

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE PAGE OF PAGES
 1 3

2. AMENDMENT/MODIFICATION NO. 0145	3. EFFECTIVE DATE See Block 16c	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY SC Chicago Service Center Office of Science - Chicago U.S. Department of Energy 9800 South Cass Avenue Lemont IL 60439	CODE 892430	7. ADMINISTERED BY (If other than Item 6) Brookhaven Site Office U.S. Department of Energy 53 Bell Avenue, Building 464 Upton NY 11973	CODE 06005
8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code) Brookhaven Science Associates, LLC Attn: George Clark Brookhaven National Laboratory Building 460, PO Box 5000 Upton New York 11973-5000		(x)	9. A. AMENDMENT OF SOLICITATION NO. 9. B. DATED (SEE ITEM 11)
CODE 027579460	FACILITY CODE N/A	X	10. A. MODIFICATION OF Contract/Order NO. DE-SC0012704 10. B. DATED (SEE ITEM 13) 12/22/2014

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

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

12. ACCOUNTING AND APPROPRIATION DATA (If required)

N/A

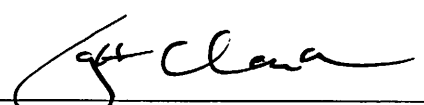
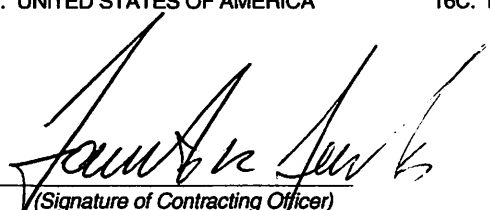
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Mutual agreement of the parties
	D. OTHER (Specify type of modification and authority)

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

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

This Modification is issued to revise Part I, Section H—Special Contract Requirements, TOC; update clauses H.27 and H.30; Part II, Section I – Contract Clauses, TOC; update clauses I.96, I.112, I.118, I.120, I.124; I.137; revise Part III, Section J – List of Documents, Exhibits, Attachments, TOC; replace Appendix I – DOE Directives/List B.

15A. NAME AND TITLE OF SIGNER (Type or print) George Clark Chief Financial Officer	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Fausto R. Fernandez Contracting Officer
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED 6/27/19
	16B. UNITED STATES OF AMERICA
	16C. DATE SIGNED 6/28/19
BY  (Signature of person authorized to sign)	
BY  (Signature of Contracting Officer)	

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	DE-SC0012704/0145	2	3

14. Description of Amendment/Modification (continued):

1. **Part I, Section H—Special Contract Requirements, Table of Contents (TOC):** Section H is revised to update clauses H.27 and H.30.

The following clause has been revised; replace the prior version with the updated attachment provided herein:

- a. **Clause H.27 – Agreements for Commercializing Technology** – This clause is revised IAW Department of Energy Acquisition Letter (AL) 2018-06, Agreements in Commercializing Technologies (ACT).
- b. **Clause H.30 – Lobbying Restriction (as per AL-2019-02 - Dec 10, 2018)** – This clause is revised IAW Department of Energy Policy Flash 2019-09, Implementation of Division A, Title III and Title V of the Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act, 2019, Pub. L. No. 115-244. Section 501 Lobbying Restrictions.

2. **Part II, Section I – Contract Clauses, Table of Contents (TOC):** Section I TOC is revised to update clauses I.96, I.118, and I.120. Delete clauses I.112, I.124, and I.137.

The following clauses have been revised; replace the prior version with the updated attachments provided herein:

- a. **Clause I.96 – FAR 52.251-1, Government Supply Sources (APR 2012) (SC Alternate) (APR 2018):** This clause is revised IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018.
- b. **Clause I.118 – DEAR 970.5203-1, Management Controls (JUN 2007) (SC Alternate II) (APR 2018):** This clause is revised IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018.
- c. **Clause I.120 – DEAR 970.5203-3, Contractor’s Organization (DEC 2000) (SC Alternate) (APR 2018):** This clause is revised IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018.

The following clauses have been deleted:

- a. **Clause I.112 – DEAR 952.226-74, Displaced Employee Hiring Preference (JUN 1997):** This clause is hereby deleted from the Prime Contract IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018.
- b. **Clause I.124 – DEAR 970.5208-1, Printing (DEC 2000):** This clause is hereby deleted from the Prime Contract IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018.
- c. **Clause I.137 – DEAR 970.5226-3, Community Commitment (DEC 2000):** This clause is hereby deleted from the Prime Contract IAW Head of the Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018.

3. Part III, Section J – List of Documents, Exhibits, Attachments, Table of Contents (TOC): Section J TOC is revised to reflect the following: replace Appendix I – DOE Directives/List B.

- a. Appendix I – DOE Directives/List** identified as Modification No. 0140 has been revised; replace the prior version with the attached Appendix I identified as Modification No. 0145. The revisions are as follows:

SUMMARY OF DIRECTIVE CHANGES			
ORDER	TITLE	CHANGE	NOTES
O 205.1C	Department of Energy Cyber Security Program	Update	I AW DOE Policy Flash 2019-09 dated December 10, 2018.
O 486.1	Department of Energy Foreign Government Talent Recruitment Programs	Add	New final directive issued June 7, 2019.

Attachments:

- Part I, Section H – Special Contract Requirements
 - ❖ H.27, H.30
- Part II, Section I – Contract Clauses
 - ❖ I.96, I.118, I.120
- Part III, Section J – List of Documents, Exhibits, Attachments
 - ❖ Appendix I – DOE Directives/List B

CLAUSE H.27 - AGREEMENTS FOR COMMERCIALIZING TECHNOLOGY

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 services¹, 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.

¹ Services that are routinely performed for DOE and multiple sponsors with little to no variance in the scope of work e.g., calibration services

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.

- b. 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.
 - i. 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.

- c. 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.
- d. 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 those 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 DEAR 970.5227-10 clause of this 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.
- e. 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.
- f. 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.
- g. 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.
- h. 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 start-ups 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. The 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).
- h. Termination. The FedACT Pilot implemented by this H-clause will terminate three years from the date AL 2018-06 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 work under this H-clause at any time. If the Contractor's authority to conduct FedACT work under this H-clause has expired or been terminated, the M&O Contractor will be permitted, subject to any other provisions of this H-clause, to complete any FedACT work that had been approved by DOE prior to this H- clause being terminated by the Government.

CLAUSE H.30 – LOBBYING RESTRICTION (AS PER AL-2019-02 – DEC 10, 2018)

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.

**CLAUSE I.96 – FAR 52.251-1 – GOVERNMENT SUPPLY SOURCES (APR 2012) (SC
ALTERNATE) (APR 2018)**

The Contracting Officer may issue the Contractor an authorization to use Government supply sources in the performance of this contract. Title to all property acquired by the Contractor under such an authorization shall vest in the Government unless otherwise specified in the contract. The provisions of the Section I Clause DEAR 970.5245-1 entitled "Property," apply to all property acquired under such authorization.

**CLAUSE I.118 – DEAR 970.5203-1 – MANAGEMENT CONTROLS (JUN 2007) (SC
ALTERNATE II) (APR 2018)**

- (a)
- (1) 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 including consideration of outsourcing of functions by management to reasonably ensure that: the mission and functions assigned to the contractor are properly executed; efficient and effective operations are promoted; resources are safeguarded against waste, loss, mismanagement, unauthorized use, or misappropriation; all encumbrances and costs that are incurred under the contract and fees that are earned are in compliance with applicable clauses and other current terms, conditions, and intended purposes; all collections accruing to the contractor in connection with the work under this contract, expenditures, and all other transactions and assets are properly recorded, managed, and reported; and financial, statistical, and other reports necessary to maintain accountability and managerial control are accurate, reliable, and timely.
 - (2) The systems of controls employed by the contractor shall be documented and satisfactory to DOE.
 - (3) 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.
 - (4) 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 970.5232-3, Accounts, records, and inspection.

- (b) The contractor shall be responsible for maintaining, as a part of its operational responsibilities, a baseline quality assurance program that implements documented performance, quality standards, and control and assessment techniques.
- (c) On an annual basis, the Contractor through an officer at a level above the Laboratory Director, shall submit an assurance to the Contracting Officer that the system of management controls, including all systems revised in accordance with the Special Contract Requirements H clause of this Contract, entitled, "Application of DOE Contractor Requirements Documents", is adequate to assure that the objectives of the management system are being accomplished and that the system and controls are effective and efficient."

**CLAUSE I.120 – DEAR 970.5203-3 – CONTRACTOR'S ORGANIZATION (DEC 2000)
(SC ALTERNATE) (APR 2018)**

- (a) *Control of employees.* The Contractor shall be responsible for maintaining satisfactory standards of employee competency, conduct, and integrity and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary. In the event the Contractor fails to remove any employee from the contract work whom DOE deems incompetent, careless, or insubordinate, or whose continued employment on the work is deemed by DOE to be inimical to the Department's mission, the Contracting Officer may require, with the approval of the Secretary of Energy, the Contractor to remove the employee from work under the contract. This includes the right to direct the Contractor to remove its most senior key person from work under the contract for serious contract performance deficiencies.

- (b) *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.

APPENDIX I

DOE Directives/List B

**Applicable to the Operations of
Brookhaven National Laboratory**

There is no List A to this Appendix.

List B to this Appendix contains the following:

Part I: "Directives List"

This section contains a list of Directives that are considered by DOE as applicable to the BNL contract.

Appendix I - Part I
DOE DIRECTIVES LIST

DOE Directives may be found at the following address: <http://www.directives.doe.gov>

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
9/29/1995	Order	130.1		Budget Formulation
9/4/2008	Manual	142.2-1	Admin Chg. 1 6/27/13	Manual for Implementation of the Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency
12/15/2006	Order	142.2A	Admin Chg. 1 6/27/13	Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency
10/14/2010	Order	142.3A	Chg.1 (Minor Chg.) 01/18/2017	Unclassified Foreign Visits and Assignments Program
3/31/2014	Order	150.1A		Continuity Programs
8/11/2016	Order	151.1D		Comprehensive Emergency Management System
6/27/2007	Order	153.1		Departmental Radiological Emergency Response Assets
12/23/2008	Order	200.1A	Chg.1 (Minor Chg.) 01/13/2017	Information Technology Management
1/7/2005	Order	203.1		Limited Personal Use of Government Office Equipment Including Information Technology
5/15/2019	Order	205.1C		Department of Energy Cyber Security Program
1/16/2009	Order	206.1	Chg.1 (Minor Chg.) 11-1-2018	Department of Energy Privacy Program
2/19/2013	Order	206.2		Identity, Credential and Access Management (ICAM)
4/8/2011	Order	210.2A		DOE Corporate Operating Experience Program
9/27/2016	Order	221.1B		Reporting Fraud, Waste, and Abuse to the Office of Inspector General
2/25/2008	Order	221.2A		Cooperation with the Office of Inspector General
3/4/2011	Order	225.1B		Accident Investigations
8/30/2011	Order	227.1A	12/21/2015	Independent Oversight Program
6/27/2011	Order	231.1B	Admin Chg. 1 11/28/12	Environment, Safety and Health Reporting
1/17/2017	Order	232.2A		Occurrence Reporting and Processing of Operations Information
12/13/2010	Order	241.1B	Chg.1 4/26/16	Scientific and Technical Information Management
3/11/2013	Order	243.1B	Admin Chg.1 7/8/13	Records Management Program
2/23/2011	Order	252.1A	Admin Chg. 1 3/12/13	Technical Standards Program
11/19/2009	Order	313.1		Management and Funding of the Department's Overseas Presence

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10/18/2007	Order	341.1A Parts: 1.(a-b) 2.a(1-3) 2.a(4)(a-h)		Federal Employee Health Services
2/23/2010	Order	350.1	Chg. 6 (Minor Chg.) 2/1/18	Contractor Human Resource Management Programs
8/17/2009	Order	410.2	Admin Chg. 1 4/10/14	Management of Nuclear Materials
1/4/2017	Order	411.2		Scientific Integrity
1/4/2017	Policy	411.2A		Scientific Integrity Policy
10/28/2008	Order	413.1B		Internal Control Program
10/22/2015	Order	413.2C	Chg.1 (Minor Chg.) 8/2/18	Laboratory Directed Research and Development
11/29/2010	Order	413.3B	Chg. 5 (Minor Chg.) 4/12/18	Program and Project Management for the Acquisition of Capital Assets
4/25/2011	Order	414.1D	Admin Chg. 1 5/8/13	Quality Assurance
12/3/2012	Order	415.1	Chg.2 (Minor Chg.) 1/17/2017	Information Technology Project Management
12/4/2012	Order	420.1C	Chg.2 (Minor Chg.) 7/26/18	Facility Safety Compliance Note: CRD Chapters 1, 3, and 5 only are applicable to BNL Hazardous Category 1, 2, or 3 nuclear facilities. Currently these type of nuclear facilities do not exist at BNL. The requirements of DOE O 420. 1C Chg. 2 CRD Chapters 2 (Fire Protection) and 5 (Natural Phenomena Hazards Mitigation) apply to BNL
7/21/2011	Order	420.2C		Safety of Accelerator Facilities
6/29/2010	Order	422.1	Admin Chg. 1 6/25/13	Conduct of Operations Compliance Note: Applicable to Hazardous Category 1, 2, or 3 nuclear facilities and other facilities as defined by BSA in a Program Plan to be approved by BHSO for incorporating
11/25/2016	Policy	434.1B		Conduct and Approval of Select Agent and Toxin Work at Department of Energy Sites
7/9/1999	Order	435.1	Admin Chg. 1 8/28/01	Radioactive Waste Management

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ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
7/9/1999	Manual	435.1-1	Admin Chg. 1 6/19/01	Radioactive Waste Management Manual
5/2/2011	Order	436.1		Departmental Sustainability
11/27/2002	Order	440.2C	Admin Chg. 1 6/22/11	Aviation Management and Safety
3/7/2008	Manual	441.1-1	Chg. 1 (Admin Chg.) 02/24/16	Nuclear Material Packaging Manual
1/31/2019	Order	442.1B		Department of Energy Employee Concerns Program
7/29/2011	Order	442.2	Chg.1 (Pg.Chg.) 10/4/2016	Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health
3/7/2011	Order	443.1B	Chg. 1 (Pg.Chg.) 4/21/16	Protection of Human Research Subjects
7/21/2011	Order	452.8		Control of Nuclear Weapon Data
7/15/2016	Order	456.1A		The Safe Handling of Unbound Engineered Nanoparticles
2/11/2011	Order	458.1	Admin Chg. 3 1/15/13	Radiation Protection of the Public and the Environment
12/20/2016	Order	460.1D		Hazardous Materials Packaging and Transportation Safety
12/22/2004	Order	460.2A		Departmental Material Transportation and Packaging Management
6/4/2008	Manual	460.2-1A		Radioactive Material Transportation Practices Manual
11/23/2016	Order	470.3C		Design Basis Threat (DBT) Order
7/21/2011	Order	470.4B	Chg.2 (Minor Chg.) 1/17/2017	Safeguards and Security Program
6/2/2014	Order	470.5		Insider Threat Program
9/2/2015	Order	470.6	Chg.1 (Minor Chg.1) 1-11-2017	Technical Security Program
3/1/2010	Order	471.1B		Identification and Protection of Unclassified Controlled Nuclear Information
4/9/2003	Order	471.3	Admin Chg. 1 1/13/11	Identifying and Protecting Official Use Only Information
4/9/2003	Manual	471.3-1	Admin Chg. 1 1/13/11	Manual for Identifying and Protecting Official Use Only Information
6/20/2011	Order	471.6	Admin Chg. 2 5/15/15	Information Security
7/27/2011	Order	472.2	Admin Chg. 1 10/8/13	Personnel Security

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ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
1/2/2018	Order	473.3A	Chg.1 (Minor Chg.) 1/2/2018	Protection Program Operations
6/27/2011	Order	474.2	Chg. 4 (Pg.Chg.) 9/13/2016	Nuclear Material Control and Accountability
12/10/2004	Order	475.1		Counterintelligence Program
10/3/2014	Order	475.2B		Identifying Classified Information
12/20/2018	Order	481.1E		Strategic Partnership Projects [Formerly Known as Work for Others (Non-Department of Energy Funded Work)]
2/8/2019	Order	483.1B	Chg. 1 (Minor Chg.)	DOE Cooperative Research and Development Agreements
8/17/2006	Order	484.1	Admin Chg. 2 6/30/14	Reimbursable Work for the Department of Homeland Security
1/19/2017	Policy	485.1		Foreign Engagements with DOE National Laboratories
6/7/2019	Order	486.1		Department of Energy Foreign Government Talent Recruitment Programs
8/2/2018	Order	522.1A		Pricing of Departmental Materials and Services
1/6/2003	Order	534.1B		Accounting
4/2/2012	Order	551.1D	Chg. 2 (Minor Chg.) 8/11/16	Official Foreign Travel