor for the use of government-furnished utilities or other similar services.

Where the utility is produced by the Government, the contractor shall carefully conserve utilities usage. The Contractor, at its expense and in a workmanlike manner satisfactory to the Contracting Officer Representative, shall install and maintain all necessary temporary connections and distribution lines. Before final acceptance of the work by the Government, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

H-30 FORCE MAJEURE

Notwithstanding anything to the contrary contained herein, to benefit of this provision the contractor shall, as soon as reasonably practicable after the occurrence of any such event,

a. provide written notice to the Contracting Officer of the nature and extent of any such Force Majeure condition and

b. use commercially reasonable efforts to remove any such causes and resume performance under this Agreement and the Ancillary Agreements, as applicable, as soon as reasonably practicable.

In the event of any such excused delay, the time for performance of such obligations shall be extended for a period equal to the time lost by reason of the delay.

Force Majeure conditions:

1) acts of God or of the public enemy,
2) acts of the Government in either its sovereign,
3) fires,
4) floods,
5) epidemics,
6) quarantine restrictions,
7) strikes,
8) freight embargoes, and
9) unusually severe weather other than those customary for the region.

H-31 SPECIAL ROCK EXCAVATION

a. Contractor shall be paid the fixed rate of $1,000 (in addition to the FFP) for each cubic yard of rock which must be excavated in excess of 250 cubic yards.

a. Definition of Special Rock Excavation – Where applicable for measurement and payment purposes, rock excavation is defined as intact rock material encountered in excavating drilled shafts which cannot be removed with a conventional earth auger and/or underreaming tool, and which requires a rock auger, core barrel, or hand labor using air-powered tools and/or other special excavation procedures. Refusal of the earth auger shall be defined as a penetration rate equal to, or less than, 1 foot per 10-minute period with the full torque and crowd continuously applied. Earth, clay, coal seams, boulders, cobbles, rock fragments, soft fractured materials, or voids encountered between rock units will not be considered rock excavation.

H-32 SALVAGE

The estimated salvage value is $200,000. Estimated salvage will be credited at actual salvage proceeds. The salvage credit will be administered as a deduction from the total contract value. The total amount of actual salvage will be determined at the time of sale. The Government will withhold the estimated amount of salvage from final payment drawdowns until the contractor provides the salvage credit actuals. The salvage credit actuals will be deducted from the total contract value and the contractor may retain the actual salvage proceeds after remittance of salvage bill of sale.

H-33 PAID LEAVE UNDER SECTION 3610 OF THE CORONAVIRUS AID, RELIEF, AND ECONOMIC SECURITY ACT (CARES ACT) TO MAINTAIN EMPLOYEES AND SUBCONTRACTORS IN A READY STATE.

a. In any request for equitable adjustment to the price (for a fixed-price type contract) or to the hourly rates and materials cost (for a time-and-materials type contract) of this contract, the Contractor may propose and the Government (without requiring consideration but precluding additional profit) will treat--for the purpose of beginning negotiations--as allowable (if otherwise allowable per federal

regulations) the incurred or estimated costs of paid leave (including sick leave) the Contractor or its subcontractors provide to keep employees in a ready state if—

1. The employees: cannot perform work on a site approved by the Federal Government (including a federally-owned or leased facility or site) due to facilities closures or other restrictions; and cannot telework because their job duties cannot be performed remotely during the public health emergency declared on January 31, 2020 for COVID–19.

2. The costs were incurred or will be incurred from January 31, 2020 through September 30, 2021.

3. The costs do not reflect any amount exceeding an average of 40 hours per week for paid leave.

b. Where other relief provided for by the CARES Act or any other Act would benefit the contractor or the contractor's subcontractors, including, but not limited to, funds available under sections 1102 and 1106 of the CARES Act, the contractor should evaluate applicability of such benefits in seeking reimbursement under the contract.

c. The Contractor must represent in any request for reimbursement—

1. Either: it has not received, has not claimed, and will not claim any other reimbursement for federal funds available under the CARES Act for the same purpose, including, but not limited to, funds available under sections 1102 and 1106 of the CARES Act; or if it has received, claimed, or will claim other reimbursement, that reimbursement or an estimate of it has been reflected in the request for equitable adjustment.

2. Its request reflects all applicable credits (estimated if necessary), including

(i) Tax credits, including credits allowed pursuant to division G of Public Law 116-127; and

(ii) Applicable credits allowed under the CARES Act, including applicable credits for loan guarantees.

d. The Government's treating--for the purpose of beginning negotiations--the costs as allowable, does not mean the Government--in determining the amount of the equitable adjustment is fair and reasonable--will agree to the Contactor's proposed adjustment to the price or to the hourly rates and materials costs.

H-34 ORDER OF PRECEDENCE

All clauses in the M&O Contract, including Special Contract Requirements in Section H of the Contract, shall apply to the sub-line item SubCLIN 0003A to the extent relevant. In addition, the special contract requirements specified in this Contract modification below shall be applicable only to SubCLIN 0003A. To the extent there are conflicts between the other M&O clauses/requirements and the special SubCLIN 0003A clauses/requirements identified herein, the SubCLIN 0003A clauses/requirements shall prevail.

H-35 TERMINATION OF 138KV POWER TRANSMISSION SYSTEM REPLACEMENT (PTSR), SubCLIN 0003A IN CASE OF EXPIRATION OR TERMINATION OF CONTRACT NO. DE-NA0003624

In the event that Contract No. De-NA0003624 expires or is terminated, the contractor is not liable for the continuation of the 138kV Power Transmission System Replacement (PTSR), SubCLIN 0003A. 138kV Power Transmission System Replacement (PTSR), SubCLIN 0003A shall be terminated for convenience effective on the date of expiration or termination of in accordance with FAR Clause 52.249-2, Termination

for the Convenience of the Government (Fixed Price) (Alt. I). The Government shall provide advance notice of the termination consistent with FAR 52.249-2.

(End of Clause)

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PART II – CONTRACT CLAUSES, SECTION I

All clauses listed in the contract shall apply to SubCLIN 0003A. All construction and Firm-Fixed Price (FFP) clauses detailed below shall apply to SubCLIN 0003A.

Federal Acquisition Regulation Clauses		
FAR NUMBER	CLAUSE TITLE *(Any insertions appear below the title in italics)*	DATE OF CLAUSE
52.211-10	Commencement, Prosecution, and Completion of Work *(a) 10 calendar days; (c) 941 calendar days*	Apr 1984
52.211-12	Liquidated Damages – Construction *(a) $2,000 for each calendar day of delay*	Sept 2000
52.211-18	Variation in Estimated Quantity	Apr 1984
52.215-21	Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data - Modifications	Oct 2010
52.222-7	Withholding of Funds	May 2014
52.222-8	Payrolls and Basic Records	Aug 2018
52.222-9	Apprentices and Trainees.	Jul 2005
52.222-10	Compliance With Copeland Act Requirements	Feb 1988
52.222-11	Subcontracts (Labor Standards)	May 2014
52.222-12	Contract Termination – Debarment	May 2014
52.222-13	Compliance With Construction Wage Rate Requirements and Related Regulations	May 2014
52.222-14	Disputes Concerning Labor Standards	Feb1988
52.222-15	Certification of Eligibility	May 2014
52.222-23	Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity for Construction	Feb 1999
52.222-27	Affirmative Action Compliance Requirements for Construction	Apr 2015
52.222-31	Construction Wage Rate Requirements – Price Adjustment (Percentage Method)	Aug 2018
52.227-1	Authorization and Consent Alt I (April 1984)	Dec 2007
52.227-4	Patent Indemnity – Construction Contracts	Dec 2007
52.229-3	Federal, State, and Local Taxes	Feb 2013
52.236-2	Differing Site Conditions	Apr 1984
52.236-3	Site Investigation and Conditions Affecting the Work	Apr 1984
52.236-5	Material and Workmanship	Apr 1984
52.236-6	Superintendence by the Contractor	Apr 1984
52.236-7	Permits and Responsibilities	Nov 1991
52.236-8	Other Contracts	Apr 1984
52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	Apr 1984
52.236-10	Operations and Storage Areas	Apr 1984
52.236-11	Use and Possession Prior to Completion	Apr 1984
52.236.12	Cleaning Up	Apr 1984
52.236-13	Accident Prevention Alternate I	Nov 1991
52.236-15	Schedules for Construction Contracts	Apr 1984
52.236-17	Layout of Work	Apr 1984
52.236-21	Specifications and Drawings for Construction	Feb 1997
52.236-26	Preconstruction Conference	Feb 1995
52.236-27	Site Visit (Construction)	Feb 1995

52.242-14	Suspension of Work	Apr 1984
52.242-17	Government Delay of Work	Apr 1984
52.243-4	Changes	Jun 2007
52.246-12	Inspection of Construction	Apr 1996
52.246-21	Warranty of Construction	Mar 1994
52.248-3	Value Engineering – Construction	Oct 2015
52.249-2	Termination for the Convenience of the Government (Fixed Price) Alt I (Sep 1996)	Apr 2012
52.249-10	Default (Fixed Price Construction)	Apr 1984

Department of Energy Acquisition Regulation Contract Clauses

DEAR NUMBER	CLAUSE TITLE (Any insertions appear below the title in italics)	DATE OF CLAUSE
970.5223-7	Sustainable Acquisition Program (OCT 2010), ALT I For Construction Contracts and Subcontracts (OCT 2010)	Oct 2010

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2.Q 01 11 00 SUMMARY OF WORK REV 4 (MOD 0125)

1.4.1.1 Complete System/Flow-Down Requirements

The Contractor shall provide all incidental parts, labor, supplies, equipment, and materials necessary to provide a complete and functional system that performs as specified.

The Contractor shall follow all manufacturers' recommendations and procedures for the installation of materials, equipment, and systems.

All equipment and systems shall comply with applicable Government and industry codes, standards, laws, regulations, Government supplied drawings and specifications.

If two or more applicable codes, standards, laws, regulations, Government supplied drawings or specifications establish differing requirements, the Contractor shall comply with the most stringent requirement at no additional cost to the Government.

Regardless of the entity performing any specific element of the Work, the Contractor is responsible for complying with the requirements of this specification. The Contractor is responsible for flowing-down the requirements of this specification to Subcontractors at any tier to the extent necessary to ensure compliance with the specification requirements.

1.4.2 Location and Project Information

The general location will be shown within the contract document by the Contracting Officer Representative.

a. Project Identification: Line Item Project 19-D-670,138kV Power Transmission System Replacement Project

b. Contractor: Mission Support & Testing Services LLC (MSTS)

c. Project Location: Nevada National Security Site, Mercury Nevada.

1. The location(s) of work is (are) in the - National Nuclear Security Site (NNSS), Mercury, Nevada to the Tweezer Substation, north of U1a Complex.

2. This location is not in an area controlled for radiological purposes.