AMENDMENT OF SOLICITATIO	OF CONTRACT	CONTRACT ID CO	DE PAGE OF	PAGES 4	
AMENDMENT/MODIFICATION NUMBER 0186	3. EFFECTIVE DATE See Block 16c	4. REQUISITION/PURCHASE	E REQUISITION NUMBER	5. PROJECT NUMBER (If	applicable)
6. ISSUED BY CODE	892430	7. ADMINISTERED BY (f other than Item 6)	CODE 06005	
SC Consolidated Service Center Office of Science U.S. Department of Energy		Brookhaven Site Office of Science U.S. Department			
9800 South Cass Avenue		53 Bell Avenue F			
8. NAME AND ADDRESS OF CONTRACTOR (Number,	street, county, State and ZIP Co	de)	(X) 9A. AMENDMEN	IT OF SOLICITATION NUM	BER
Brookhaven Science Associates, LLC Attn: Kevin Fox Brookhaven National Laboratory			98. DATED (SEE	TEM 11)	
Building 460, PO Box 5000		İ	10A. MODIFICAT	TION OF CONTRACT/ORDE	R NUMBE
Upton NY 11973-5000			DE-SC0012		
CODE 027579460	FACILITY CODE N/A		12/22/2014	E TIEST TO	
	EM ONLY APPLIES TO	AMENDMENTS OF S			
	in includes a reference to the soliceIPT OF OFFERS PRIOR TO already submitted, such change is amendment, and is received printed. APPLIES ONLY TO MOI HE CONTRACT/ORDE! URSUANT TO: (Specify author) TIORDER IS MODIFIED TO RE IN ITEM 14, PURSUANT TO RESIDENT TO THE STATE OF THE PRINTED INTO PURSUAN OF the parties modifying the parties are the parties and the parties are the parties and the parties are the parties	icitation and amendment nun THE HOUR AND DATE SPE may be made by letter or el- irior to the opening hour and of DIFICATIONS OF COIR NUMBER AS DESC ity) THE CHANGES SET FOR EFLECT THE ADMINISTRAT HE AUTHORITY OF FAR 43. IT TO AUTHORITY OF:	ibers. FAILURE OF YOU COFFIED MAY RESULT I Schronic communication, late specified. NTRACTS/ORDER RIBED IN ITEM 14 RTH IN ITEM 14 ARE M VE CHANGES (such as 103(b).	UR ACKNOWLEDGMENT TO REJECTION OF YOUR O provided each letter or election. S. ADE IN THE CONTRACT OF	O BE FFER. If ronic
			0001 AACA 65015		
E. IMPORTANT: Contractor is not	is required to sign this of	document and return	1 copies	to the issuing office.	
14. DESCRIPTION OF AMENDMENT/MODIFICATION (C See pages 2-4.	Organized by UCF section head	ings, including solicitation/cor	tract subject matter whe	re feasible.)	
Except as provided herein, all terms and conditions of the	document referenced in Item 9A	or 10A, as heretofore chang	ed, remains unchanged	and in full force and effect.	
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF			
George Clark, Chief Financial Officer		Fausto R. Fernando	ez, Contracting O	fficer	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF	AMERICA	16C DATE	SIGNED
George Clark Digitally signed by George Clark Date: 2021.03.26 10:20:15	03/26/2021	Family to American man to commence of the comment	Digitally signed by FA FERNANDEZ Date: 2021.03.30 09:0	14:43 -04'00'	
(Signature of person authorized to sign)	(Signature	of Contracting Officer)	03/30/2	021	
			CTANDAD	D FORM 20 (DEV	44/2046

14. DESCRIPTION OF AMENDMENT/MODIFICATION continued.

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

Contract Sections:

- a. Part I The Schedule
 - Section H—Special Contract Requirements
 - o H.30
 - o H.45
 - o H.46
- b. Part II—Contract Clauses
 - I.51 FAR 52.223-3
 - I.67 FAR 52.225-9
 - I.68 FAR 52.225-13
- c. Part III, Section J List of Attachments
 - Appendix D
 - Appendix G
 - Appendix I

B. Table of Changes

PART I, SECTION H — SPECIAL CONTRACT REQUIREMENTS

Clause No.	Title	Change & Explanation
H.30	Lobbying Restriction	Change: Update clause to its current version. Explanation: This clause is updated IAW PF 2021-19 Implementation of the Consolidated Appropriations Act, 2021, Division D (Energy and Water Development and Related Agencies Appropriations Act, 2012), Title III and Title V; Division E and Acquisition Letter No. AL-2021-02 dated February 11, 2021.
H.45	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	Change: Update to clause to extend coverage of the Act. Explanation: This clause is updated IAW PF 2021-25 Guidance for continuing to use DOE's Clauses developed to implement Section 3610 of the Coronavirus Aid, Relief, and Economic Security (CARES) Act (Pub. L. No. 116-136)
H.46	Prohibition on Funding For Certain Nondisclosure Agreements	Change: Add clause to the contract.

Explanation:
This clause is being added IAW DOE PF 2021-19 This
clause is updated IAW PF 2021-19 Implementation of
the Consolidated Appropriations Act, 2021, Division D
(Energy and Water Development and Related Agencies
Appropriations Act, 2012), Title III and Title V; Division
E and Acquisition Letter No. AL-2021-02 dated
February 11, 2021.

PART II, SECTION I — CONTRACT REQUIREMENTS

Clause No.	Title	Change & Explanation
I.51	FAR 52.223-3, Hazardous Material Identification And Material Safety Data (Jan	Change: Update clause to its current version.
	1997) (Alternate I) (Jul 1995)	Explanation: Amend section 52.223-3 by—
		a. Revising the date of the clause; and b. the undesignated table in paragraph (b)
		IAW (FAC) 2021-03, Technical Amendments published January 14, 2021 effective 2/16/2021.
1.67	FAR 52.225-9, Buy American—Construction	Change: Update clause to its current version.
	Materials (May 2014)	Explanation: Amend section 52.225-9 by—
		Revising the date of the clause and paragraph (b)(2) to read as follows:
		(2) This requirement does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows:
		[Contracting Officer to list applicable excepted materials or indicate "none"]
		IAW (FAC) 2021-03, Technical Amendments published January 14, 2021 effective 2/16/2021.
1.68	FAR 52.225-13, Restrictions on Certain Foreign Purchases (Jun 2008)	Change: Update clause to its current version.
	(3411 2000)	Explanation: Amend section 52.225-13 by—
		a. Revising the date of clause; and

Page 4 of 4

b. Removing from paragraph (b)
" http://www.treas.gov/offices/enforcement/ofac/
sdn and "http://www.treas.gov/offices/
enforcement/ofac and adding
"https://home.treasury.gov/policy-issues/financial-sanctions/specially-designated-nationals-and-blocked-persons-list-sdn-human-readable-lists and "https://home.treasury.gov/policy-issues/office-of-foreign-assets-control-sanctions-programs-and-information in their places, respectively.
IAW (FAC) 2021-03, Technical Amendments published
January 14, 2021 effective 2/16/2021.

PART III, SECTION J — LIST OF DOCUMENTS, EXHIBITS, ATTACHMENTS

Appendix	Title	Change & Explanation
D	Contractor's Commitments	Change:
		Update appendix.
		Explanation:
		This appendix is updated to close out commitments that
		have been met.
G	Purchasing System	Change:
	Requirements	Update section titled, "DOE Approval."
		Explanation:
		This appendix is being updated IAW with the Financial
		Management Handbook Chapter 12 update effective on
		October 1, 2021.
I	DOE Directives/List B	Change:
		Update the following directive.
		Add O 520.1B
		Delete O 534.1B
		Delete O 413.1B
		Explanation:
		This appendix is replacing the prior version with the
		attached Appendix I identified as Modification No. 0182.

C. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

END OF MODIFICATION

CLAUSE H.30 – 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.

CLAUSE H.45 – 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) 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 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 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.
 - (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.

CLAUSE H.46 – PROHIBITION ON FUNDING FOR CERTAIN NONDISCLOSURE AGREEMENTS

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 forms 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.

CLAUSE I.51 – FAR 52.223-3 – HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (FEB 2021) (ALTERNATE I) (JUL 1995)

- (a) "Hazardous material", as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No.313 (including revisions adopted during the term of the contract).
- (b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material	Identification No.
Material Safety Data Sheets to be provided on a periodic basis as agreed to by Contracting Officer.	

- (c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.
- (d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No.313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No.313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.
- (e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No.313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.
- (f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

- (g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.
- (h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:
 - (1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to-
 - (i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;
 - (ii) Obtain medical treatment for those affected by the material; and
 - (iii) Have others use, duplicate, and disclose the data for the Government for these purposes.
 - (2) To use, duplicate, and disclose data furnished under this clause, in accordance with paragraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.
 - (3) The Government is not precluded from using similar or identical data acquired from other sources.
- (i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR1910.1200(g) and the latest version of Federal Standard No.313, for all hazardous materials identified in paragraph (b) of this clause.
 - (1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.
 - (2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

CLAUSE I.67 – FAR 52.225-9 - BUY AMERICAN-CONSTRUCTION MATERIALS (FEB 2021)

(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 item (as defined in paragraph (1) of the definition at Federal Acquisition Regulation (FAR) <u>2.101</u>);
 - (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.

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 55 percent of the cost of all its components. 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 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.
 - This clause implements <u>41 U.S.C.chapter 83</u>, Buy American, by providing a preference for domestic construction material. In accordance with <u>41 U.S.C. 1907</u>, 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 <u>12.505(a)(2)</u>). 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 item or to the construction materials or components listed by the Government as follows: 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. 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;
 - (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:

Construction Material Description	Unit of Measure	Quantity	Price (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.]

CLAUSE I.68 – FAR 52.225-13 – RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (FEB 2021)

- (a) Except as authorized by the Office of Foreign Assets Control (OFAC) in the Department of the Treasury, the Contractor shall not acquire, for use in the performance of this contract, any supplies or services if any proclamation, Executive order, or statute administered by OFAC, or if OFAC's implementing regulations at 31 CFR Chapter V, would prohibit such a transaction by a person subject to the jurisdiction of the United States.
- (b) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from Burma or North Korea, into the United States or its outlying areas. Lists of entities and individuals subject to economic sanctions are included in OFAC's List of Specially Designated Nationals and Blocked Persons at https://home.treasury.gov/policy-issues/financial-sanctions/specially-designated-nationals-and-blocked-persons-list-sdn-human-readable-lists. More information about these restrictions, as well as updates, is available in the OFAC's regulations at 31 CFR Chapter V and/or on OFAC's website at https://home.treasury.gov/policy-issues/office-of-foreign-assets-control-sanctions-programs-and-information.
- (c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

APPENDIX D

CONTRACTOR'S COMMITMENTS

REV. 1

Applicable to the Operations of Brookhaven National Laboratory

The following proposed commitments were accepted.

	Alignment with BSA's Critical	Delivery	Estimated
Source/Commitment	Outcomes or Other Initiatives	Timeframe	Value
New York State			
High-energy x-ray beamline at NSLS-II	Transformation of synchrotron science; in operando/in situ energy science	2015-2020	\$25 million
Accelerator & Electron Ion Collider (EIC) Design Building	Origins of matter and mass	2015–2020	\$25 million
Establish Big Data Consortium–Center for Data-driven Discovery (CD ₃)	Data-driven discovery	2015–2020	\$15 million
		NYS Total	\$65 million
Brookhaven Science Associates			
Capitalize Agreements for Commercializing Technology (ACT) and nonfederal Work for Others (WFO) to accelerate Laboratory growth agenda	Growth in WFO, energy technology; workforce development; community relations	2015–2025	\$3.2 million
STEM education and community outreach	Workforce development; community relations	2015–2025	\$2.5 million
Laboratory employee college scholarships	Workforce attraction and retention	2015–2025	\$1.5 million
Laboratory Director discretionary funds	All Critical Outcomes	2015–2025	\$15 million
		BSA Total	\$22.2 million
Stony Brook University			
Stony Brook-BNL Joint Appointments	Synchrotron sciences; Energy sciences; High-Energy Physics (HEP); Environmental; Datadriven Discovery	2015–2025	\$26.2 million
Stony Brook-BNL Seed Grant Program	All science Critical Outcomes	2015–2025	\$2 million
		Stony Brook Total	\$28.2 million
Partner Universities			
Columbia UBNL Joint Appointments	Transformation of synchrotron science; in operando/in situ energy science	2015–2020	\$2.25 million
Cornell UBNL Joint Appointment	In operando/in situ energy science	2015–2020	\$750,000
		Partner Universities Total	\$3M
GRAND TOTAL			\$118.4 million

The following commitments have been completed

	Alignment with BSA's Critical	Delivery	Estimated	Completion
Source/Commitment	Outcomes or Other Initiatives	Timeframe	Value	date
New York State				
High-energy x-ray beamline at NSLS-II	Transformation of synchrotron science; in operando/in situ energy science	2015-2020	\$25 million	March 2021
Accelerator & Electron Ion Collider (EIC) Design Building	Origins of matter and mass	2015–2020	\$25 million	March 2021
Establish Big Data Consortium–Center for Data-driven Discovery (CD ₃)	Data-driven discovery	2015–2020	\$15 million	
		NYS Total	\$65 million	
Brookhaven Science Associates				
Capitalize Agreements for Commercializing Technology (ACT) and nonfederal Work for Others (WFO) to accelerate Laboratory growth agenda	Growth in WFO, energy technology; workforce development; community relations	2015–2025	\$3.2 million	
STEM education and community outreach	Workforce development; community relations	2015–2025	\$2.5 million	
Laboratory employee college scholarships	Workforce attraction and retention	2015–2025	\$1.5 million	
Laboratory Director discretionary funds	All Critical Outcomes	2015–2025	\$15 million	
		BSA Total	\$22.2	
			million	
Stony Brook University	1 -			
Stony Brook-BNL Joint Appointments	Synchrotron sciences; Energy sciences; High-Energy Physics (HEP); Environmental; Datadriven Discovery	2015–2025	\$26.2 million	March 2021
Stony Brook-BNL Seed Grant Program	All science Critical Outcomes	2015–2025	\$2 million	
		Stony Brook Total	\$28.2 million	
Partner Universities				
Columbia UBNL Joint Appointments	Transformation of synchrotron science; in operando/in situ energy science	2015–2020	\$2.25 million	March 2021
Cornell UBNL Joint Appointment	In operando/in situ energy science	2015–2020	\$750,000	March 2021
		Partner Universities Total	\$3M	
GRAND TOTAL			\$118.4	
GRAND TOTAL			million	

The following proposed commitments were not accepted.

2 12 11	Alignment with BSA's Critical Outcomes or Other Initiatives	Delivery Timeframe	Estimated Value
Source/Commitment Brookhaven Science Associates		T T T T T T T T T T T T T T T T T T T	T Ciliaro
Capitalize Special Purpose Entity for campus modernization	Renewed research campus	2015–2020	\$1,000,000
		BSA Total	\$1,000,000
Stony Brook University			
Training for BNL staff development	Safe, efficient operations	2015–2020	\$125,000
		Stony Brook Total	\$125,000
Battelle			
Communities of Practice (COP) participation	All Critical Outcomes	2015–2025	\$800,000
		Battelle Total	\$800,000
Partner Universities			
Governance Role via Board and Committee Membership	All Critical Outcomes	2015–2025	\$360,000
Oversight of Science via S&T Steering Committee	All science Critical Outcomes	2015–2025	\$720,000
		Partner Universities Total	\$1,080,000
GRAND TOTAL			\$3,005,000

Construction of HEX Beamline at NSLS II

Source of Commitment

New York State (NYS)

Description of Commitment

The President of New York's Empire State Development (the economic development agency for NYS), the Speaker of the NYS Assembly, and the Temporary President/ Majority Leader of the NYS Senate have each stated their intent to provide \$25 million in NYS funds over the period 2015 through 2020 to construct a unique high-energy, x-ray beamline at the NSLS II to support implementation of BSA's strategy for rapid build out of NSLS II beamlines and acceleration of BNL's research mission in photon sciences and in operando research. The three attached letters provide the strongest possible statement of support for the funding, which is combined with Commitments 2 and 3. The construction will be managed as a project within NSLS II, with leadership by the NSLS II Director and close coordination with the Associate Laboratory Director (ALD) for Basic Energy Sciences at BNL.

Location of Commitment Estimated

Total Value

NSLS II at BNL \$25 million

Expected Benefits to BNL

Accelerates plan for rapid build out of NSLS II beamlines; enables in situ/in operando research agenda in energy sciences; provides unique capabilities for NSLS II user community

Date Commitment will be Provided

2015 through 2020

Description of any liability to the Government as well as any Governmental action required or related to the commitment:

Once completed and operational, BNL/NSLS II assumes responsibility for management, operation, and support of beamline.

Construction of Building for Accelerator Development and EIC Design

Source of Commitment

New York State (NYS)

Description of Commitment

The President of New York's Empire State Development (the economic development agency for NYS), the Speaker of the NYS Assembly, and the Temporary President/ Majority Leader of the NYS Senate have each stated their intent to provide \$25 million in NYS funds over the period 2015 through 2020 to construct a building to house the Center for Accelerator Research, Development, and Design (CARDD), which will be the home of the electron Relativistic Heavy Ion Collider (eRHIC) Design team and for the eRHIC detector collaborations during the construction phase. The three attached letters provide the strongest possible statement of support for the funding, which is combined with Commitments 1 and 3.

Location of Commitment Estimated Total Value

BNL \$25 million

Expected Benefits to BNL

Accelerates design and development of accelerator and detector technologies that enable Electron-Ion Collider (EIC) design; supports BNL's mission in nuclear physics; supports nuclear physics user community

Date Commitment will be Provided

2015 through 2020

Description of any liability to the Government as well as any Governmental action required or related to the commitment:

After its completion, BNL assumes responsibility for the Accelerator Development and EIC Design Building, including its operation and maintenance.

Investment in "Big-Data" Consortium Involving BNL, Stony Brook, Columbia University, and New York Industrial Partners

Source of Commitment

New York State (NYS)

Description of Commitment

The President of New York's Empire State Development (the economic development agency for NYS), the Speaker of the NYS Assembly, and the Temporary President/ Majority Leader of the NYS Senate have each stated their intent to provide \$15 million in NYS funds over the period 2015 through 2020 to establish and operate a "big-data" consortium, the Center for Data-driven Discovery (CD₃) involving BNL, Stony Brook University, Columbia University, and New York industrial partners. The three attached letters provide the strongest possible statement of support for the funding, which is combined with Commitments 1 and 2.

I	Location of Commitment	Estimated Total Value
	BNL	\$15 million

Expected Benefits to BNL

Accelerates implementation of the Computational Sciences Initiative and creation of CD₃, which will centralize computational capabilities across the Laboratory, providing cost-effective support for BNL's science missions and leveraging resources from academic and industrial partners

Date Commitment will be Provided

2015 through 2020

Description of any liability to the Government as well as any Governmental action required or related to the commitment:

BSA Investment to Enable ACT and Non-Federal WFO for Laboratory Growth Strategy

Source of Commitment

Brookhaven Science Associates (BSA)

Description of Commitment

BSA will provide a package of investments that enable ACT and non-federal WFO that accelerate our growth agenda for BNL. The overall commitment has three components: (1) BSA will make available a minimum of \$1 million in working capital to support ACT, and up to \$3 million when needed to accommodate growth in the program; (2) a minimum of \$1.2 million over 10 years for operating expenses for ACT; and (3) a minimum of \$1 million in working capital yearly to accelerate non-federal WFO initiatives. BSA's investments to capitalize and operate the ACT program are contingent on DOE's approval of an ACT clause for BNL. BSA's commitments over 10 years are contingent on retaining the contract beyond the initial 5-year time frame.

Location of Commitment	Estimated Total Value
BNL	A minimum of \$3.2 million over 10 years (assumes BSA retains contract), with up to \$5.2 million when needed to accommodate growth

Expected Benefits to BNL

Accelerates BSA's growth agenda for BNL by expanding technology transfer and non-federal WFO

Date Commitment will be Provided

2015 through 2025 (assumes BSA retains contract)

Description of any liability to the Government as well as any Governmental action required or related to the commitment:

BSA investment in ACT is contingent on DOE's approval of an ACT clause for BNL.

BSA Investment in STEM Education and Community Outreach

Source of Commitment

Brookhaven Science Associates (BSA)

Description of Commitment

BSA will expand its support of Science, Technology, Engineering, and Mathematics (STEM) education programs and community outreach activities by increasing its commitment to these activities to \$2.5 million over 10 years.

Location of Commitment Estimated Total Value

BNL and its local community \$2.5 million over 10 years

(assumes BSA retains contract)

Expected Benefits to BNL

STEM education programs support BSA's vision for developing a diverse workforce for the Laboratory. These education programs, combined with other community outreach activities, enhance BNL's and DOE's branding in the local community and support the strong local partnerships that BSA has developed at BNL.

Date Commitment will be Provided

2015 through 2025 (assumes BSA retains contract)

Description of any liability to the Government as well as any Governmental action required or related to the commitment:

BSA College Scholarships for Children of Laboratory Employees

Source of Commitment

Brookhaven Science Associates (BSA)

Description of Commitment

BSA commits a minimum of \$1.5 million over 10 years to provide need- and merit based college scholarships for children of BNL employees.

Location of Commitment Estimated Total Value

BNL A minimum of \$1.5 million over 10 years (assumes BSA retains contract)

Expected Benefits to BNL

BSA's program of college scholarships for children of Laboratory employees supports recruitment and retention efforts, allowing BNL to build and maintain a highly qualified workforce.

Date Commitment will be Provided

2015 through 2025 (assumes BSA retains contract)

Description of any liability to the Government as well as any Governmental action required or related to the commitment:

BSA Investment for Laboratory Director Discretionary Funds

Source of Commitment

Brookhaven Science Associates (BSA)

Description of Commitment

BSA commits \$15 million in funds over 10 years to be expended at the Director's discretion to support Laboratory business objectives.

Location of Commitment Estimated Total Value

BNL \$15 million over 10 years

(assumes BSA retains contract)

Expected Benefits to BNL

Expenditures enable Laboratory to perform necessary activities not allowable under the M&O contract, to fulfill responsibilities, and to rapidly respond to opportunities for private sector partnerships.

Date Commitment will be Provided

2015 through 2025 (assumes BSA retains contract)

Description of any liability to the Government as well as any Governmental action required or related to the commitment:

Stony Brook University-BNL Joint Appointment Program

Source of Commitment

Stony Brook University

Description of Commitment

Stony Brook will continue its existing program of joint appointments with BNL (currently numbering 24), and will expand the program with 22 new positions over 10 years, bringing the total to 46. In the first 5 years of the new contract, 10 to 12 positions will be added, with the full complement of 22 in the next 5 years, assuming BSA retains the contract. The new joint appointments are aligned with BSA's Critical Outcomes and related initiatives. Joint appointees will enter the tenure track for faculty at Stony Brook.

Location of Commitment	Estimated Total Value
	\$26.2 million over 10 years (assumes BSA retains contract)

Expected Benefits to BNL

Accelerate recruitment of research staff to maximize achievement of BNL science missions; strengthen connection to parent organization

Date Commitment will be Provided

2015 through 2025 (assumes BSA retains contract)

Description of any liability to the Government as well as any Governmental action required or related to the commitment:

Stony Brook University-BNL Seed Grant Program

Source of Commitment

Stony Brook University

Description of Commitment

Stony Brook will continue its successful Seed Grant Program, providing approximately \$200,000 yearly for competitive grants that involve collaboration between BNL and Stony Brook researchers. The Grant Program allows collaborators to undertake demonstration and proof-of-concept research to provide a foundation for external funding proposals.

BNL and Stony Brook \$2 million over 10 years (assumes BSA retains contract)

Expected Benefits to BNL

Provide seed funds for preliminary research activities that support BNL's mission; accelerate growth agenda for BNL; strengthen connection to parent organization

Date Commitment will be Provided

2015 through 2025 (assumes BSA retains contract)

Description of any liability to the Government as well as any Governmental action required or related to the commitment:

Columbia University-BNL Joint Appointments

Source of Commitment

Columbia University

Description of Commitment

Columbia University commits to continued support for three joint positions through the initial 5-year contract period at a minimum, subject to continued availability of appropriately qualified and interested individuals. The current joint appointments include Professors Simon Billinge, Wayne Hendrickson, and Jingguang Chen.

Location of Commitment Estimated Total Value

BNL and Columbia University \$2.25 million over 5 years

Expected Benefits to BNL

Accelerate BNL's science mission in areas that align with BSA's vision and DOE's goals; strengthen connections to a BSA partner university; open pipeline for recruiting Ph.D.s and postdocs from Columbia

Date Commitment will be Provided

2015 through 2020

Description of any liability to the Government as well as any Governmental action required or related to the commitment:

Cornell University-BNL Joint Appointment

Source of Commitment Cornell

University

Description of Commitment

Cornell University commits to continued support for one joint position through the initial 5-year contract period at a minimum, subject to continued availability of appropriately qualified and interested individuals. The current joint appointment is Professor Seamus Davis.

Location of Commitment Estimated Total Value

BNL and Cornell University \$750,000 over 5 years

Expected Benefits to BNL

Accelerate BNL mission in basic energy sciences; strengthen connection to a BSA partner university; open pipeline for recruiting Ph.D.s and postdocs from Cornell

Date Commitment will be Provided

2015 through 2020

Description of any liability to the Government as well as any Governmental action required or related to the commitment:

APPENDIX G

PURCHASING SYSTEM REQUIREMENTS

Applicable to the Operations of Brookhaven National Laboratory

Purchasing System Requirements

This Appendix and Section I Clause entitled "DEAR 970.5244-1 – Contractor Purchasing System" sets forth DOE requirements applicable to the Purchasing System established under the contract for the management of Brookhaven National Laboratory (BNL).

Subcontracts Not Binding on DOE

As used herein, the term "subcontracts" includes subcontracts, purchase orders, letter agreements, basic ordering agreements, consultant agreements, micro-purchases, EDI and other electronic contracting transactions, and lower tier subcontracts under cost-type subcontracts (in an unbroken cost-type chain) that represent costs properly chargeable to the Prime Contract.

All applicable subcontracts made in the name of the BNL M&O Contractor shall not bind or purport to bind the Government, shall not relieve the Contractor of any obligation under the Prime Contract (including, among other things, the obligation to properly supervise and coordinate the work of subcontractors), and shall contain such provisions as are required by this contract or as DOE may prescribe based on Federal statutes and regulations, or DOE Orders and Policies.

DOE Approval

Prior DOE written approval is required for the following actions:

- 1. Laboratory Acquisition Plans, Solicitations, and Awards of any subcontract having a value of \$5,000,000.00 or greater, or any subcontract modification which will cause the value to exceed \$5,000,000.00;
- 2. Except as otherwise expressly provided or directed, in writing, by DOE Patent Counsel with notification to the Contracting Officer, actions which involve any one of, or combination of, the following intellectual property matters:
 - a. Acquisition of software by negotiated lease or license;
 - b. Purchase of patents or patent license rights, including the payment of royalties and permits, or license fees;
 - c. Recognition of proprietary rights, including the recognition of technical data as trade secrets; or,
 - d. Any restriction of DOE's use of data procured under a subcontract.
- 3. All Inter-Contractor Purchases (ICP's) regardless of dollar value.

4. All new, additions, modifications or deletions of Laboratory Procurement Policies and Procedures shall be submitted to DOE for approval prior to implementation.

The above approval requirements do not eliminate any other requirement for review, concurrence, or approval of other proposed actions specified in the subject contract or DOE's right to require consent on any single or class of purchasing actions selected for special surveillance.

Contract No. DE-SC0012704
Section J | Appendix I
Modification No. 0186

APPENDIX I

DOE Directives/List B

Applicable to the Operations of Brookhaven National Laboratory

Contract No. DE-SC0012704
Section J | Appendix I
Modification No. 0186

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.

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	Chg. 1 (Admin Chg.) 6/27/2013	Manual for Implementation of the Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency
12/15/2006	Order	142.2A	Chg. 1 (Admin Chg.) 6/27/2013	Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency
10/14/2010	Order	142.3A	Chg.2 (LtdChg.) 12/13/2019	Unclassified Foreign Visits and Assignments Program
3/31/2014	Order	150.1A		Continuity Programs
8/11/2016 6/27/2007	Order Order	151.1D 153.1	Chg.1 (Minor Chg.) 10/4/2019	Comprehensive Emergency Management System 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
12/21/2015	Order	227.1A	Chg. 1 (Admin Chg.) 1/21/2020	Independent Oversight Program
6/27/2011	Order	231.1B	Chg. 1 (Admin Chg.) 11/28/2012	Environment, Safety and Health Reporting
1/17/2017	Order	232.2A	Chg.1 (Minor Chg.) 10/04/2019	Occurrence Reporting and Processing of Operations Information

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
12/13/2010	Order	241.1B	Chg. 1 (Admin Chg) 4/26/2016	Scientific and Technical Information Management
3/11/2013	Order	243.1B	Chg. 1 (Admin Chg.) 7/8/2013	Records Management Program
2/23/2011	Order	252.1A	Chg. 1 (Admin Chg.) 3/12/2013	Technical Standards Program
11/19/2009	Order	313.1		Management and Funding of the Department's Overseas Presence
10/18/2007	Order	341.1A Parts: 1.(a-b) 2.a(1-3) 2.a(4)(a- h)		Federal Employee Health Services
9/30/1996	Order	350.1	Chg. 7 (LtdChg.) 2/19/2020	Contractor Human Resource Management Programs
8/17/2009	Order	410.2	Chg. 1 (Admin Chg.) 4/10/2014	Management of Nuclear Materials
1/4/2017	Order	411.2		Scientific Integrity
1/4/2017	Policy	411.2A		Scientific Integrity Policy
10/22/2015	Order	413.2C	Chg.1 (Minor Chg.) 8/2/2018	Laboratory Directed Research and Development
11/29/2010	Order	413.3B	Chg. 5 (Minor Chg.) 4/12/2018	Program and Project Management for the Acquisition of Capital Assets
4/25/2011	Order	414.1D	Chg. 2 (LtdChg.) 9/15/2020	Quality Assurance
12/3/2012	Order	415.1	Chg. 2 (Minor Chg.) 1/17/2017	Information Technology Project Management

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
12/4/2012	Order	420.1C	Chg.3 (Ltd Chg.) 11/14/2019	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	Chg. 3 (Minor Chg.) 10/4/2019	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 approved by BHSO
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	Chg. 1 (Pg Chg) 8/28/2001	Radioactive Waste Management
7/9/1999	Manual	435.1-1	Chg. 2 (Admin Chg.) 6/8/2011	Radioactive Waste Management Manual
5/2/2011	Order	436.1		Departmental Sustainability
6/15/2011	Order	440.2C	Chg. 2 (LtdChg.) 9/15/2020	Aviation Management and Safety
3/7/2008	Manual	441.1-1	Chg. 1 (Admin Chg.) 02/24/2016	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.) 10/5/2016	Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health
11/26/2019	Order	443.1C		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	Chg. 4 (LtdChg.) 9/15/2020	Radiation Protection of the Public and the Environment

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
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	Chg. 1 (LtdChg.) 9/9/2020	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.) 1/11/2017	Technical Security Program
3/1/2010	Order	471.1B		Identification and Protection of Unclassified Controlled Nuclear Information
4/9/2003	Order	471.3	Chg. 1 (Admin Chg.) 1/13/2011	Identifying and Protecting Official Use Only Information
4/9/2003	Manual	471.3-1	Chg. 1 (Admin Chg.) 1/13/2011	Manual for Identifying and Protecting Official Use Only Information
6/20/2011	Order	471.6	Chg. 3 (Admin Chg.) 9/12/2019	Information Security
7/21/2011	Order	472.2	Chg. 1 (Pg Chg.) 7/9/2014	Personnel Security
3/23/2016	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	Chg. 1 (LtdChg.) 12/13/2019	Strategic Partnership Projects [Formerly Known as Work for Others (Non-Department of Energy Funded Work)]

ICCLIED	TVDE	NUMBER	THROUGH	TITLE
ISSUED	TYPE	NUMBER	CHANGE	Includes Compliance Notes as Necessary
			Chg. 2 (LtdChg.)	
12/20/2016	Order	483.1B	12/13/2019	DOE Cooperative Research and Development Agreements
8/17/2006	Order	484.1	Chg. 2 (Admin Chg.) 6/30/2014	Reimbursable Work for the Department of Homeland Security
12/13/2019	Policy	485.1A		Foreign Engagements with DOE National Laboratories
9/4/2020	Order	486.1A		Foreign Government Sponsored or Affiliated Activities Compliance Note: BSA is developing a compliance implementation action plan to be approved by BHSO
1/7/2021	Order	520.1B		Financial Management and Chief Financial Officer Responsibilities
8/2/2018	Order	522.1A		Pricing of Departmental Materials and Services
5/2/2019	Order	550.1	Chg. 1 (LtdChg.) 12/13/2019	Official Travel
3/30/2012	Order	580.1A	Chg. 1 (Admin Chg.) 10/22/2012	Department of Energy Personal Property Management Program