AMENDMENT OF SOLICITATION	1. CONTRACT ID CODE		PAGE OF	OF PAGES		
2. AMENDMENT/MODIFICATION NUMBER	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE	REQUISITION NUMBER	5. PROJEC	T NUMBER	(If applicable)
6. ISSUED BY CODE		7. ADMINISTERED BY (If	other than Item 6)	CODE		
11. THIS ITEM The above numbered solicitation is amended as set for Offers must acknowledge receipt of this amendment prior to the set of the s	CILITY CODE MONLY APPLIES TO th in Item 14. The hour and c the hour and date specified in	AMENDMENTS OF SC late specified for receipt of Off	ers is extended. d, by one of the followir	E ITEM 11) TION OF CON EE ITEM 13) is no ng methods:	ITRACT/OR	DER NUMBER
	EIPT OF OFFERS PRIOR TO eady submitted, such change mendment, and is received p ed) PPLIES ONLY TO MOI E CONTRACT/ORDEI	THE HOUR AND DATE SPEC may be made by letter or electric to the opening hour and date of the opening hour and t	CIFIED MAY RESULT ctronic communication, ate specified. TRACTS/ORDEF RIBED IN ITEM 14	IN REJECTIOI provided each RS. 4.	N OF YOUR	COFFER. If
B. THE ABOVE NUMBERED CONTRACT/C appropriation data, etc.) SET FORTH IN				s changes in pa	aying office,	
C. THIS SUPPLEMENTAL AGREEMENT IS D. OTHER (Specify type of modification and		IT TO AUTHORITY OF:				
E. IMPORTANT: Contractor is not is no	s required to sign this o			s to the issu	uing office	<u>.</u>
Except as provided herein, all terms and conditions of the dot 15A. NAME AND TITLE OF SIGNER (<i>Type or print</i>)	cument referenced in Item 9A	or 10A, as heretofore change	-			<u>.</u>
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED 10/29/21	16B. UNITED STATES OF A	MERICA		16C. DA 10/29/	ATE SIGNED /2021

(Signature of person	authorized to	sign)

(Signature of Contracting Officer)

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14. DESCRIPTION OF AMENDMENT/MODIFICATION continued.

A. This modification is issued to update the following contract section:

Contract Section:

- a. Part I—The Schedule
 - Section H Special Contract Requirements

 H.5
- b. Part II-Contract Clause
 - Section I Contract Clause
 - I.161 DEAR 970.5244-1
- B. Table of Changes

PART I, SECTION H - SPECIAL CONTRACT REQUIREMENTS

Clause No.	Title	Change & Explanation
H.5	Advance Understandings Regarding Additional Items of Allowable and Unallowable Costs and Other Matters	Change: Remove paragraph (c). Explanation: This clause is updated IAW SC guidance for DEAR and FAR clause alternates by the HCA in a memo titled "Office of Science proposed DEAR and FAR Clause Alternatives Developed by the Revolutionary Working Group (RWG) process dated April 2, 2018.

PART II, SECTION I - CONTRACT REQUIREMENTS

Clause No.	Title	Change & Explanation
I.161	DEAR 970.5244-1, Contractor Purchasing System (Aug 2016) (Deviation) (Deviation Per AL 2013-10, Jun 2013) (Deviation Per Policy Flash 2015-17, Mar 2015) (SC Alternate) (Apr 2018)	Change: Delete "(Deviation per AL 2013-10, Jun 2013)" from the clause title, and delete paragraph (x)(7), "Nondisplacement of Qualified Workers clause prescribed in 48 CFR 22.1207".
		Explanation: This clause is updated IAW PF 2020-29 and AL 2013- 10, Jun 2013 which was superseded by PF 2020-29; Federal Acquisition Circular (FAC) 2020-06 containing Federal Acquisition Regulation (FAR) amendments, published in the May 6, 2020, Federal Register at 85 FR 27086.

C. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED. END OF MODIFICATION

CLAUSE H.5 – ADVANCE UNDERSTANDINGS REGARDING ADDITIONAL ITEMS OF ALLOWABLE AND UNALLOWABLE COSTS AND OTHER MATTERS

Allowable costs under this contract shall be determined according to the requirements of Section I Clause entitled "DEAR 970.5232-2 – Payments and Advances". For purposes of effective contract implementation, certain items of cost are being specifically identified below as allowable and/or unallowable under this contract to the extent indicated:

- (a) ITEMS OF ALLOWABLE COSTS:
 - (1) Cost for the defense and indemnification of employees in accordance with the provisions of Section H Clause entitled "Defense and Indemnification of Employees".
 - (2) Rentals and leases of land, buildings, and equipment owned by third parties, allowances in lieu of rental, charges associated therewith and costs of alteration, remodeling and restorations where such items are used in the performance of the contract, except that such rentals and leases directly chargeable to the contract shall be subject to such approval by the Contracting Officer.
 - (3) Notwithstanding the provisions of FAR 31.205-44 (e), stipends and payments made to reimburse travel or other expenses of researchers and students who are not employed under this contract but are participating in research, educational or training activities under this contract to the extent such costs are incurred in connection with fellowship, international agreements, or other research, educational or training programs approved by the Contracting Officer.
 - (4) Notwithstanding the provisions of FAR 31.205-44 (e), payments to educational institutions for tuition and fees, or institutional allowances, in connection with fellowship or other research, educational or training programs for researchers and students who are not employed under this contract.
 - (5) Costs incurred or expenditures made by the Contractor, as directed, approved or ratified by the Contracting Officer and not otherwise unallowable under any other provisions of this contract.
 - (6) Subject to any other limitations on allowability contained in this contract, costs incurred and expenditures made by the Contractor's Board of Directors (or equivalent corporate oversight entity), its members, committees, panels and support personnel in connection with performance of work under this contract. The Contractor shall provide to the Contracting

Officer, for an allowability determination, an annual accounting of these costs incurred and expenditures made.

- (b) ITEMS OF UNALLOWABLE COSTS:
 - (1) Premium Pay for wearing radiation-measuring devices for Laboratory and all-tier cost-type subcontract employees.
 - (2) Salaries or other salary-like compensation of the Contractor's Board members, or that of members of subcommittees of the Board who are employees of the Contractor, or the equivalent corporate oversight entity/entities.
 - (3) Home office expenses, whether direct or indirect, relating to activities of the Contractor, except as otherwise specifically agreed to elsewhere in this contract or subsequently in writing by the Contracting Officer.

CLAUSE I.161 – DEAR 970.5244-1 – CONTRACTOR PURCHASING SYSTEM (AUG 2016) (DEVIATION) (DEVIATION PER POLICY FLASH 2015-17, MAR 2015) (SC ALTERNATE) (APR 2018)

- (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, 48 CFR subpart 970.44, and Appendix G of this Contract. 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 which is appropriate to the value of the purchase and is adequate to establish the propriety of the transaction and the price paid. The Contractor's purchasing performance will be evaluated against such performance criteria and measures as may be set forth elsewhere in this contract. DOE reserves the right at any time to require that the Contractor submit for approval any or all purchases under this contract. The Contractor shall not purchase any item or service, the purchase of which is expressly prohibited by the written direction of DOE, and shall use such special and directed sources as may be expressly required by the DOE Contracting Officer. DOE will conduct periodic appraisals of the Contractor's management of all facets of the purchasing function, including the Contractor's compliance with its approved system and methods. Such appraisals will be performed through the conduct of Contractor Purchasing System Reviews in accordance with 48 CFR subpart 44.3, or, when approved by the Contracting Officer, through the Contractor's participation in the conduct of the Balanced Scorecard performance measurement and performance management system. 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 subpart 970.41.
- (c) *Acquisition of Real Property.* Real property 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 of cost-reimbursement subcontractors at all tiers; and

- (ii) Audits, where necessary, to provide a valid basis for pre-award or cost or price analysis.
- (2) Responsibility for determining the costs allowable under each costreimbursement subcontract remains with the contractor or next higher-tier subcontractor. The Contractor shall provide, in appropriate cases, for the timely involvement of the Contractor and the DOE Contracting Officer in resolution of subcontract cost allowability.
- (3) Where audits of subcontractors at any tier are required, arrangements may be made to have the cognizant Federal agency perform the audit of the subcontract or the contractor may employ external auditors to support mandatory subcontract audits required by this contract. These arrangements shall be made administratively between DOE and the other agency involved and shall provide for the cognizant agency to audit in an appropriate manner in light of the magnitude and nature of the subcontract. In no case, however, shall these arrangements preclude determination by the DOE Contracting Officer of the allowability or unallowability of subcontractor costs claimed for reimbursement by the Contractor.
- (4) Allowable costs for cost reimbursable 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 penal amounts as set forth in 48 CFR 28.102-2(a) 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 penal 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 \$25,000, but not greater than \$100,000, 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 penal 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 above the Simplified Acquisition Threshold.
 - (2) *Specifications*. Specifications for construction shall be prepared in accordance with the DOE publication entitled "General Design Criteria Manual."
 - (3) 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.
- (I) Indemnification. Except for Price-Anderson Nuclear Hazards Indemnity, subcontractors may not be indemnified except with the prior approval of the Senior Procurement Executive or under conditions specified by the Senior Procurement Executive.
- (m) *Leasing of Motor Vehicles.* Contractors shall comply with 48 CFR subpart 8.11 and 48 CFR subpart 908.11.
- (n) [Reserved]
- (o) *Management, Acquisition and Use of Information Resources.* Requirements for automatic data processing resources and telecommunications facilities, services, and equipment, shall be reviewed and approved in accordance with applicable DOE Orders and regulations regarding information resources.
- (p) *Priorities, Allocations and Allotments.* Priorities, allocations and allotments shall be extended to appropriate subcontracts in accordance with the clause or clauses of this contract dealing with priorities and allocations.
- (q) Purchase of Special Items. Purchase of the following items shall be in accordance with the following provisions of 48 CFR subpart 8.5, 48 CFR subpart 908.71, Federal Management Regulation 41 CFR part 102, and the Federal Property Management Regulation 41 CFR chapter 101:

- (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
- (r) Purchase versus Lease Determinations. Contractors shall determine whether required equipment and property should be purchased or leased, and establish appropriate thresholds for application of lease versus purchase determinations. Such determinations shall be made—
 - (1) At time of original acquisition;
 - (2) When lease renewals are being considered; and
 - (3) At other times as circumstances warrant.
- (s) *Quality Assurance.* Contractors shall provide no less protection for the Government in its subcontracts than is provided in the prime contract.
- (t) Setoff of Assigned Subcontractor Proceeds. Where a subcontractor has been permitted to assign payments to a financial institution, the assignment shall treat any right of setoff in accordance with 48 CFR 932.803.

- (u) *Strategic and Critical Materials.* The Contractor may use strategic and critical materials in the National Defense Stockpile.
- (v) Termination. When subcontracts are terminated as a result of the termination of all or a portion of this contract, the Contractor shall settle with subcontractors in conformity with the policies and principles relating to settlement of prime contracts in 48 CFR subparts 49.1, 49.2 and 49.3. When subcontracts are terminated for reasons other than termination of this contract, the Contractor shall settle such subcontracts in general conformity with the policies and principles in 48 CFR subparts 49.1, 49.2, 49.3 and 49.4. Each such termination shall be documented and consistent with the terms of this contract. Terminations which require approval by the Government shall be supported by accounting data and other information as may be directed by the Contracting Officer.
- (w) Unclassified Controlled Nuclear Information. Subcontracts involving unclassified uncontrolled nuclear information shall be treated in accordance with 10 CFR part 1017.
- (x) Subcontract Flowdown Requirements. In addition to terms and conditions that are included in the prime contract which direct application of such terms and conditions in appropriate subcontracts, the Contractor shall include the following clauses in subcontracts, as applicable:
 - (1) 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 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(b).
 - (7) Service Contract Reporting clause prescribed in 48 CFR 4.1705.
 - (8) Minimum Wages under Executive Order 13658 clause prescribed in 48 CFR 22.1906.
- (y) *Legal Services.* Contractor purchases of litigation and other legal services are subject to the requirements in 10 CFR part 719 and the requirements of this clause.