AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 | 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0094	See Block 16C		

6. ISSUED BY CODE	06005	7. ADMINISTERED BY *(If other than Item 6)* Code	06005

U.S. Department of Energy
Brookhaven Site Office
53 Bell Avenue, Building 464
Upton, NY 11973-5000

8. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, State and ZIP Code)*

Brookhaven Science Associates, LLC
Attn: Brian Boyle
Brookhaven National Laboratory
Building 460, PO Box 5000
Upton, New York 11973-5000

CODE N/A FACILITY CODE N/A

(✓)	
	9. A. AMENDMENT OF SOLICITATION NO.
	9. B. DATED *(SEE ITEM 11)*
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 B – Supplies or Services and Prices/Costs, TOC, delete Section B.3, paragraph (a); revise Part II, Section I – Contract Clauses, TOC; update clauses I.103, I.107, I.110, I.113, I.115, I.116, I.117, I.150, I.153, I.157; revise Part III, Section J – List of Documents, Exhibits, Attachments, TOC; add Appendix B – Performance Evaluation and Measurement Plan FY 2018; add Appendix H – Small Business Subcontracting Plan FY 2018.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
George Clark Chief Financial Officer	David R. Mitchell Contracting Officer
15B. CONTRACTOR/OFFEROR 15C. DATE SIGNED	16B. UNITED STATES OF AMERICA 16C. DATE SIGNED
10/26/17	BY 10/27/17
(Signature of person authorized to sign	*(Signature of Contracting Officer)*

14. Description of Amendment/Modification (continued):

1. **Part I, Section B – Supplies or Services and Prices/Costs, Table of Contents (TOC):** Section B TOC is revised to delete paragraph B.3(a). All transition activities under this contract have been completed. This paragraph is now titled "RESERVED".

2. **Part II, Section I – Contract Clauses, Table of Contents (TOC):** Section I TOC is revised to reflect an update to clauses I.103, I.107, I.110, I.113, I.115, I.116, I.117, I.150, I.153, I.157.

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

a. **Clause I.103 – DEAR 952.204-75, Public Affairs (Dec 2000)** – This clause has been updated to delete the word "established" from paragraph (d) IAW 74 FR 36368, 36370 dated July 22, 2009.

b. **Clause I.107 – DEAR 952.211-71, Priorities and Allocations (Atomic Energy) (Apr 2008) –** This clause has been updated to make administrative changes to language IAW 74 FR 36369, 36370 dated July 22, 2009.

c. **Clause I.110 – DEAR 952.223-75, Preservation of Individual Occupational Radiation Exposure Records (APR 1984) –** This clause has been updated to make administrative changes to language IAW 79 FR 56285 dated September 19, 2014.

d. **Clause I.113 – DEAR 952.235-71, Research Misconduct (JUL 2005) –** This clause has been updated to make administrative changes to paragraphs (3) and (3)(c) IAW 75 FR 29459 dated May 26, 2010.

e. **Clause I.115 – DEAR 952.247-70, Foreign Travel (JUN 2010) –** This clause has been updated to make administrative changes IAW 75 FR 29459 dated May 26, 2010.

f. **Clause I.116 – DEAR 952.250-70, Nuclear Hazards Indemnity Agreement (Aug 2012) (Al-2012-10) (Aug 2016) –** This clause has been updated to administrative changes IAW 81 FR 45978 dated July 15, 2016.

g. **Clause I.117** – **DEAR 952.251-70, Contractor Employee Travel Discounts (AUG 2009) –** This clause has been updated to make administrative changes IAW 74 FR 36370, 36378, 36380 dated July 22, 2009.

h. **Clause I.150 – DEAR 970.5232-2, Payments and Advances (Dec 2000) (Alternates II And III) (Dec 2000) –** This clause has been updated to remove a word from paragraph (e)(2)(B), add punctuation, and correct the clause title IAW 75 FR 68221 dated Nov. 5, 2010.

i. **Clause I.153 – DEAR 970.5232-5, Liability With Respect To Cost Accounting Standards (Dec 2000) –** This clause has been updated to add a word in paragraph (a) and delete words in paragraph (b) IAW 75 FR 68221 dated November 5, 2010.

j. **Clause I.157 – DEAR 970.5235-1, Federally Funded Research and Development Center Sponsoring Agreement (Dec 2010) –** This clause has been updated to change Work For Others to Strategic Partnership Project Program in paragraph (C) and update the DOE order in paragraph (D) IAW 80 FR 15520 dated March 24, 2015.

3. **Part III, Section J – List of Documents, Exhibits, Attachments, Table of Contents (TOC):** Section J TOC is revised to reflect the following: Add Appendix B – Performance Evaluation and Measurement Plan.
    a. **Appendix B – Performance Evaluation and Measurement Plan:** This section is revised to add the FY 2018 Plan. See the attachment provided herein.
    b. **Appendix H – Small Business Subcontracting Plan:** This section is revised to add the FY 2018 Plan. See the attachment provided herein.

Attachments:

- Part II, Section I – Contract Clauses
    - Clauses I.103, I.107, I.110, I.113, I.115, I.116, I.117, I.150, I.153, I.157
- Part III, Section J – List of Documents, Exhibits, Attachments
    - Appendix B – Performance Evaluation and Measurement Plan FY 2018
    - Appendix H – Small Business Subcontracting Plan FY 2018

CLAUSE I.103 – DEAR 952.204-75 – PUBLIC AFFAIRS (DEC 2000)

(a) The Contractor must cooperate with the Department in releasing unclassified information to the public and news media regarding DOE policies, programs, and activities relating to its effort under the contract. The responsibilities under this clause must be accomplished through coordination with the Contracting Officer and appropriate DOE public affairs personnel in accordance with procedures defined by the Contracting Officer.

(b) The Contractor is responsible for the development, planning, and coordination of proactive approaches for the timely dissemination of unclassified information regarding DOE activities onsite and offsite, including, but not limited to, operations and programs. Proactive public affairs programs may utilize a variety of communication media, including public workshops, meetings or hearings, open houses, newsletters, press releases, conferences, audio/visual presentations, speeches, forums, tours, and other appropriate stakeholder interactions.

(c) The Contractor's internal procedures must ensure that all releases of information to the public and news media are coordinated through, and approved by, a management official at an appropriate level within the Contractor's organization.

(d) The Contractor must comply with DOE procedures for obtaining advance clearances on oral, written, and audio/visual informational material prepared for public dissemination or use.

(e) Unless prohibited by law, and in accordance with procedures defined by the Contracting Officer, the Contractor must notify the Contracting Officer and appropriate DOE public affairs personnel of communications or contacts with Members of Congress relating to the effort performed under the contract.

(f) In accordance with procedures defined by the Contracting Officer, the Contractor must notify the Contracting Officer and appropriate DOE public affairs personnel of activities or situations that may attract regional or national news media attention and of non-routine inquiries from national news media relating to the effort performed under the contract.

(g) In releases of information to the public and news media, the Contractor must fully and accurately identify the Contractor's relationship to the Department and fully and accurately credit the Department for its role in funding programs and projects resulting in scientific, technical, and other achievements.

CLAUSE I.107 – DEAR 952.211-71 – PRIORITIES AND ALLOCATIONS (ATOMIC ENERGY) (APR 2008)

The Contractor shall follow the provisions of Defense Priorities and Allocations System (DPAS) regulation (15 CFR part 700) in obtaining materials (including equipment), services, or facilities needed to fill this contract.

CLAUSE I.110 – DEAR 952.223-75 – PRESERVATION OF INDIVIDUAL OCCUPATIONAL RADIATION EXPOSURE RECORDS (APR 1984)

Individual occupational radiation exposure records generated in the performance of work under this contract shall be generated and maintained by the contractor in accordance with 36 CFR Chapter XII, Subchapter B, “Records Management,” the National Archives and Records Administration (NARA)-approved DOE Records Disposition Schedules, and shall be operated as a DOE Privacy Act system of records, in accordance with the Privacy Act.

CLAUSE I.113 – DEAR 952.235-71 – RESEARCH MISCONDUCT (JUL 2005)

(a) The Contractor is responsible for maintaining the integrity of research performed pursuant to this contract award including the prevention, detection, and remediation of research misconduct as defined by this clause, and the conduct of inquiries, investigations, and adjudication of allegations of research misconduct in accordance with the requirements of this clause.

(b) Unless otherwise instructed by the Contracting Officer, the Contractor must conduct an initial inquiry into any allegation of research misconduct. If the Contractor determines that there is sufficient evidence to proceed to an investigation, it must notify the Contracting Officer and, unless otherwise instructed, the Contractor must:

(1) Conduct an investigation to develop a complete factual record and an examination of such record leading to either a finding of research misconduct and an identification of appropriate remedies or a determination that no further action is warranted.

(2) If the investigation leads to a finding of research misconduct, conduct an adjudication by a responsible official who was not involved in the inquiry or investigation and is separated organizationally from the element which conducted the investigation. The adjudication must include a review of the investigative record and, as warranted, a determination of appropriate corrective actions and sanctions.

(3) Inform the Contracting Officer if an initial inquiry supports a formal investigation and, if requested by the Contracting Officer thereafter, keep the Contracting Officer informed of the results of the investigation and any subsequent adjudication. When an investigation is complete, the Contractor will forward to the Contracting Officer a copy of the evidentiary record, the investigative report, any recommendations made to the Contractor's adjudicating official, the adjudicating official's decision and notification of any corrective action taken or planned, and the subject's written response (if any).

(c) The Department of Energy (DOE) may elect to act in lieu of the Contractor in conducting an inquiry or investigation into an allegation of research misconduct if the Contracting Officer finds that—

(1) The research organization is not prepared to handle the allegation in a manner consistent with this clause;

(2) The allegation involves an entity of sufficiently small size that it cannot reasonably conduct the inquiry;

(3) DOE involvement is necessary to ensure the public heath, safety, and security, or to prevent harm to the public interest; or

(4) The allegation involves possible criminal misconduct.

(d) In conducting the activities under paragraphs (b) and (c) of this clause, the Contractor and the Department, if it elects to conduct the inquiry or investigation, shall adhere to the following guidelines:

(1) *Safeguards for information and subjects of allegations.* The Contractor shall provide safeguards to ensure that individuals may bring allegations of research misconduct made in good faith to the attention of the Contractor without suffering retribution. Safeguards include: protection against retaliation; fair and objective procedures for examining and resolving allegations; and diligence in protecting positions and reputations. The Contractor shall also provide the subjects of allegations confidence that their rights are protected and that the mere filing of an allegation of research misconduct will not result in an adverse action. Safeguards include timely written notice regarding substantive allegations against them, a description of the allegation and reasonable access to any evidence submitted to support the allegation or developed in response to an allegation and notice of any findings of research misconduct.

(2) *Objectivity and expertise.* The Contractor shall select individual(s) to inquire, investigate, and adjudicate allegations of research misconduct who have appropriate expertise and have no unresolved conflict of interest. The individual(s) who conducts an adjudication must not be the same individual(s) who conducted the inquiry or investigation, and must be separate organizationally from the element that conducted the inquiry or investigation.

(3) *Timeliness.* The Contractor shall coordinate, inquire, investigate and adjudicate allegations of research misconduct promptly, but thoroughly. Generally, an investigation should be completed within 120 days of initiation, and adjudication should be complete within 60 days of receipt of the record of investigation.

(4) *Confidentiality.* To the extent possible, consistent with fair and thorough processing of allegations of research misconduct and applicable law and regulation, knowledge about the identity of the subjects of allegations and informants should be limited to those with a need to know.

(5) *Remediation and sanction.* If the Contractor finds that research misconduct has occurred, it shall assess the seriousness of the misconduct and its impact on the research completed or in process. The Contractor must take all necessary corrective actions. Such action may

include but are not limited to, correcting the research record and as appropriate imposing restrictions, controls, or other parameters on research in process or to be conducted in the future. The Contractor must coordinate remedial actions with the Contracting Officer. The Contractor must also consider whether personnel sanctions are appropriate. Any such sanction must be considered and effected consistent with any applicable personnel laws, policies, and procedures, and shall take into account the seriousness of the misconduct and its impact, whether it was done knowingly or intentionally, and whether it was an isolated event or pattern of conduct.

(e) DOE reserves the right to pursue such remedies and other actions as it deems appropriate, consistent with the terms and conditions of the award instrument and applicable laws and regulations. However, the Contractor's good faith administration of this clause and the effectiveness of its remedial actions and sanctions shall be positive considerations and shall be taken into account as mitigating factors in assessing the need for such actions. If DOE pursues any such action, it will inform the subject of the action of the outcome and any applicable appeal procedures.

(f) *Definitions.*

Adjudication means a formal review of a record of investigation of alleged research misconduct to determine whether and what corrective actions and sanctions should be taken.

Fabrication means making up data or results and recording or reporting them.

Falsification means manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

Finding of Research Misconduct means a determination, based on a preponderance of the evidence, that research misconduct has occurred. Such a finding requires a conclusion that there has been a significant departure from accepted practices of the relevant research community and that it be knowingly, intentionally, or recklessly committed.

Inquiry means information gathering and initial fact-finding to determine whether an allegation or apparent instance of misconduct warrants an investigation.

Investigation means the formal examination and evaluation of the relevant facts.

Plagiarism means the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

Research means all basic, applied, and demonstration research in all fields of science, medicine, engineering, and mathematics, including, but not limited to, research in economics, education, linguistics, medicine, psychology, social sciences statistics, and research involving human subjects or animals.

Research misconduct means fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results, but does not include honest error or differences of opinion.

Research record means the record of all data or results that embody the facts resulting from scientists' inquiries, including, but not limited to, research proposals, laboratory records, both physical and electronic, progress reports, abstracts, theses, oral presentations, internal reports, and journal articles.

(g) By executing this contract, the Contractor provides its assurance that it has established an administrative process for performing an inquiry, mediating if possible, or investigating, and reporting allegations of research misconduct; and that it will comply with its own administrative process and the requirements of 10 CFR part 733 for performing an inquiry, possible mediation, investigation and reporting of research misconduct.

(h) The Contractor must insert or have inserted the substance of this clause, including paragraph (g), in subcontracts at all tiers that involve research.

CLAUSE I.115 – DEAR 952.247-70 – FOREIGN TRAVEL (JUN 2010)

Contractor foreign travel shall be conducted pursuant to the requirements contained in Department of Energy (DOE) Order 551.1C, Official Foreign Travel, or its successor in effect at the time of award.

CLAUSE I.116 – DEAR 952.250-70 – NUCLEAR HAZARDS INDEMNITY AGREEMENT (AUG 2012) (AL-2012-10) (AUG 2016)

(a) *Authority.* This clause is incorporated into this contract pursuant to the authority contained in subsection 170d. of the Atomic Energy Act of 1954, as amended (hereinafter called the Act.)

(b) *Definitions.* The definitions set out in the Act shall apply to this clause.

(c) *Financial protection.* Except as hereafter permitted or required in writing by DOE, the Contractor will not be required to provide or maintain, and will not provide or maintain at Government expense, any form of financial protection to cover public liability, as described in paragraph (d)(2) below. DOE may, however, at any time require in writing that the Contractor provide and maintain financial protection of such a type and in such amount as DOE shall determine to be appropriate to cover such public liability, provided that the costs of such financial protection are reimbursed to the Contractor by DOE.

(d)

(1) *Indemnification.* To the extent that the Contractor and other persons indemnified are not compensated by any financial protection permitted or required by DOE, DOE will indemnify the Contractor and other persons indemnified against (i) claims for public liability as described in subparagraph (d)(2) of this clause; and (ii) such legal costs of the Contractor and other persons indemnified as are approved by DOE, provided that DOE's liability, including such legal costs, shall not exceed the amount set forth in section 170e.(1)(B) of the Act in the aggregate for each nuclear incident or precautionary evacuation occurring within the United States or $500 million in the aggregate for each nuclear incident occurring outside the United States, irrespective of the number of persons indemnified in connection with this contract.

(2) The public liability referred to in subparagraph (d)(1) of this clause is public liability as defined in the Act which (i) arises out of or in connection with the activities under this contract, including transportation; and (ii) arises out of or results from a nuclear incident or precautionary evacuation, as those terms are defined in the Act.

(e)

(1) *Waiver of defenses.* In the event of a nuclear incident, as defined in the Act, arising out of nuclear waste activities, as defined in the Act, the

Contractor, on behalf of itself and other persons indemnified, agrees to waive any issue or defense as to charitable or governmental immunity.

(2) In the event of an extraordinary nuclear occurrence which—

(i) Arises out of, results from, or occurs in the course of the construction, possession, or operation of a production or utilization facility; or

(ii) Arises out of, results from, or occurs in the course of transportation of source material, by-product material, or special nuclear material to or from a production or utilization facility; or

(iii) Arises out of or results from the possession, operation, or use by the Contractor or a subcontractor of a device utilizing special nuclear material or by-product material, during the course of the contract activity; or

(iv) Arises out of, results from, or occurs in the course of nuclear waste activities, the Contractor, on behalf of itself and other persons indemnified, agrees to waive—

(A) Any issue or defense as to the conduct of the claimant (including the conduct of persons through whom the claimant derives its cause of action) or fault of persons indemnified, including, but not limited to—

(*1*) Negligence;

(*2*) Contributory negligence;

(*3*) Assumption of risk; or

(*4*) Unforeseeable intervening causes, whether involving the conduct of a third person or an act of God;

(B) Any issue or defense as to charitable or governmental immunity; and

(C) Any issue or defense based on any statute of limitations, if suit is instituted within 3 years from the date on which the claimant first knew, or reasonably could have known, of his injury or change and the cause thereof. The waiver of any such issue or defense shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action. The waiver shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified.

(v) The term *extraordinary nuclear occurrence* means an event which DOE has determined to be an extraordinary nuclear occurrence as defined in the Act. A determination of whether or not there has been an extraordinary nuclear occurrence will be made in accordance with the procedures in 10 CFR part 840.

(vi) For the purposes of that determination, *offsite* as that term is used in 10 CFR part 840 means away from “the contract location” which phrase means any DOE facility, installation, or site at which contractual activity under this contract is being carried on, and any contractor-owned or controlled facility, installation, or site at which the Contractor is engaged in the performance of contractual activity under this contract.

(3) The waivers set forth above—

(i) Shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action;

(ii) Shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified;

(iii) Shall not preclude a defense based upon a failure to take reasonable steps to mitigate damages;

(iv) Shall not apply to injury or damage to a claimant or to a claimant's property which is intentionally sustained by the claimant or which results from a nuclear incident intentionally and wrongfully caused by the claimant;

(v) Shall not apply to injury to a claimant who is employed at the site of and in connection with the activity where the extraordinary nuclear occurrence takes place, if benefits therefore are either payable or required to be provided under any workmen's compensation or occupational disease law;

(vi) Shall not apply to any claim resulting from a nuclear incident occurring outside the United States;

(vii) Shall be effective only with respect to those obligations set forth in this clause and in insurance policies, contracts or other proof of financial protection; and

(viii) Shall not apply to, or prejudice the prosecution or defense of, any claim or portion of claim which is not within the protection afforded under (A) the limit of liability provisions under subsection 170e. of the Act, and (B) the

terms of this agreement and the terms of insurance policies, contracts, or other proof of financial protection.

(f) *Notification and litigation of claims.* The Contractor shall give immediate written notice to DOE of any known action or claim filed or made against the Contractor or other person indemnified for public liability as defined in paragraph (d)(2). Except as otherwise directed by DOE, the Contractor shall furnish promptly to DOE, copies of all pertinent papers received by the Contractor or filed with respect to such actions or claims. DOE shall have the right to, and may collaborate with, the Contractor and any other person indemnified in the settlement or defense of any action or claim and shall have the right to (1) require the prior approval of DOE for the payment of any claim that DOE may be required to indemnify hereunder; and (2) appear through the Attorney General on behalf of the Contractor or other person indemnified in any action brought upon any claim that DOE may be required to indemnify hereunder, take charge of such action, and settle or defend any such action. If the settlement or defense of any such action or claim is undertaken by DOE, the Contractor or other person indemnified shall furnish all reasonable assistance in effecting a settlement or asserting a defense.

(g) *Continuity of DOE obligations.* The obligations of DOE under this clause shall not be affected by any failure on the part of the Contractor to fulfill its obligation under this contract and shall be unaffected by the death, disability, or termination of existence of the Contractor, or by the completion, termination or expiration of this contract.

(h) *Effect of other clauses.* The provisions of this clause shall not be limited in any way by, and shall be interpreted without reference to, any other clause of this contract, including the clause entitled Contract Disputes, provided, however, that this clause shall be subject to the clauses entitled Covenant Against Contingent Fees, and Accounts, records, and inspection, and any provisions that are later added to this contract as required by applicable Federal law, including statutes, executive orders and regulations, to be included in Nuclear Hazards Indemnity Agreements.

(i) *Civil penalties.* The Contractor and its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to civil penalties, pursuant to 234A of the Act, for violations of applicable DOE nuclear-safety related rules, regulations, or orders.

(j) *Criminal penalties.* Any individual director, officer, or employee of the Contractor or of its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to criminal penalties, pursuant to 223(c) of the Act, for knowing and willful violation of the Atomic Energy Act of 1954, as amended, and applicable DOE nuclear safety-related rules, regulations or orders which violation results in, or, if undetected, would have resulted in a nuclear incident.

(k) *Inclusion in subcontracts.* The Contractor shall insert this clause in any subcontract which may involve the risk of public liability, as that term is defined in the Act and further described in paragraph (d)(2) above. However, this clause shall not be included in subcontracts in which the subcontractor is subject to Nuclear Regulatory Commission (NRC) financial protection requirements under section 170b. of the Act or NRC agreements of indemnification under section 170c. or k. of the Act for the activities under the subcontract.

CLAUSE I.117 – DEAR 952.251-70 – CONTRACTOR EMPLOYEE TRAVEL DISCOUNTS (AUG 2009)

(a) The Contractor shall take advantage of travel discounts offered to Federal Contractor employee travelers by AMTRAK, hotels, motels, or car rental companies, when use of such discounts would result in lower overall trip costs and the discounted services are reasonably available. Vendors providing these services may require the Contractor employee to furnish them a letter of identification signed by the authorized Contracting Officer.

(b) *Contracted airlines.* Contractors are not eligible for GSA contract city pair fares.

(c) *Discount rail service.* AMTRAK voluntarily offers discounts to Federal travelers on official business and sometimes extends those discounts to Federal contractor employees.

(d) *Hotels/motels.* Many lodging providers extend their discount rates for Federal employees to Federal contractor employees.

(e) *Car rentals.* The Surface Deployment and Distribution Command (SDDC) of the Department of Defense negotiates rate agreements with car rental companies that are available to Federal travelers on official business. Some car rental companies extend those discounts to Federal contractor employees.

(f) *Obtaining travel discounts.*

(1) To determine which vendors offer discounts to Government contractors, the Contractor may review commercial publications such as the Official Airline guides Official Traveler, Innovata, or National Telecommunications. The Contractor may also obtain this information from GSA contract Travel Management Centers or the Department of Defense's Commercial Travel Offices.

(2) The vendor providing the service may require the Government contractor to furnish a letter signed by the Contracting Officer. The following illustrates a standard letter of identification.

OFFICIAL AGENCY LETTERHEAD

TO: Participating Vendor

SUBJECT: OFFICIAL TRAVEL OF GOVERNMENT CONTRACTOR

(FULL NAME OF TRAVELER), the bearer of this letter is an employee of Brookhaven Science Associates, LLC which has a contract with this agency under Government contract DE-SC0012704. During the period of

the contract 01/05/2015 to 01/04/2020, AND WITH THE APPROVAL OF THE CONTRACT VENDOR, the employee is eligible and authorized to use available travel discount rates in accordance with Government contracts and/or agreements. Government Contract City Pair fares are not available to Contractors.

SIGNATURE, Title and telephone number of Contracting Officer

CLAUSE I.150 – DEAR 970.5232-2 – PAYMENTS AND ADVANCES (DEC 2000) (ALTERNATES II AND III) (DEC 2000)

(a) *Payment of Total available fee: Base Fee and Performance Fee.* The base fee amount, if any, is payable in equal monthly installments. Total available fee amount earned is payable following the Government's Determination of Total Available Fee Amount Earned in accordance with the clause of this contract entitled "Total Available Fee: Base Fee Amount and Performance Fee Amount." Base fee amount and total available fee amount earned payments shall be made by direct payment or withdrawn from funds advanced or available under this contract, as determined by the Contracting Officer. The Contracting Officer may offset against any such fee payment the amounts owed to the Government by the Contractor, including any amounts owed for disallowed costs under this contract. No base fee amount or total available fee amount earned payment may be withdrawn against the payments cleared financing arrangement without the prior written approval of the contracting officer.

(b) *Payments on Account of Allowable Costs.* The Contracting Officer and the Contractor shall agree as to the extent to which payment for allowable costs or payments for other items specifically approved in writing by the Contracting Officer (for example, negotiated fixed amounts) shall be made from advances of Government funds. When pension contributions are paid by the Contractor to the retirement fund less frequently than quarterly, accrued costs therefore shall be excluded from costs for payment purposes until such costs are paid. If pension contributions are paid on a quarterly or more frequent basis, accrual therefore may be included in costs for payment purposes, provided that they are paid to the fund within 30 days after the close of the period covered. If payments are not made to the fund within such 30-day period, pension contribution costs shall be excluded from cost for payment purposes until payment has been made.

(c) *Special financial institution account—use.* All advances of Government funds shall be withdrawn pursuant to a payments cleared financing arrangement prescribed by DOE in favor of the financial institution or, at the option of the Government, shall be made by direct payment or other payment mechanism to the Contractor, and shall be deposited only in the special financial institution account referred to in the Special Financial Institution Account Agreement, which is incorporated into this contract as Appendix C. No part of the funds in the special financial institution account shall be commingled with any funds of the Contractor or used for a purpose other than that of making payments for costs allowable and, if applicable, fees earned under this contract, negotiated fixed amounts, or payments for other items specifically approved in writing by the Contracting Officer. If the Contracting Officer determines that the balance of such special financial institution account exceeds the Contractor's current needs, the Contractor shall promptly make such disposition of the excess as the Contracting Officer may direct.

(d) *Title to funds advanced.* Title to the unexpended balance of any funds advanced and of any special financial institution account established pursuant to this clause shall remain in the Government and be superior to any claim or lien of the financial institution of deposit or others. It is understood that an advance to the Contractor hereunder is not a loan to the Contractor, and will not require the payment of interest by the Contractor, and that the Contractor acquires no right, title or interest in or to such advance other than the right to make expenditures therefrom, as provided in this clause.

(e) *Financial settlement.* The Government shall promptly pay to the Contractor the unpaid balance of allowable costs (or other items specifically approved in writing by the Contracting Officer) and fee upon termination of the work, expiration of the term of the contract, or completion of the work and its acceptance by the Government after:

(1) Compliance by the Contractor with DOE's patent clearance requirements; and

(2) The furnishing by the Contractor of:

(i) An assignment of the Contractor's rights to any refunds, rebates, allowances, accounts receivable, collections accruing to the Contractor in connection with the work under this contract, or other credits applicable to allowable costs under the contract;

(ii) A closing financial statement;

(iii) The accounting for Government-owned property required by the clause entitled “Property”; and

(iv) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract subject only to the following exceptions:

(A) Specified claims in stated amounts or in estimated amounts where the amounts are not susceptible to exact statement by the Contractor;

(B) Claims, together with reasonable expenses incidental thereto, based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided that such claims are not known to the Contractor on the date of the execution of the release; and provided further that the Contractor gives notice of such claims in writing to the Contracting Officer promptly, but not more than one (1) year after the Contractor's right of action first accrues. In

addition, the Contractor shall provide prompt notice to the Contracting Officer of all potential claims under this clause, whether in litigation or not (see 48 CFR 970.5228-1, Insurance—Litigation and Claims);

(C) Claims for reimbursement of costs (other than expenses of the Contractor by reason of any indemnification of the Government against patent liability), including reasonable expenses incidental thereto, incurred by the Contractor under the provisions of this contract relating to patents; and

(D) Claims recognizable under the clause entitled, Nuclear Hazards Indemnity Agreement.

(3) In arriving at the amount due the Contractor under this clause, there shall be deducted—

(i) Any claim which the Government may have against the Contractor in connection with this contract; and

(ii) Deductions due under the terms of this contract and not otherwise recovered by or credited to the Government. The unliquidated balance of the special financial institution account may be applied to the amount due and any balance shall be returned to the Government forthwith.

(f) *Claims.* Claims for credit against funds advanced for payment shall be accompanied by such supporting documents and justification as the Contracting Officer shall prescribe.

(g) *Discounts.* The Contractor shall take and afford the Government the advantage of all known and available cash and trade discounts, rebates, allowances, credits, salvage, and commissions unless the Contracting Officer finds that action is not in the best interest of the Government.

(h) *Collections.* All collections accruing to the Contractor in connection with the work under this contract, except for the Contractor's fee and royalties or other income accruing to the Contractor from technology transfer activities in accordance with this contract, shall be Government property and shall be processed and accounted for in accordance with applicable requirements imposed by the Contracting Officer pursuant to the Laws, regulations, and DOE directives clause of this contract and, to the extent consistent with those requirements, shall be deposited in the special financial institution account or otherwise made available for payment of allowable costs under this contract, unless otherwise directed by the Contracting Officer.

(i) *Direct payment of charges.* The Government reserves the right, upon ten days written notice from the Contracting Officer to the Contractor, to pay directly to the persons concerned, all amounts due which otherwise would be allowable under this contract. Any payment so made shall discharge the Government of all liability to the Contractor therefore.

(j) *Determining allowable costs.* The Contracting Officer shall determine allowable costs in accordance with the Federal Acquisition Regulation subpart 31.2 and the Department of Energy Acquisition Regulation subpart 48 CFR 970.31 in effect on the date of this contract and other provisions of this contract.

(k) Review and approval of costs incurred. The Contractor shall prepare and submit annually as of September 30, a “Statement of Costs Incurred and Claimed” (Cost Statement) for the total of net expenditures accrued (i.e., net costs incurred) for the period covered by the Cost Statement. The Contractor shall certify the Cost Statement subject to the penalty provisions for unallowable costs as stated in sections 306(b) and (i) of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 256), as amended. DOE, after audit and appropriate adjustment, will approve such Cost Statement. This approval by DOE will constitute an acknowledgment by DOE that the net costs incurred are allowable under the contract and that they have been recorded in the accounts maintained by the Contractor in accordance with DOE accounting policies, but will not relieve the Contractor of responsibility for DOE's assets in its care, for appropriate subsequent adjustments, or for errors later becoming known to DOE.

CLAUSE I.153 – DEAR 970.5232-5 – LIABILITY WITH RESPECT TO COST ACCOUNTING STANDARDS (DEC 2000)

(a) The Contractor is not liable to the Government for increased costs or interest resulting from its failure to comply with the clauses of this contract entitled, “Cost Accounting Standards,” and “Administration of Cost Accounting Standards,” if its failure to comply with the clauses is caused by the Contractor's compliance with published DOE financial management policies and procedures or other requirements established by the Department's Chief Financial Officer or Senior Procurement Executive.

(b) The Contractor is not liable to the Government for increased costs or interest resulting from its subcontractors' failure to comply with the clauses at 52.230-2, “Cost Accounting Standards,” and 52.230-6, “Administration of Cost Accounting Standards,” if the Contractor includes in each covered subcontract a clause making the subcontractor liable to the Government for increased costs or interest resulting from the subcontractor's failure to comply with the clauses; and the Contractor seeks the subcontract price adjustment and cooperates with the Government in the Government's attempts to recover from the subcontractor.

CLAUSE I.157 – DEAR 970.5235-1 – FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER SPONSORING AGREEMENT (DEC 2010)

(a) Pursuant to 48 CFR 35.017-1, this contract constitutes the sponsoring agreement between the Department of Energy (DOE) and the Contractor, which establishes the relationship for the operation of a Department of Energy sponsored Federally Funded Research and Development Center (FFRDC).

(b) In the operation of this FFRDC, the Contractor may be provided access beyond that which is common to the normal contractual relationship, to Government and supplier data, including sensitive and proprietary data, and to Government employees and facilities needed to discharge its responsibilities efficiently and effectively. Because of this special relationship, it is essential that the FFRDC be operated in the public interest with objectivity and independence, be free from organizational conflicts of interest, and have full disclosure of its affairs to the Department of Energy.

(c) Unless otherwise provided by the contract, the Contractor may accept work from a nonsponsor (as defined in 48 CFR 35.017) in accordance with the requirements and limitations of the clause 48 CFR 970.5217-1, Strategic Partnership Projects Program.

(d) As an FFRDC, the Contractor shall not use its privileged information or access to government facilities to compete with the private sector. Specific guidance on restricted activities is contained in DOE Order 481.1C, Strategic Partnership Projects (Formerly Known as Work for Others (Non-Department of Energy Funded Work)), or successor version.

U.S. DEPARTMENT OF ENERGY

AND

BROOKHAVEN SCIENCE ASSOCIATES, LLC

APPENDIX B

PERFORMANCE EVALUATION AND MEASUREMENT PLAN

FISCAL YEAR 2018

BROOKHAVEN NATIONAL LABORATORY

TABLE OF CONTENTS

INTRODUCTION

This document, the Performance Evaluation and Measurement Plan (PEMP), primarily serves as DOE's Quality Assurance/Surveillance Plan (QASP) for the evaluation of Brookhaven Science Associates (hereafter referred to as "the Contractor") performance regarding the management and operations of the Brookhaven National Laboratory (hereafter referred to as "the Laboratory") for the evaluation period from October 1, 2017, through September 30, 2018. The performance evaluation provides a standard by which to determine whether the Contractor is managerially and operationally in control of the Laboratory and is meeting the mission requirement and performance expectations/objectives of the Department as stipulated within this contract.

This document also describes the distribution of the total available performance-based fee and the methodology for determining the amount of fee earned by the Contractor as stipulated within the clauses entitled, "Determining Total Available Performance Fee and Fee Earned," "Conditional Payment of Fee, Profit, or Incentives," and "Total Available Fee: Base Fee Amount and Performance Fee Amount." In partnership with the Contractor and other key customers, the Department of Energy (DOE) Headquarters (HQ) and the Site Office have defined the measurement basis that serves as the Contractor's performance-based evaluation and fee determination.

The Performance Goals (hereafter referred to as Goals), Performance Objectives (hereafter referred to as Objectives) and set of notable outcomes discussed herein were developed in accordance with contract expectations set forth within the contract. The notable outcomes for meeting the Objectives set forth within this plan have been developed in coordination with HQ program offices as appropriate. Except as otherwise provided for within the contract, the evaluation and fee determination will rest solely on the Contractor's performance within the Performance Goals and Objectives set forth within this plan.

The overall performance against each Objective of this performance plan, to include the evaluation of notable outcomes, shall be evaluated jointly by the appropriate HQ office, major customer and/or the Site Office as appropriate. This cooperative review methodology will ensure that the overall evaluation of the Contractor results in a consolidated DOE position taking into account specific notable outcomes as well as all additional information available to the evaluating office. The Site Office shall work closely with each HQ program office or major customer throughout the year in evaluating the Contractor's performance and will provide observations regarding programs and projects as well as other management and operation activities conducted by the Contractor throughout the year.

Section I provides information on how the performance rating (grade) for the Contractor, as well as how the performance-based incentives fee earned (if any) will be determined. As applicable, also provides information on the award term eligibility requirements.

Section II provides the detailed information concerning each Goal, their corresponding Objectives, and notable outcomes identified, along with the weightings assigned to each Goal and Objective and a table for calculating the final grade for each Goal.

I. DETERMINING THE CONTRACTOR'S PERFORMANCE RATING, AND PERFORMANCE-BASED FEE AND AWARD TERM ELIGIBILITY (as applicable)

The FY 2018 Contractor performance grades for each Goal will be determined based on the weighted sum of the individual scores earned for each of the Objectives described within this document for Science and Technology (S&T), Contractor/Laboratory Leadership, and for Management and Operations (M&O). Each Goal is composed of two or more weighted Objectives. Additionally, a set of notable outcomes has

been identified to highlight key aspects/areas of performance deserving special attention by the Contractor for the upcoming fiscal year. Each notable outcome is linked to one or more Objectives, and failure to meet expectations against any notable outcome will result in a grade less than B+ for that Objective(s) (i.e., if the contractor fails to meet expectations against a notable outcome tied to an Objective under Goal 1.0, 2.0, or 3.0, the SC program office that assigned the notable outcome shall award a grade less than "B+" for the Objective(s) to which the notable outcome is linked; and if the contractor fails to meet expectations against a notable outcome tied to an Objective under Goal 4.0, 5.0, 6.0, 7.0 or 8.0, SC shall award a grade less than "B+" for the Objective(s) to which the notable outcome is linked). Performance above expectations against a notable outcome will be considered in the context of the Contractor's entire performance with respect to the relevant Objective. The following section describes SC's methodology for determining the Contractor's grades at the Objective level.

Performance Evaluation Methodology:
The purpose of this section is to establish a methodology to develop grades at the Objective level. Each evaluating office shall provide a proposed grade and corresponding numerical score for each Objective (see Figure 1 for SC's scale). Each evaluation will measure the degree of effectiveness and performance of the Contractor in meeting the corresponding Objectives.

Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F
Total Score	**4.3-4.1**	**4.0-3.8**	**3.7-3.5**	**3.4-3.1**	**3.0-2.8**	**2.7-2.5**	**2.4-2.1**	**2.0-1.8**	**1.7-1.1**	**1.0-0.8**	**0.7-0**

Figure 1. FY 2018 Contractor Letter Grade Scale

For the three S&T Goals (1.0 – 3.0) the Contractor shall be evaluated against the defined levels of performance provided for each Objective under the S&T Goals. The Contractor performance under Goal 4.0 will also be evaluated using the defined levels of performance described for the three Objectives under Goal 4.0. The descriptions for these defined levels of performance are included in Section II.

It is the DOE's expectation that the Contractor provides for and maintains management and operational (M&O) systems that efficiently and effectively support the current mission(s) of the Laboratory and assure the Laboratory's ability to deliver against DOE's future needs. In evaluating the Contractor's performance DOE shall assess the degree of effectiveness and performance in meeting each of the Objectives provided under each of the Goals. For the four M&O Goals (5.0 – 8.0) DOE will rely on a combination of the information through the Contractor's own assurance systems, the ability of the Contractor to demonstrate the validity of this information, and DOE's own independent assessment of the Contractor's performance across the spectrum of its responsibilities. The latter might include, but is not limited to operational awareness (daily oversight) activities; formal assessments conducted; "For Cause" reviews (if any); and other outside agency reviews (OIG, GAO, DCAA, etc.).

The mission of the Laboratory is to deliver the science and technology needed to support Departmental missions and other sponsor's needs. Operational performance at the Laboratory meets DOE's expectations (defined as the grade of B+) for each Objective if the Contractor is performing at a level that fully supports the Laboratory's current and future science and technology mission(s). Performance that has, or has the potential to, 1) adversely impact the delivery of the current and/or future DOE/Laboratory mission(s), 2) adversely impact the DOE and or the Laboratory's reputation, or 3) does not provide the competent people, necessary facilities and robust systems necessary to ensure sustainable performance, shall be graded below expectations as defined in Figure I-1, below.

The Department sets our expectations high, and expects performance at that level to optimize the efficient and effective operation of the Laboratory. Thus, the Department does not expect routine Contractor

performance above expectations against the M&O Goals (5.0 – 8.0). Performance that might merit grades above B+ would need to reflect a Contractor's significant contributions to the management and operations at the system of Laboratories, or recognition by external, independent entities as exemplary performance.

Definitions for the grading scale for the Goal 5.0 – 8.0 Objectives are provided in Figure I-1, below:

Letter Grade	Numerical Grade	Definition
A+	4.3-4.1	Significantly exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). Performance is notable for its significant contributions to the management and operations across the SC system of laboratories, and/or has been recognized by external, independent entities as exemplary.
A	4.0-3.8	Notably exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). Performance is notable for its contributions to the management and operations across the SC system of laboratories, and/or as been recognized by external, independent entities as exemplary.
A-	3.7-3.5	Exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s).
B+	3.4-3.1	Meets expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). No performance has, or has the potential to, adversely impact 1) the delivery of the current and/or future DOE/Laboratory mission(s), 2) the DOE and/or the Laboratory's reputation, or does not 3) provide a sustainable performance platform.
B	3.0 -2.8	Just misses meeting expectations of performance against a few aspects of the Objective in question. In a few minor instances, the Contractor's systems function at a level that does not fully support the Laboratory's current and future science and technology mission, or provide a sustainable performance platform.
B-	2.7-2.5	Misses meeting expectations of performance against several aspects of the Objective in question. In several areas, the Contractor's systems function at a level that does not fully support the Laboratory's current and future science and technology mission, or provide a sustainable performance platform.
C+	2.4-2.1	Misses meeting expectations of performance against many aspects of the Objective in question. In several notable areas, the Contractor's systems function at a level that does not fully support the Laboratory's current and future science and technology mission or provide a sustainable performance platform, and/or have affected the reputation of the Laboratory or DOE.
C	2.0-1.8	Significantly misses meeting expectations of performance against many aspects of the Objective in question. In many notable areas, the Contractor's systems do not support the Laboratory's current and future science and technology mission, nor provide a sustainable performance platform and may affect the reputation of the Laboratory or DOE.
C-	1.7- 1.1	Significantly misses meeting expectations of performance against most aspects of the Objective in question. In many notable areas, the Contractor's systems demonstrably hinder the Laboratory's ability to deliver on current and future science and technology mission, and have harmed the reputation of the Laboratory or DOE.
D	1.0-0.8	Most or all expectations of performance against the Objective in question are missed. Performance failures in this area have affected all parts of the Laboratory; DOE leadership engagement is required to deal with the situation and help the Contractor.
F	0.7-0	All expectations of performance against the Objective in question are missed. Performance failures in this area are not recoverable by the Contractor or DOE.

Figure I-1. Letter Grade and Numerical Grade Definitions

Calculating Individual Goal Scores and Letter Grades:
Each Objective is assigned the earned numerical score by the evaluating office as stated above. The Goal rating is then computed by multiplying the numerical score by the weight of each Objective within a Goal. These values are then added together to develop an overall numerical score for each Goal. For the purpose of determining the final Goal grade, the raw numerical score for each Goal will be rounded to the nearest tenth of a point using the standard rounding convention discussed below and then compared to Figure I-1. A set of tables is provided at the end of each Performance Goal section of this document to assist in the calculation of Objective numerical scores to the Goal grade. No overall rollup grade shall be provided.

As stated above the raw numerical score from each calculation shall be carried through to the next stage of the calculation process. The raw numerical score for weighted final S&T and weighted final M&O will be rounded to the nearest tenth of a point for purposes of determining fee. A standard rounding convention of x.44 and less rounds down to the nearest tenth (here, x.4), while x.45 and greater rounds up to the nearest tenth (here, x.5).

The eight Performance Goal grades shall be used to create a report card for the laboratory (see Figure 2, below).

Performance Goal	**Grade**
1.0 Mission Accomplishment	
2.0 Design, Fabrication, Construction and Operations of Research Facilities	
3.0 Science and Technology Program Management	
4.0 Sound and Competent Leadership and Stewardship of the Laboratory	
5.0 Integrated Safety, Health, and Environmental Protection	
6.0 Business Systems	
7.0 Operating, Maintaining, and Renewing Facility and Infrastructure Portfolio	
8.0 Integrated Safeguards and Security Management and Emergency Management Systems	

Figure 2. Laboratory Report Card

Determining the Amount of Performance-Based Fee Earned:
SC uses the following process to determine the amount of performance-based fee earned by the contractor. The S&T score from each evaluator shall be used to determine an initial numerical score for S&T (see Table A, below), and the rollup of the scores for each M&O Performance Goal shall be used to determine an initial numerical M&O score (see Table B, below).

S&T Performance Goal	**Numerical Score**	**Weight[1]**		
1.0 Mission Accomplishment				
2.0 Design, Fabrication, Construction and Operation of Research Facilities				
3.0 Science and Technology Program Management		25%		
			Initial S&T Score	

Table A: Fiscal Year Contractor Evaluation Initial S&T Score Calculation

[1] For Goals 1.0 and 2.0, the weights are based on fiscal year costs for each program distributed between these Goals 1.0 and 2.0; however, a minimum weight of 30% for Goal 1.0 is required regardless of program distribution. For Goal 3.0, the weight is set as a fixed percentage for all laboratories.

M&O Performance Goal	Numerical Score	Weight		
5.0 Integrated Safety, Health, and Environmental Protection		30%		
6.0 Business Systems		30%		
7.0 Operating, Maintaining, and Renewing Facility and Infrastructure Portfolio		30%		
8.0 Integrated Safeguards and Security Management and Emergency Management Systems		10%		
			Initial M&O Score	

Table B. Fiscal Year Contractor Evaluation Initial M&O Score Calculation

These initial scores will then be adjusted based on the numerical score for Goal 4.0 (see Table C, below).

	Numerical Score	Weight		
Initial S&T Score		0.75		
Goal 4.0		0.25		
			Final S&T Score	
Initial M&O Score		0.75		
Goal 4.0		0.25		
			Final M&O Score	

Table C. FY Fiscal Year Final S&T and M&O Score Calculation

The percentage of the available performance-based fee that may be earned by the Contractor shall be determined based on the final score for S&T (see Table C) and then compared to Figure 3, below. The final score for M&O from Table C shall then be utilized to determine the final fee multiplier (see Figure 3), which shall be utilized to determine the overall amount of performance-based fee earned for FY 2018 as calculated within Table D.

Overall Final Score for either S&T or M&O from Table C.	Percent S&T Fee Earned	M&O Fee Multiplier
4.3	100%	100%
4.2		
4.1		
4.0	97%	100%
3.9		
3.8		
3.7	94%	100%
3.6		
3.5		
3.4	91%	100%
3.3		
3.2		
3.1		
3.0	88%	95%
2.9		
2.8		
2.7	85%	90%
2.6		
2.5		
2.4	75%	85%
2.3		
2.2		
2.1		
2.0	50%	75%
1.9		
1.8		
1.7	0%	60%
1.6		
1.5		
1.4		
1.3		
1.2		
1.1		
1.0 to 0.8	0%	0%
0.7 to 0.0	0%	0%

Figure 3. Performance-Based Fee Earned Scale

Overall Fee Determination	
Percent S&T Fee Earned	
M&O Fee Multiplier	x
Overall Earned Performance-Based Fee	

Table D. Final Percentage of Performance-Based Fee Earned Determination

The Federal Acquisition Regulations (FAR) requirements for using and administering cost-plus-award-fee contracts were modified to provide for a five-level adjectival grading system with associated levels of available fee.[1] SC has addressed the FAR 16 language by mapping its standard numerical scores and associated fee determinations to the FAR Adjectival Rating System, as noted in Figure 4.

Range of Overall Final Score for S&T from Figure 3.	FAR Adjectival Rating	Maximum Performance-Fee Pool Available to be Earned
3.1 to 4.3	**Excellent**	**100%**
2.5 to 3.0	**Very Good**	**88%**
2.1 to 2.4	**Good**	**75%**
1.8 to 2.0	**Satisfactory**	**50%**
0.0 to 1.7	**Unsatisfactory**	**0%**

Figure 4. Crosswalk of SC Numerical Scores and the FAR 16 Adjectival Rating System

[1] See Policy Flash 2010-05, *Federal Acquisition Circular 2005-37*.

Adjustment to the Letter Grade and/or Performance-Based Fee Determination:
The lack of performance objectives and notable outcomes in this plan do not diminish the need to comply with minimum contractual requirements. Although the performance-based Goals and their corresponding Objectives shall be the primary means utilized in determining the Contractor's performance grade and/or amount of performance-based fee earned, the Contracting Officer may unilaterally adjust the rating and/or reduce the otherwise earned fee based on the Contractor's performance against all contract requirements as set forth in the Prime Contract. While reductions may be based on performance against any contract requirement, specific note should be made to contract clauses which address reduction of fee including, Standards of Contractor Performance Evaluation, DEAR 970.5215-1 – Total Available Fee: Base Fee Amount and Performance Fee Amount, and Conditional Payment of Fee, Profit, and Other Incentives – Facility Management Contracts. Data to support rating and/or fee adjustments may be derived from other sources to include, but not limited to, operational awareness (daily oversight) activities; "For Cause" reviews (if any); and other outside agency reviews (OIG, GAO, DCAA, etc.), as needed.

The adjustment of a grade and/or reduction of otherwise earned fee will be determined by the severity of the performance failure and consideration of mitigating factors. DEAR 970.5215-3 Conditional Payment of Fee, Profit, and Other Incentives – Facility Management Contracts is the mechanism used for reduction of fee as it relates to performance failures related to safeguarding of classified information and to adequate protection of environment, health and safety. Its guidance can also serve as an example for reduction of fee in other areas.

The final Contractor performance-based grades for each Goal and fee earned determination will be contained within a year-end report, documenting the results from the DOE review. The report will identify areas where performance improvement is necessary and, if required, provide the basis for any performance-based rating and/or fee adjustments made from the otherwise earned rating/fee based on Performance Goal achievements.

Determining Award Term Eligibility:
Pursuant to Section F.2 "Award Term Incentive," the Contractor may also earn additional award term of 12 months during this evaluation period by meeting or exceeding performance expectations. Contractor eligibility for award term extensions is delineated in Section F.2(b) of the contract.

II. PERFORMANCE GOALS, OBJECTIVES & NOTABLE OUTCOMES

Background
The current performance-based management approach to oversight within DOE has established a new culture within the Department with emphasis on the customer-supplier partnership between DOE and the laboratory contractors. It has also placed a greater focus on mission performance, best business practices, cost management, and improved contractor accountability. Under the performance-based management system the DOE provides clear direction to the laboratories and develops annual performance plans (such as this one) to assess the contractors performance in meeting that direction in accordance with contract requirements. The DOE policy for implementing performance-based management includes the following guiding principles:

- Performance objectives are established in partnership with affected organizations and are directly aligned to the DOE strategic goals;
- Resource decisions and budget requests are tied to results; and
- Results are used for management information, establishing accountability, and driving long-term improvements.

The performance-based approach focuses the evaluation of the Contractor's performance against these Performance Goals. Progress against these Goals is measured through the use of a set of Objectives. The success of each Objective will be measured based on demonstrated performance by the laboratory, and on a set of notable outcomes that focus laboratory leadership on the specific items that are the most important initiatives and highest risk issues the laboratory must address during the year. These notable outcomes should be objective, measurable, and results-oriented to allow for a definitive determination of whether or not the specific outcome was achieved at the end of the year.

Performance Goals, Objectives, and Notable Outcomes
The following sections describe the Performance Goals, their supporting Objectives, and associated notable outcomes for FY 2018.

GOAL 1.0 Provide for Efficient and Effective Mission Accomplishment

The science and technology programs at the Laboratory produce high-quality, original, and creative results that advance science and technology; demonstrate sustained scientific progress and impact; receive appropriate external recognition of accomplishments; and contribute to overall research and development goals of the Department and its customers.

The weight of this Goal is TBD%.

The Provide for Efficient and Effective Mission Accomplishment Goal measures the overall effectiveness and performance of the Contractor in delivering science and technology results which contribute to and enhance the DOE's mission of protecting our national and economic security by providing world-class scientific research capacity and advancing scientific knowledge by supporting world-class, peer-reviewed scientific results, which are recognized by others.

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science, other cognizant HQ Program Offices, and other customers as identified below. The overall Goal score from each HQ Program Office and/or customer is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 1.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2018.

- Office of Advanced Scientific Computing Research (ASCR)
- Office of Basic Energy Sciences (BES)
- Office of Biological and Environmental Research (BER)
- Office of High Energy Physics (HEP)
- Office of Nuclear Physics (NP)
- Office of Defense Nuclear Nonproliferation (DNN)
- Office of Workforce Development for Teachers and Scientists (WDTS)
- Nuclear Regulatory Commission (NRC)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 1.2, below). The overall score earned is then compared to Table 1.3 to determine the overall letter grade for this Goal. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2018 as compared to the total cost for those remaining HQ Program Offices.

Objectives

1.1 Provide Science and Technology Results with Meaningful Impact on the Field

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- Performance of the Laboratory with respect to proposed research plans;
- Performance of the Laboratory with respect to community impact and peer review; and
- Performance of the Laboratory with respect to impact to DOE mission needs.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- Impact of publications on the field, as measured primarily by peer review;
- Impact of S&T results on the field, as measured primarily by peer review;
- Impact of S&T results outside the field indicating broader interest;
- Impact of S&T results on DOE or other customer mission(s);
- Successful stewardship of mission-relevant research areas;
- Delivery on proposed S&T plans;
- Significant awards (Nobel Prizes, R&D 100, FLC, etc.);
- Invited talks, citations, making high-quality data available to the scientific community; and
- Development of tools and techniques that become standards or widely-used in the scientific community.

Letter Grade	**Definition**
A+	In addition to satisfying the conditions for B+ • There are *significant research areas for which* the Laboratory *has exceeded the expectations* of the proposed research plans *in significant ways through creative, new, or unconventional methods that allow greater scientific reach than expected*. • S&T conducted at the Laboratory *has resolved one of the most critical questions in the field, or has changed the way the research community thinks about a particular field through paradigm shifting discoveries that would be considered the most influential discovery of the decade for that field*. • S&T conducted at the Laboratory *provided major advances that significantly accelerate* DOE or other customer mission(s).
A	In addition to satisfying the conditions for B+ • There are *important examples* where the Laboratory *exceeded the expectations* of the proposed research plans *in significant ways through creative, new, or unconventional methods that allow greater scientific reach than expected*. • *All area*s of S&T conducted at the Laboratory are of *exceptional or outstanding* merit and quality. • S&T conducted at the Laboratory has *significant positive impact* to DOE or other customer missions.
A-	In addition to satisfying the conditions for B+ • There are *important examples* where the Laboratory *exceeded the expectations* of the proposed research plans. • *Significant areas* of S&T conducted at the Laboratory are of *exceptional or outstanding* merit and quality. • S&T conducted at the Laboratory *significantly impact* DOE or other customer missions.
B+	The Laboratory has achieved each of the following objectives: • The Laboratory has successfully executed proposed research plans. • S&T conducted at the Laboratory are of *high* scientific merit and quality • S&T conducted at the Laboratory *advance* DOE or other customer missions.

Letter Grade	Definition
B	• The Laboratory has successfully executed proposed research plans. • S&T conducted at the Laboratory *advance* DOE or other customer missions. BUT the Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons: • S&T conducted at the Laboratory are *not uniformly of high* merit and quality OR *some areas of research, previously supported, have become uncompetitive* OR *the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.*
B-	The Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons: • The Laboratory has *failed to successfully execute* proposed research plans *but contingencies were in place such that no funding was or will be terminated*. OR S&T conducted at the Laboratory *does little to advance* DOE or other customer missions. • *Significant areas of* S&T conducted at the Laboratory are *not of high* merit and quality OR *some areas of research, previously supported, have become uncompetitive* OR *the Laboratory do not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.*
C	The Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons: • *In several significant aspects,* the Laboratory *failed to deliver* on proposed research plans *using available resources such that some funding was or will be terminated* OR S&T conducted at the Laboratory *failed to contribute to* DOE or other customer missions • *Significant areas of* S&T conducted at the Laboratory are *of poor* merit and quality OR *some areas of research, previously supported, have become uncompetitive* AND *the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities*.
D	The Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons: • *Multiple program elements at* the Laboratory *failed to deliver* on proposed research plans *using available resources such that significant funding was or will be terminated*. • *Multiple significant areas of* S&T conducted at the Laboratory are *of poor* merit and quality OR *some areas of research, previously supported, have become uncompetitive* AND *the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities*. • S&T conducted at the Laboratory *failed to contribute to* DOE or other customer missions.
F	The Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons: • *Multiple program elements at* the Laboratory *failed to deliver* on proposed research plans *using available resources resulting in total termination of funding.* • *Multiple significant areas of* S&T conducted at the Laboratory are *of poor* merit and quality OR *some areas of research, previously supported, have become uncompetitive* AND *the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities OR the Laboratory has been found to have engaged in gross scientific incompetence and/or scientific fraud.* • S&T conducted at the Laboratory *failed to contribute to* DOE or other customer missions.

1.2 Provide Quality Leadership in Science and Technology that Advances Community Goals and DOE Mission Goals.

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- Innovativeness / Novelty of research ideas put forward by the Laboratory;
- Extent to which Laboratory staff members take on substantive or formal leadership roles in their community;
- Extent to which Laboratory staff members take on formal leadership roles in DOE and SC activities; and
- Extent to which Laboratory staff members contribute thoughtful and thorough peer reviews and other research assessments as requested by DOE and SC.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.:

- Willingness to pursue novel approaches and/or demonstration of innovative solutions to problems;
- Willingness to take on high-risk/high payoff/long-term research problems, evidence that previous risky decisions by the PI/research staff have proved to be correct and are paying off;
- The uniqueness and challenge of science pursued, recognition for doing the best work in the field;
- Extent and quality of collaborative efforts;
- Staff members visible in leadership positions in the scientific community;
- Involvement in professional organizations, National Academies panels and workshops,
- Effectiveness in driving the direction and setting the priorities of the community in a research field; and
- Success in competition for resources.

Letter Grade	Definition
A+	In addition to satisfying the conditions for B+, the following conditions hold for ALL Laboratory staff: • Laboratory staff members have *leadership positions* in professional organizations AND *in National Academy or equivalent panels to discuss and determine further research directions*; • Laboratory staff members have *leadership positions* in DOE sponsored workshops and strategic planning activities, for example, Laboratory staff members chair or co-chair DOE-sponsored workshops and strategic planning activities. • The Laboratory program consistently produces and submits competitive proposals that challenge convention and open *significant new fields* for research that are well aligned with DOE mission needs and *the Laboratory has a strong recognized role in setting priorities and driving the direction in key research areas and are internationally recognized leaders in the field*. • Laboratory staff hold *leadership positions* in multi-institutional research collaborations.

Letter Grade	Definition
A	In addition to satisfying the conditions for B+ • Laboratory staff members have *leadership positions* in professional organizations AND *staff has contributing role in National Academy or equivalent panels to discuss further research directions*; • Laboratory staff members have *leadership positions* in DOE sponsored workshops and strategic planning activities. • The Laboratory program consistently produces and submits competitive proposals that challenge convention and open *significant new fields* for research that are well aligned with DOE mission needs and *the Laboratory has a strong recognized role in setting priorities and driving the direction in key research areas.* • Laboratory staff hold *leadership positions* in multi-institutional research collaborations.
A-	In addition to satisfying the conditions for B+ • Laboratory staff members have *leadership positions* in professional organizations OR *staff has contributing role in National Academy or equivalent panels to discuss further research directions*; • Laboratory staff members have *leadership positions* in DOE sponsored workshops and strategic planning activities. • The Laboratory program consistently submits competitive proposals that challenge convention and open *significant* new avenues for research that are well aligned with DOE mission needs. • Laboratory staff hold *leadership positions* in multi-institutional research collaborations.
B^+	The Laboratory has achieved each of the following objectives: • Laboratory staff members are *active participants* in professional organizations, committees, and activities, and take on leadership responsibilities commensurate with experience and expertise. • Laboratory staff members are *active participants* in DOE sponsored workshops and strategic planning activities. • Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. • The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE mission needs. • Laboratory staff are *active participants* in multi-institutional research collaborations
B	• Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. • The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE mission needs. BUT the Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons: • Although *regular participants* in professional organizations, committees, and activities, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.* • Although *regular participants* in DOE sponsored workshops and strategic planning activities, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.* • Although *active members of* multi-institutional research collaborations, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.*

Letter Grade	Definition
B-	• Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. BUT the Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons: • The Laboratory program submits competitive proposals *but these either lack innovation or are not well aligned with DOE mission needs*. • Laboratory staff are *infrequent participants* in professional organizations, committees, and activities, and *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.* • Laboratory staff are *infrequent participants* in DOE sponsored workshops and strategic planning activities, and *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.* • Although *active members of* multi-institutional research collaborations, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.*
C	The Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons: • Laboratory staff members *do not reliably* contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. • *Some areas of research, previously supported, are no longer competitive*. • Laboratory staff members are *infrequent participants* in professional organizations, committees, and activities, AND *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.* • Laboratory staff members are *infrequent participants* in DOE sponsored workshops and strategic planning activities, and *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.* • Although Laboratory staff members are *active members of* multi-institutional research collaborations, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.*
D	The Laboratory fails to meet the conditions for B+ because *the Laboratory staff are working on problems that are no longer at the forefront of science and are considered mundane*.
F	Review has found the Laboratory staff to be *guilty of gross scientific incompetence and/or scientific fraud*.

Notable Outcomes

- **BES:** Deliver impactful science to advance the integrated research objectives for the Center for Computational Design of Functional Strongly Correlated Materials and Theoretical Spectroscopy—as measured by the FY 2018 Progress Report. (Objective 1.1)

- **BES:** Deliver published papers that reflect the synergy of the combined instruments in OASIS. (Objective 1.1)

Program Office[2]	Letter Grade	Numerical Score	Weight	Overall Score
Office of Advanced Scientific Computing Research				
1.1 Impact			50%	
1.2 Leadership			50%	
			Overall ASCR Total	
Office of Basic Energy Sciences				
1.1 Impact			50%	
1.2 Leadership			50%	
			Overall BES Total	
Office of Biological and Environmental Research				
1.1 Impact			60%	
1.2 Leadership			40%	
			Overall BER Total	
Office of High Energy Physics				
1.1 Impact			50%	
1.2 Leadership			50%	
			Overall HEP Total	
Office of Nuclear Physics				
1.1 Impact			50%	
1.2 Leadership			50%	
			Overall NP Total	
Office of Defense Nuclear Nonproliferation				
1.1 Impact			67%	
1.2 Leadership			33%	
			Overall DNN Total	
Office of Workforce Development for Teachers and Scientists				
1.1 Impact			80%	
1.2 Leadership			20%	
			Overall NE Total	
Nuclear Regulatory Commission				
1.1 Impact			50%	
1.2 Leadership			50%	
			Overall NRC Total	

Table 1.1 – Program Performance Goal 1.0 Score Development

Program Office[2]	Letter Grade	Numerical Score	Funding Weight (cost)	Overall Weighted Score

[2] A complete listing of the Objectives weightings under the S&T Goals for the SC Programs and other customers is provided within Attachment I to this plan.

Program Office[2]	Letter Grade	Numerical Score	Funding Weight (cost)	Overall Weighted Score
Office of Advanced Scientific Computing Research				
Office of Basic Energy Sciences				
Office of Biological and Environmental Research				
Office of High Energy Physics				
Office of Nuclear Physics				
Office of Defense Nuclear Nonproliferation				
Office of Workforce Development for Teachers and Scientists				
Nuclear Regulatory Commission				
			Performance Goal 1.0 Total	

Table 1.2 – Overall Performance Goal 1.0 Score Development[3]

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 1.3 – Goal 1.0 Final Letter Grade

[3] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2018.

GOAL 2.0 Provide for Efficient and Effective Design, Fabrication, Construction and Operations of Research Facilities

The Laboratory provides effective and efficient strategic planning; fabrication, construction and/or operations of Laboratory research facilities; and are responsive to the user community.

The weight of this Goal is TBD%.

The Provide for Efficient and Effective Design, Fabrication, Construction and Operations of Research Facilities Goal shall measure the overall effectiveness and performance of the Contractor in planning for and delivering leading-edge specialty research and/or user facilities to ensure the required capabilities are present to meet today's and tomorrow's complex challenges. It also measures the Contractor's innovative operational and programmatic means for implementation of systems that ensures the availability, reliability, and efficiency of these facilities; and the appropriate balance between R&D and user support.

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science Program Office as identified below. The overall Goal score from each Program Office is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 2.1). Final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2018.

- Office of Basic Energy Sciences (BES)
- Office of Biological and Environmental Research (BER)
- Office of High Energy Physics (HEP)
- Office of Nuclear Physics (NP)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 2.2 below). The overall score earned is then compared to Table 2.3 to determine the overall letter grade for this Goal. Individual Program Office weightings for each of the Objectives identified below are provided within Table 2.1. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by DOE HQ Office of Science's (SC) Program Offices for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2018 as compared to the total cost for those remaining HQ Program Offices.

Objectives

2.1 Provide Effective Facility Design(s) as Required to Support Laboratory Programs (i.e., activities leading up to CD-2)

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The Laboratory's delivery of accurate and timely information required to carry out the critical decision and budget formulation process;
- The Laboratory's ability to meet the intent of DOE Order 413.3B Chg4 (MinChg), Program and Project Management for the Acquisition of Capital Assets or its successor version;
- The extent to which the Laboratory appropriately assesses risks and contingency needs; and
- The extent to which the Laboratory is effective in its unique management role and partnership with HQ.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- The quality of the scientific justification for proposed facilities resulting from preconceptual R&D;
- The technical quality of conceptual and preliminary designs and the credibility of the associated cost estimates
- The credibility of plans for the full life cycle of proposed facilities including financing options;
- The leveraging of existing facilities and capabilities of the DOE Laboratory complex in plans for proposed facilities; and
- The novelty and potential impact of new technologies embodied in proposed facilities.

Letter Grade	Definition
A+	In addition to satisfying all conditions for B+; the Laboratory *exceeds expectations* in *all* of these categories: • The Laboratory is recognized by the research community as the leader for making the science case for the acquisition; • The Laboratory takes the initiative to demonstrate and thoroughly document the potential for transformational scientific advancement. • Approaches proposed by the Laboratory are widely regarded as innovative, novel, comprehensive, and potentially cost-effective. • Reviews repeatedly confirm strong potential for scientific discovery in areas that support the Department's mission, and potential to change a discipline or research area's direction. • The Laboratory identifies, analyzes and champions novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing and these efforts result in significant cost estimate and/or risk reductions without loss or, or while enhancing capability.

Letter Grade	Definition
A	In addition to satisfying all conditions for B+, *all* of the following conditions are also met: • The Laboratory is recognized by the research community as a leader for making the science case for the acquisition; • The Laboratory takes the initiative to demonstrate the potential for revolutionary scientific advancement working in partnership with HQ • The Laboratory identifies, analyzes, and champions, to HQ and Site office, novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing.
A-	In addition to satisfying all conditions for B+, *all* of the following conditions are also met: • The approaches proposed by the Laboratory are widely regarded as innovative, novel, comprehensive, and potentially cost-effective • Reviews repeatedly confirm potential for scientific discovery in areas that support the Department's mission, and potential to change a discipline or research area's direction.
B+	The Laboratory has achieved each of the following objectives: • The Laboratory displays leadership and commitment in the development of quality analyses, preliminary designs, and related documentation to support the approval of the mission need (CD-0), the alternative selection and cost range (CD-1) and the performance baseline (CD-2). • Documentation requested by the programs is provided in a timely and thorough manner. • The Laboratory keeps DOE appraised of the status, near-term plans and the resolution of problems on a regular basis; anticipates emerging issues that could impact plans and takes the initiative to inform DOE of possible consequences. • The Laboratory solves problems and addresses issues to avoid adverse impacts to the project.
B	The Laboratory fails to meet expectations in one of the areas listed under B+.
B-	The Laboratory fails to meet expectations in several of the areas listed under B+
C	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the required analyses and documentation developed by the Laboratory are EITHER not innovative, OR reflect a lack of commitment and leadership.
D	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the Laboratory fails to provide a compelling justification for the acquisition.
F	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the approaches proposed by the Laboratory are based on fraudulent assumptions; the science case is weak to non-existent, and the business case is seriously flawed.

2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components (execution phase, post CD-2 to CD-4)

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The Laboratory's adherence to DOE Order 413.3B Chg4 (MinChg), Program and Project Management for the Acquisition of Capital Assets or its successor version;
- Successful fabrication of facility components by the Laboratory;
- The Laboratory's effectiveness in meeting construction schedule and budget;
- The quality of key Laboratory staff overseeing the project(s); and
- The extent to which the Laboratory maintains open, effective, and timely communication with HQ regarding issues and risks.

Letter Grade	Definition
A+	In addition to satisfying all conditions for A, • There is high confidence throughout the execution phase that the project will be completed *significantly* under budget and/or ahead of schedule while meeting or exceeding all performance baselines;
A	In addition to satisfying all conditions for B+, • The Laboratory has identified and implemented practices that would allow the project scope to be *significantly expanded* if such were desirable, without impact on baseline cost or schedule; • The Laboratory *always* provides *exemplary* project status reports on time to DOE and takes the initiative to communicate emerging problems or issues. • Reviews identify environment, safety and health practices to be *exemplary*. • There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline;
A-	In addition to satisfying all conditions for B+, • The Laboratory has identified practices that would allow for the project scope to be expanded if such were desirable, without impact on baseline cost or schedule; • Problems are identified and corrected by the Laboratory promptly, with no impact on scope, cost or schedule • The Laboratory provides *particularly useful* project status reports on time to DOE and regularly takes the initiative to communicate emerging problems or issues. • Reviews identify environment, safety and health practices to *exceed expectations*. • There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline;
B+	The Laboratory has achieved each of the following objectives • The project meets CD-2 performance measures; • The Laboratory provides sustained leadership and commitment to environment, safety and health; • Reviews regularly recognize the Laboratory for being proactive in the management of the execution phase of the project; • To a large extent, problems are identified and corrected by the Laboratory with little, or no impact on scope, cost or schedule; • DOE is kept informed of project status on a regular basis; reviews regularly indicate project is expected to meet its cost/schedule performance baseline.
B	The Laboratory provides sustained leadership and commitment to environment, safety and health BUT • The project fails to meet expectations in *one* of the remaining areas listed under B+.
B-	The Laboratory provides sustained leadership and commitment to environment, safety and health BUT • The project fails to meet expectations in *several* of the areas listed under B+
C	The Laboratory provides sustained leadership and commitment to environment, safety and health BUT The project fails to meet expectations in *several* of the areas listed under B+ AND • Reviews indicate project remains at risk of breaching its cost/schedule performance baseline; • Reports to DOE can vary in degree of completeness
D	The project fails to meet conditions for B+ in at least one of the following areas: • Reviews indicate project is likely to breach its cost/schedule performance baseline; • Laboratory commitment to environment, safety and health issues is inadequate; • Reports to DOE are largely incomplete; Laboratory commitment to the project has subsided.
F	The project fails to meet conditions for B+ in at least one of the following areas: • Laboratory falsifies data during project execution phase; • Shows disdain for executing the project within minimal standards for environment, safety or health, • Fails to keep DOE informed of project status; • Recent reviews indicate that the project is expected to breach its cost/schedule performance baseline.

2.3 Provide Efficient and Effective Operation of Facilities

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The availability, reliability, performance, and efficiency of Laboratory facility(ies);
- The degree to which the facility is optimally arranged to support the user community;
- The extent to which Laboratory R&D is conducted to develop/expand the capabilities of the facility(ies);
- The Laboratory's effectiveness in balancing resources between facility R&D and user support; and
- The quality of the process used to allocate facility time to users.

Letter Grade	**Definition**
A+	In addition to satisfying all conditions for B+; *all* of the following conditions are also met • Performance of the facility *exceeds* expectations as defined before the start of the year in all of these categories: cost of operations, users served, availability, and capability; • The schedule and the costs associated with the ramp-up to steady state operations are *significantly less* than planned and are acknowledged to be 'leadership caliber' by reviews; • Data on environment, safety, and health continues to be exemplary and widely regarded as among the 'best in class' • The Laboratory took extraordinary means to deliver an extraordinary result for the users and the program in the performance/ review period.
A	In addition to satisfying all conditions for B+; *all* of the following conditions are also met • Performance of the facility *exceeds* expectations as defined before the start of the year in most of these categories: cost of operations, users served, availability, and capability; • The schedule and the costs associated with the ramp-up to steady state operations are *less* than planned and are acknowledged to be 'leadership caliber' by reviews; • Data on environment, safety, and health continues to be *exemplary* and widely regarded as among the 'best in class.'
A-	In addition to satisfying all conditions for B+, *one* of the following conditions is met: • Performance of the facility *exceeds* expectations as defined before the start of the year in any of these categories: cost of operations, users served, availability, and capability; • The schedule and the costs associated with the ramp-up to steady state operations are *less* than planned and are acknowledged to be among the best by reviews;
B^+	The Laboratory has achieved each of the following objectives: • Performance of the facility *meets* expectations as defined before the start of the year in all of these categories: cost of operations, users served, availability, capability (for example, beam delivery, luminosity, peak performance, etc.), • The schedule and the costs associated with the ramp-up to steady state operations occur as planned; • Data on environment, safety, and health continues to be very good as compared with other projects in the DOE. • User surveys meet program expectations and reflect that the Laboratory is responsive to user needs.
B	The project fails to meet expectations in *one* of the areas listed under B+.
B-	The project fails to meet expectations in *more than one* of the areas listed under B+.
C	Performance of the facility fails to meet expectations in *many* of the areas listed under B+; for example, • The cost of operations is unexpectedly high and availability of the facility is unexpectedly low, the number of users is unexpectedly low, capability is well below expectations. • The facility operates at steady state, on cost and on schedule, but the reliability of performance is somewhat below planned values, **or** the facility operates at steady state, but the associated schedule and costs exceed planned values. • Commitment to environment, safety, and health is satisfactory.

Letter Grade	Definition
D	Performance of the facility fails to meet expectations in *many* of the areas listed under B+; for example, • The cost of operations is unexpectedly high and availability of the facility is unexpectedly low; capability is well below expectations. • The facility operates somewhat below steady state, on cost and on schedule, and the reliability of performance is somewhat below planned values, **or** the facility operates at steady state, but the associated schedule and costs exceed planned values. • Commitment to environment, safety, and health is inadequate.
F	• The facility fails to operate; the facility operates well below steady state **and/or** the reliability of the performance is well below planned values. • Laboratory commitment to environment, safety, and health issues is inadequate.

2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The extent to which the facility is being used to perform influential science;
- The Laboratory's efforts to take full advantage of the facility to generate impactful S&T results;
- The extent to which the facility is strengthened by a resident Laboratory research community that pushes the envelope of what the facility can do and/or are among the scientific leaders of the community;
- The Laboratory's ability to appropriately balance access by internal and external user communities; and
- The extent to which there is a healthy program of outreach to the scientific community.

Letter Grade	Definition
A+	In addition to meeting all measures under *A*, • The Laboratory took extraordinary means to deliver an extraordinary result for a new user community.
A	In addition to satisfying all conditions for B+; *all* of the following conditions are met • An *aggressive* outreach programs is in place and has been documented as attracting new communities to the facility; • Reviews consistently find that the facility capability or scope of research potential *significantly* exceeds expectations for example, due to newly discovered capabilities or exposure to new research communities; OR Reviews find that multiple disciplines are using the facility in new and novel ways that the facility is being used to pursue influential science.
A-	In addition to satisfying all conditions for B+, all of the following conditions are met • A *strong* outreach program is in place; • Reviews find that the facility capability or scope of research potential exceeds expectations for example, due to newly discovered capabilities or exposure to new research communities; OR Reviews document how multiple disciplines are using the facility in new and novel ways and/or that the facility is being used to pursue important science.

Letter Grade	Definition
B^+	The Laboratory has achieved each of the following objectives: • Reviews find / validate that the facility is being used for influential science; • The scope of facility capabilities is challenged and broadened by resident users; • The Laboratory effectively manages user allocations; • The Laboratory effectively maintains the facility to required performance standards (for example, runtime, luminosity, etc.) • A healthy outreach program is in place.
B	The Laboratory fails to meet expectations in *one* of the areas listed under B+
B-	The Laboratory fails to meet expectations in *several* of the areas listed under B+
C	The Laboratory fails to meet expectations in *many* of the areas listed under B+
D	Reviews find that there are few facility users, few of whom are using the facility in novel ways to produce impactful science; research base is very thin.
F	Laboratory staff does not possess capabilities to operate and/or use the facility adequately.

Notable Outcomes

- **HEP:** BNL shall deliver all protoDUNE TPC readout electronics to CERN having been tested standalone at BNL by May 1, 2018. (Objective 2.1)

- **NP:** Successfully obtain approval of Critical Decision – 1, Approve Alternative Selection and Cost Range, for the sPHENIX Major Item of Equipment. (Objective 2.1)

- **HEP:** BNL management should investigate the underlying cause of the sudden decrease in the LHC ATLAS Detector Upgrade project contingency funds and put in procedures to prevent a reoccurrence on that project or the other HEP supported projects at BNL. The lab should document the actions taken and submit to HEP by January 5, 2018. (Objective 2.2)

- **HEP:** By the end of March 2018, provide an operations plan that will support continued operation of the Accelerator Test Facility (ATF) in BNL building 820. The plan should include the impacts on ATF operations staff due to construction activities at ATF-II and should include the support required for operation of the Ultra-fast Electron Diffraction (UED) facility in BNL building 912. (Objective 2.3)

Program Office[4]	Letter Grade	Numerical Score	Weight	Overall Score

[4] A complete listing of the Objectives weightings under the S&T Goals for the SC Programs and other customers is provided within Attachment I to this plan.

Program Office[4]	Letter Grade	Numerical Score	Weight	Overall Score
Office of Basic Energy Sciences				
2.1 Provide Effective Facility Design(s)			0%	
2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components			0%	
2.3 Provide Efficient and Effective Operation of Facilities			45%	
2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities			55%	
			Overall BES Total	
Office of Biological and Environmental Research				
2.1 Provide Effective Facility Design(s)			0%	
2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components			0%	
2.3 Provide Efficient and Effective Operation of Facilities			90%	
2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities			10%	
			Overall BER Total	
Office of High Energy Physics				
2.1 Provide Effective Facility Design(s)			45%	
2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components			40%	
2.3 Provide Efficient and Effective Operation of Facilities			15%	
2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities			0%	
			Overall HEP Total	
Office of Nuclear Physics				
2.1 Provide Effective Facility Design(s)			0%	
2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components			0%	
2.3 Provide Efficient and Effective Operation of Facilities			85%	
2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities			15%	
			Overall NP Total	

Table 2.1 – Program Performance Goal 2.0 Score Development

Program Office	Letter Grade	Numerical Score	Funding Weight (cost)	Overall Weighted Score
Office of Basic Energy Sciences				
Office of Biological and Environmental Research				
Office of High Energy Physics				
Office of Nuclear Physics				
			Performance Goal 2.0 Total	

Table 2.2 – Overall Performance Goal 2.0 Score Development[5]

[5] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2018.

Total Score	**4.3-4.1**	**4.0-3.8**	**3.7-3.5**	**3.4-3.1**	**3.0-2.8**	**2.7-2.5**	**2.4-2.1**	**2.0-1.8**	**1.7-1.1**	**1.0-0.8**	**0.7-0**
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 2.3 – Goal 2.0 Final Letter Grade

GOAL 3.0 Provide Effective and Efficient Science and Technology Program Management

The Laboratory provides effective program vision and leadership; strategic planning and development of initiatives; recruits and retains a quality scientific workforce; and provides outstanding research processes, which improve research productivity.

The weight of this Goal is 25%.

The Provide Effective and Efficient Science and Technology Program Management Goal shall measure the Contractor's overall management in executing S&T programs. Dimensions of program management covered include: 1) providing key competencies to support research programs to include key staffing requirements; 2) providing quality research plans that take into account technical risks, identify actions to mitigate risks; and 3) maintaining effective communications with customers to include providing quality responses to customer needs.

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science, other cognizant HQ Program Offices, and other customers as identified below. The overall Goal score from each HQ Program Office and/or customer is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 3.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2018 provided by the Program Offices listed below.

- Office of Advanced Scientific Computing Research (ASCR)
- Office of Basic Energy Sciences (BES)
- Office of Biological and Environmental Research (BER)
- Office of High Energy Physics (HEP)
- Office of Nuclear Physics (NP)
- Office of Defense Nuclear Nonproliferation (DNN)
- Office of Workforce Development for Teachers and Scientists (WDTS)
- Nuclear Regulatory Commission (NRC)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 3.2 below). The overall score earned is then compared to Table 3.3 to determine the overall letter grade for this Goal. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2018 as compared to the total cost for those remaining HQ Program Offices.

Objectives

3.1 Provide Effective and Efficient Strategic Planning and Stewardship of Scientific Capabilities and Program Vision

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The quality of the Laboratory's strategic plan;
- The extent to which the Laboratory shows strategic vision for research
- The extent to which programs of research take advantage of Laboratory capabilities—research programs are more than the sum of their individual project parts;
- The extent to which the Laboratory undertakes research for which it is uniquely qualified;
- The extent to which lab plans are aligned with DOE mission goals;
- The extent to which the Laboratory programs are balanced between high-/low- risk research for a sustainable program; and
- The extent to which the Laboratory is able to retain and recruit staff for a sustainable program

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- Articulation of scientific vision;
- Development and maintenance of core competencies,
- Ability to attract and retain highly qualified staff;
- Efficiency and effectiveness of joint planning (e.g., workshops) with outside community;
- Creativity and robustness of ideas for new facilities and research programs; and
- Willingness to take on high-risk/high payoff/long-term research problems, evidence that the Laboratory "guessed right" in that previous risky decisions proved to be correct and are paying off.
- The depth and breadth of Laboratory research portfolio and its potential for growth.

Letter Grade	Definition
A+	In addition to satisfying the conditions for B+, the execution of the Laboratory's strategic plan has enabled the Laboratory to achieve each of the following: • *Most* of the Laboratory's core competencies are recognized as world leading; • The Laboratory has attracted and retained world-leading scientists in *most* programs; • There is evidence that previous decisions to pursue high-risk/high-payoff research proved to be correct and are paying off; • The Laboratory has succeeded in developing new core competencies of *outstanding* quality in areas both exploratory, high-risk research and research that is vital to the DOE/SC missions;
A	In addition to satisfying the conditions for B+, the execution of the Laboratory's strategic plan has enabled the Laboratory to achieve the following: • *Several* of the Laboratory's core competencies are recognized as world leading; • The Laboratory has attracted and retained world-leading scientists in *several* programs; • There is evidence that previous decisions to pursue high-risk/high-payoff research proved to be correct and are paying off • The Laboratory has succeeded in developing *new* core competencies of *high* quality in areas both exploratory, high-risk research and research that is vital to the DOE/SC missions

Letter Grade	Definition
A-	In addition to satisfying the conditions for B+, the execution of the Laboratory's strategic plan has enabled the Laboratory to achieve at least one of the following: • At least one of the Laboratory's core competencies is recognized as *world-leading*; • The Laboratory has attracted and retained *world-leading* scientists in one or more programs; • The Laboratory has a coherent plan for addressing future workforce challenges.
B+	The execution of the Laboratory's strategic plan has enabled the Laboratory to achieve each of the following objectives: • The Laboratory has articulated a coherent and compelling strategic plan that has been developed with input from external research communities and headquarters guidance, which, where appropriate, includes a coherent plan for building smaller research programs into new core competencies; and reallocates resources away from less effective programs. • The Laboratory has demonstrated the ability to attract and retain professional scientific staff in support of its strategic vision. • The portfolio of Laboratory research balances the needs for both high-risk/ high-payoff research and stewardship of mission-critical research. • The Laboratory's research portfolio takes advantage of unique capabilities at the Laboratory. • The Laboratory's research portfolio includes activities for which the Laboratory is uniquely capable.
B	The Laboratory fails to satisfy one of the conditions for B+; for example • The Laboratory's strategic plan is only *partially* coherent and is not entirely well-connected with external communities; • The portfolio of Laboratory research does *not* appropriately balance high-risk/ high-payoff research and stewardship of mission-critical research; • The Laboratory has developed and maintained *some, but not all*, of its core competencies. • The plan to attract and retain professional scientific staff is *lacking* strategic vision.
B-	The Laboratory fails to satisfy *several* of the conditions for B+, including at least one of the following: • Weak programmatic vision insufficiently connected with external communities; • Development and maintenance of only a few core competencies • little attention to maintaining the correct balance between high-risk and mission-critical research; • Inability to attract and retain talented scientists in some programs.
C	The Laboratory fails to satisfy *several* of the conditions for B+, including at least one of the following reasons: • The Laboratory's strategic plan lacks strategic vision and lacks appropriate coordination with appropriate stakeholders including external research groups. • The Laboratory's strategic plan does not provide for sufficient maintenance of core competencies • Plan to attract and retain professional scientific staff is unlikely to be successful or does not focus on strategic capabilities.
D	The Laboratory fails to satisfy *several* of the conditions for B+, and specifically • The Laboratory has demonstrated little effort in developing a strategic plan. • The Laboratory has done little to develop and maintain core competencies • The Laboratory has had minimal success in attracting and retaining professional scientific staff.
F	The Laboratory has: • Made limited or ineffective attempts to develop a strategic plan; • Not demonstrated the ability to develop and maintain core competencies, has failed to propose high-risk/high-reward research and has failed to steward mission-critical areas; • Failed to attract even reasonably competent scientists and technical staff.

3.2 Provide Effective and Efficient Science and Technology Project/Program/Facilities Management

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The Laboratory's management of R&D programs and facilities according to proposed plans;
- The extent to which the Laboratory's management of projects/programs/facilities supports the Laboratory strategic plan
- Adequacy of the Laboratory's consideration of technical risks;
- The extent to which the Laboratory is successful in identifying/avoiding technical problems;
- Effectiveness in leveraging across multiple areas of research and between research and facility capabilities;
- The extent to which the Laboratory demonstrates a willingness to make tough decisions (i.e., cut programs with sub-critical mass of expertise, divert resources to more promising areas, etc.); and
- The use of LDRD and other Laboratory investments and overhead funds to improve the competitiveness of the Laboratory.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- Laboratory plans that are reviewed by experts outside of lab management and/or include broadly-based input from within the Laboratory.

Letter Grade	Definition
A+	In addition to meeting the all expectations under A, • The Laboratory has taken extraordinary measures to deliver an extraordinary result of critical importance to DOE missions, which could include the delivery of a critical technology or insight in response to a National emergency
A	In addition to satisfying the conditions for B+, • The Laboratory's implementation of project/program/facility plans has led directly to effective R&D programs/facility operations that exceed program expectations in *several* programmatic areas. Examples are listed under A-.

Letter Grade	Definition
A-	In addition to satisfying the conditions for B+, • The Laboratory's implementation of project/program/facility plans has led directly to effective R&D programs/facility operations that exceed program expectations in *more than one* programmatic area. Examples of performance that exceeds expectations include: • The Laboratory's implementation of project/program/facility plans has led directly to significant cost savings and/or significantly higher productivity than expected; • Project/program/facility plans prove to be robust against changing scientific and fiscal conditions through contingency planning; • The Laboratory has demonstrated creativity and forceful leadership in development and/or proactive management of its project/program/facility plans to reduce or eliminate risk; • The Laboratory's proposals for new initiatives are funded through reallocation of resources from less effective programs. • Research plans and management actions are proactive, not reactive, as evidenced by making hard decisions and taking strong actions; and • Management is prepared for budget fluctuations and changes in DOE program priorities – multiple contingencies are planned for; and • LDRD investments, overhead funds, and other Laboratory funds are used to strengthen lab plans and fill critical gaps in the Laboratory portfolio enabling it to respond to future DOE initiatives and/or national emergencies;
B^+	The Laboratory has achieved each of the following objectives: • Project/program/facility plans exist for all major projects/programs/facilities. • Project/program/facility plans are consistent with known budgets, are based on reasonable assessments of technical risk, are well-aligned with DOE interests, provide sufficient flexibility to respond to unforeseen directives and opportunities, and effectively leverage other Laboratory resources and expertise. • The Laboratory has implemented the project/program/facility plans and has effective methods of tracking progress. • The Laboratory demonstrates willingness to make tough decisions (i.e., cut programs with sub-critical mass of expertise, divert resources to more promising areas, etc.). • The Laboratory's implementation of project/program/facility plans has led directly to effective R&D programs/facility operations. • LDRD investments and other overhead funds are managed appropriately.
B	• Project/program/facility plans exist for all major projects/programs/facilities. • The Laboratory has implemented the project/program/facility plans. BUT the Laboratory fails to meet *at least one of* the conditions for B+.
B-	• Project/program/facility plans exist for all major projects/programs/facilities. • The Laboratory has implemented the project/program/facility plans. BUT the Laboratory fails to meet *several of* the conditions for B+.
C	• Project/program/facility plans exist for most major projects/programs/facilities. BUT the Laboratory has failed to implement the project/program/facility plans AND the Laboratory fails to meet *several of* the conditions for B+.
D	• Project/program/facility plans do not exist for a significant fraction of the Laboratory's major projects/programs/facilities; OR • Significant work at the Laboratory is not in alignment with the project/program/facility plans
F	The Laboratory has failed to conduct project/program/facility planning activities.

3.3 Provide Efficient and Effective Communications and Responsiveness to Headquarters Needs

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The quality, accuracy and timeliness of the Laboratory's response to customer requests for information;
- The extent to which the Laboratory provides point-of-contact resources and maintains effective internal communications hierarchies to facilitate efficient determination of the appropriate point-of-contact for a given issue or program element;
- The effectiveness of the Laboratory's communications and depth of responsiveness under extraordinary or critical circumstances; and
- The effectiveness of Laboratory management in accentuating the importance of communication and responsiveness.

Letter Grade	Definition
A+	In addition to meeting the all expectations under A, • The Laboratory's effective communication and extraordinary responsiveness in the face of extreme situations or a national emergency had a materially positive impact on the outcome of the event and/or DOE mission objectives
A	In addition to satisfying the conditions for B+, the Laboratory also meets all of the following: • Laboratory management has instilled a culture throughout the lab that emphasizes good communication practices; • Communication channels are well-defined and information is effectively conveyed; • Responses to HQ requests for information from all Laboratory representatives are prompt, thorough, correct and succinct; important or critical information is delivered in real-time; • Laboratory representatives *always* initiate a communication with HQ on emerging Laboratory issues; headquarters is never surprised to learn of emerging Laboratory issues through outside channels.
A-	In addition to satisfying the conditions for B+, • Laboratory management has instilled a culture throughout the lab that emphasizes good communication practices; and • Responses to requests for information are prompt, thorough, and economical/succinct at all levels of interaction; • Laboratory representatives *often* initiate communication with HQ on emerging Laboratory issues; • under critical circumstances, essential information is delivered in real-time
B^+	The Laboratory has achieved each of the following objectives: • Staff throughout the Laboratory organization engage in good communication practices; • Responses to requests for information are prompt and thorough; • The accuracy and integrity of the information provided is never in doubt; • Up-to-date point-of-contact information is widely available for all programmatic areas; • Headquarters is always and promptly informed of both positive and negative events at the Laboratory
B	The Laboratory failed to meet the conditions for B+ *in a few instance*s
B-	The Laboratory fails to meet the conditions for B+ for *one* of the following reasons: • Responses to requests for information do not provide the minimum requirements to meet HQ needs; While the integrity of the information provided is never in doubt, its accuracy sometimes is; • Laboratory representatives do not take the initiative to alert HQ to emerging Laboratory issues.

Letter Grade	Definition
C	The Laboratory fails to meet the conditions for B+ for *one or more* of the following reasons: • Responses to requests for information frequently fail to provide the minimum requirements to meet HQ needs • The Laboratory used outside channels or circumvented HQ in conveying critical information; • The integrity and/or accuracy of information provided is sometimes in doubt; • Laboratory management fails to demonstrate that its employees are held accountable for ensuring effective communication and responsiveness; • Laboratory representatives failed to alert HQ to emerging Laboratory issues.
D	The Laboratory fails to meet the conditions for B+ for one of the following reasons: • Laboratory staff are generally well-intentioned in communication but consistently ineffective and/or incompetent; • The Laboratory management fails to emphasize the importance of effective communication and responsiveness
F	The Laboratory fails to meet the conditions for B+ for one of the following reasons • Laboratory staff are openly hostile and/or non-responsive to requests for information – emails and phone calls are consistently ignored; • Responses to requests for information are consistently incorrect, inaccurate or fraudulent – information is not organized, is incomplete, or is fabricated.

Notable Outcomes

- **BES:** Develop a strategic plan for all elements of the chemical sciences, geosciences, and biosciences research portfolio supported by BES-CSGB. The plan should articulate a vision for BES-CSGB research and its contribution to the laboratory strategy, how an integrated portfolio is managed across BNL organizations, the laboratory's efforts in succession planning required to sustain healthy programs, and the prioritization of areas for future emphasis, recognizing the evolving portfolio and budget. (Objective 3.1)
- **HEP:** Begin implementing the consolidation and redirection plans developed during the Laboratory Optimization process, smoothing the transition to a full implementation with the FY 2019 Field Work Proposal submission. (Objective 3.2)

Program Office[6]	Letter Grade	Numerical Score	Weight	Overall Score
Office of Advanced Scientific Computing Research				
3.1 Effective and Efficient Strategic Planning and Stewardship			30%	
3.2 Project/Program /Facilities Management			40%	
3.3 Communications and Responsiveness			30%	
			Overall ASCR Total	
Office of Basic Energy Sciences				
3.1 Effective and Efficient Strategic Planning and Stewardship			40%	
3.2 Project/Program /Facilities Management			30%	
3.3 Communications and Responsiveness			30%	
			Overall BES Total	

[6] A complete listing of the Objectives weightings under the S&T Goals for the SC Programs and other customers is provided within Attachment I to this plan.

Office of Biological and Environmental Research				
3.1 Effective and Efficient Strategic Planning and Stewardship			20%	
3.2 Project/Program /Facilities Management			30%	
3.3 Communications and Responsiveness			50%	
			Overall BER Total	
Office of High Energy Physics				
3.1 Effective and Efficient Strategic Planning and Stewardship			30%	
3.2 Project/Program /Facilities Management			45%	
3.3 Communications and Responsiveness			25%	
			Overall HEP Total	
Office of Nuclear Physics				
3.1 Effective and Efficient Strategic Planning and Stewardship			40%	
3.2 Project/Program /Facilities Management			35%	
3.3 Communications and Responsiveness			25%	
			Overall NP Total	
Office of Defense Nuclear Nonproliferation				
3.1 Effective and Efficient Strategic Planning and Stewardship			40%	
3.2 Project/Program /Facilities Management			35%	
3.3 Communications and Responsiveness			25%	
			Overall DNN Total	
Office of Workforce Development for Teachers and Scientists				
3.1 Effective and Efficient Strategic Planning and Stewardship			20%	
3.2 Project/Program /Facilities Management			50%	
3.3 Communications and Responsiveness			30%	
			Overall NE Total	
Nuclear Regulatory Commission				
3.1 Effective and Efficient Strategic Planning and Stewardship			34%	
3.2 Project/Program /Facilities Management			33%	
3.3 Communications and Responsiveness			33%	
			Overall NRC Total	

Table 3.1 – Program Performance Goal 3.0 Score Development

HQ Program Office	Letter Grade	Numerical Score	Funding Weight (cost)	Overall Weighted Score
Office of Advanced Scientific Computing Research				
Office of Basic Energy Sciences				
Office of Biological and Environmental Research				
Office of High Energy Physics				
Office of Nuclear Physics				
Office of Defense Nuclear Nonproliferation				
Office of Nuclear Energy				
Nuclear Regulatory Commission				
			Performance Goal 3.0 Total	

Table 3.2 – Overall Performance Goal 3.0 Score Development[7]

Total Score	**4.3-4.1**	**4.0-3.8**	**3.7-3.5**	**3.4-3.1**	**3.0-2.8**	**2.7-2.5**	**2.4-2.1**	**2.0-1.8**	**1.7-1.1**	**1.0-0.8**	**0.7-0**
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 3.3 – Goal 3.0 Final Letter Grade

[7]. The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2018.

Attachment I

Program Office Goal & Objective Weightings
Office of Science

	ASCR	BER	BES	HEP	NP	WDTS
	Weight	**Weight**	**Weight**	**Weight**	**Weight**	**Weight**
Goal 1.0 Mission Accomplishment						
1.1 Impact	50%	60%	50%	50%	50%	80%
1.2 Leadership	50%	40%	50%	50%	50%	20%
Goal 2.0 Design, Fabrication, Construction and Operation of Facilities						
2.1 Design of Facility (the initiation phase and the definition phase, i.e. activities leading up to CD-2)	0%	0%	0%	45%	0%	0%
2.2 Construction of Facility / Fabrication of Components (execution phase, Post CD-2 to CD-4)	0%	0%	0%	40%	0%	0%
2.3 Operation of Facility	0%	90%	45%	15%	85%	0%
2.4 Utilization of Facility to Grow and Support Lab's Research Base and External User Community	0%	10%	55%	0%	15%	0%
Goal 3.0 Program Management						
3.1 Effective and Efficient Strategic Planning and Stewardship	30%	20%	40%	30%	40%	20%
3.2 Project/Program/Facilities Management	40%	30%	30%	45%	35%	50%
3.3 Communications and Responsiveness	30%	50%	30%	25%	25%	30%

Attachment I

Program Office Goal & Objective Weightings
All Other Customers[8]

	DNN Weight	NRC Weight
Goal 1.0 Mission Accomplishment		
1.1 Impact	67%	50%
1.2 Leadership	33%	50%
Goal 3.0 Program Management		
3.1 Effective and Efficient Strategic Planning and Stewardship	40%	34%
3.2 Project/Program/Facilities Management	35%	33%
3.3 Communications and Responsiveness	25%	33%

[8] Objective weightings indicated for non-science customers are reflective of FY 2018 weightings and will be updated as those customers provide their weightings. Final Objective weightings will be incorporated, as appropriate, once they are determined by each HQ Program Office and provided to the Site Office. Should a HQ Program Office fail to provide final Objective weightings before the end of the first quarter FY 2018 the preliminary weightings provided shall become final.

GOAL 4.0 Provide Sound and Competent Leadership and Stewardship of the Laboratory

This Goal evaluates the Contractor's Leadership capabilities in leading the direction of the overall Laboratory, the responsiveness of the Contractor to issues and opportunities for continuous improvement, and corporate office involvement/commitment to the overall success of the Laboratory.

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in overall Contractor Leadership's planning for, integration of, responsiveness to and support for the overall success of the Laboratory. This may include, but is not limited to, the quality of Laboratory Vision/Mission strategic planning documentation and progress in realizing the Laboratory vision/mission; the ability to establish and maintain long-term partnerships/relationships with the scientific and local communities as well as private industry that advance, expand, and benefit the ongoing Laboratory mission(s) and/or provide new opportunities/capabilities; implementation of a robust assurance system; Laboratory and Corporate Office Leadership's ability to instill responsibility and accountability down and through the entire organization; overall effectiveness of communications with DOE; understanding, management and allocation of the costs of doing business at the Laboratory commensurate with associated risks and benefits; utilization of corporate resources to establish joint appointments or other programs/projects/activities to strengthen the Laboratory; and advancing excellence in stakeholder relations to include good corporate citizenship within the local community.

Objectives:

4.1 Leadership and Stewardship of the Laboratory

By which we mean: The performance of the laboratory's senior management team as demonstrated by their ability to do such things as:

- Define an exciting yet realistic scientific vision for the future of the laboratory,
- Make progress in realizing the vision for the laboratory,
- Establish and maintain long-term partnerships/relationships that maintain appropriate relations with the scientific and local communities, and
- Develop and leverage appropriate relations with private industry to the benefit of the laboratory and the U.S. taxpayer.

Letter Grade	Definition
A+	The Senior Leadership of the laboratory has made outstanding progress (on an order of magnitude scale) over the previous year in realizing their vision for the laboratory, and has had a demonstrable impact on the Department and the Nation. Strategic plans are of outstanding quality, have been externally recognized and referenced for their excellence, and have an impact on the vision/plans of other national laboratories. The Senior leadership of the laboratory may have been faced very difficult challenges and plotted, successfully, its own course through the difficulty, with minimal hand-holding by the Department. Partners in the scientific and local communities applaud the laboratory in national fora, and the Department is strengthened by this.
A	The Senior Leadership of the laboratory has made significant progress over the previous year in realizing their vision for the laboratory, and has through this has had a demonstrable positive impact on the Office of Science and the Department. Strategic plans are of outstanding quality, and recognize and reflect the vision/plans of other national laboratories. Faced with difficult challenges, actions were taken by the Senior leadership of the laboratory to redirect laboratory activities to enhance the long-term future of the laboratory. Partners in the scientific and local communities applaud the laboratory in national fora, and the Department is strengthened by this.

Letter Grade	Definition
A-	The laboratory senior management performs better than expected (B+ grade) in these areas.
B+	The Senior Leadership of the laboratory has made significant progress over the previous year in realizing their vision for the laboratory. Strategic plans present long range goals that are both exciting and realistic. Decisions and actions taken by the lab leadership align work, facilities, equipment and technical capabilities with the laboratory vision and plan. The Senior leadership of the laboratory faced difficult challenges and successfully plotted its own course through the difficulty, with help from the Department. Partners in the scientific and local communities are supportive of the laboratory.
B	The Senior Leadership of the laboratory has made little progress over the previous year in realizing their vision for the laboratory. Strategic plans present long range goals that are exciting and realistic; however DOE is not fully confident that the laboratory is taking the actions necessary for the goals to be achieved. The Laboratory is not fully engaged with its partners/relationships in the scientific and local communities to maximize the potential benefits these relations have for the laboratory.
C	The Senior Leadership of the laboratory has made no progress over the previous year in realizing their vision for the laboratory or aligning work, facilities, equipment and technical capabilities with the laboratory vision and plan. Strategic plans present long range goals that are either unexciting or unrealistic. Business plans exist, but they are not linked to the strategic plan and do not inspire DOE's confidence that the strategic goals will be achieved. Partnerships with the scientific and local communities with potential to advance the laboratory exist, but they may not always be consistent with the mission of or vision for the laboratory. Affected communities and stakeholders are mostly supportive of the laboratory and aligned with the management's vision for the laboratory.
D	The Senior Leadership of the laboratory has made no progress or has back-slid over the previous year in realizing their vision for the laboratory or in aligning work, facilities, equipment and technical capabilities with the laboratory vision and plan. Strategic plans present long range goals that are neither exciting nor realistic. Partnerships that may advance the Laboratory towards strategic goals are inappropriate, unidentified, or unlikely. Affected communities and stakeholders are not adequately engaged with the laboratory and indicate non-alignment with DOE priorities.
F	The Senior Leadership of the laboratory has made no progress or has back-slid over the previous year in realizing their vision for the laboratory or in or aligning work, facilities, equipment and technical capabilities with the laboratory vision and plan. Strategic plans present long range goals that are not aligned with DOE priorities or the mission of the laboratory. Partnerships that may advance the Laboratory towards strategic goals are inappropriate, unidentified, and unlikely, and/or the senior management team does not demonstrate a concerted effort to develop, leverage, and maintain relations with the scientific and local communities to assist the laboratory in achieving a successful future. Affected communities and stakeholders are openly non-supportive of the laboratory and DOE priorities.

4.2 Management and Operation of the Laboratory

By which we mean: The performance of the laboratory's senior management team as demonstrated by their ability to do such things as:

- Implement a robust contractor assurance system,
- Understand the costs of doing business at the laboratory and prioritize the management and allocation of these costs commensurate with their associated risks and benefits,
- Instill a culture of accountability and responsibility down and through the entire organization;
- Ensure good and timely communication between the laboratory and SC headquarters and the Site Office so that DOE can deal effectively with both internal and external constituencies.

Letter Grade	Definition
A+	The laboratory has a nationally or internationally recognized contractor assurance system in place that integrates internal and external (corporate) evaluation processes to evaluate risk, and is working to help others internal and external to the Department establish similarly outstanding practices. The laboratory understands the drivers of cost at their lab, and are prioritizing and managing these costs commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Laboratory management and processes reflect a sense of accountability and responsibility with is evident down and through the entire organization. Communication between the laboratory and SC headquarters and the Site Office is such that all the national laboratories and the Department as a whole benefits.
A	The laboratory has improved dramatically in the last year in all of the following: building a robust and transparent contractor assurance system that integrates internal and external (corporate) evaluation processes to evaluate risk; demonstrating the use of this system in making decisions that are aligned with the laboratory's vision and strategic plan; understanding the drivers of cost at their lab, and prioritizing and managing these costs consistent with their associated risks and benefits to the laboratory and the SC laboratory system; demonstrating laboratory management and processes reflect a sense of accountability and responsibility with is evident down and through the entire organization; assuring communication between the laboratory and SC headquarters that is beneficial to both the lab and SC.
A-	The laboratory senior management performs better than expected (B+ grade) in these areas.
B+	The laboratory has a robust and transparent contractor assurance system in place that integrates internal and external (corporate) evaluation processes to evaluate risk. The laboratory can demonstrate use of this system in making decisions that are aligned with the laboratory's vision and strategic plan. The laboratory understands the drivers of cost at their lab, and are prioritizing and managing these costs commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Laboratory management and processes reflect a sense of accountability and responsibility with is evident down and through the entire organization. Communication between the laboratory and SC headquarters and the Site Office is such that there are no surprises or embarrassments.
B	The laboratory has a contractor assurance system in place but further improvements are necessary, or the link between the CAS and the laboratory's decision-making processes are not evident. The laboratory understands the drivers of cost at their lab, but they are not prioritizing and managing these costs as well as they should to be commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Laboratory management and processes reflect a sense of accountability and responsibility with is mostly evident down and through the entire organization. Communication between the laboratory and SC headquarters and the Site Office is such that there are no significant surprises or embarrassments.
C	The laboratory lacks a robust and transparent contractor assurance system in place that integrates internal and external (corporate) evaluation processes to evaluate risk. The laboratory cannot demonstrate use of this system in making decisions that are aligned with the laboratory's vision and strategic plan. The laboratory does not fully understand the drivers of cost at their lab, and thus are not prioritizing and managing these costs as well as they should to be commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Communication between the laboratory and SC headquarters and the Site Office is such that there has been at least one significant surprise or embarrassment.
D	The laboratory lacks a contractor assurance system, doesn't understand the drivers of cost at their lab, and is not prioritizing and managing costs. SC HQ must intercede in management decisions. Poor communication between the laboratory and SC headquarters and the Site Office has resulted in more than one significant surprise or embarrassment.
F	Lack of management by the laboratory's senior management has put the future of the laboratory at risk, or has significantly hurt the reputation of the Office of Science.

4.3 Contractor Value-added

***By which we mean*:** the additional benefits that accrue to the laboratory and the Department of Energy by virtue of having this particular M&O contractor in place. Included here, typically, are things over which the laboratory leadership does not have immediate authority, such as:

- Corporate involvement/contributions to deal with challenges at the laboratory;
- Using corporate resources to establish joint appointments or other programs/projects/activities that strengthen the lab, and
- Providing other contributions to the laboratory that that enable the lab to do things that are good for the laboratory and its community and that DOE cannot supply.

Letter Grade	Definition
A+	The laboratory has been transformed as a result of the many, substantial, additional benefits that accrue to the lab as a result of this contractor's operation of the laboratory.
A	Over the past year, the laboratory has become demonstrably stronger, better and more attractive as a place of employment as a result of the many, substantial, additional benefits that accrue to the lab as a result of this contractor's operation of the laboratory.
A-	The laboratory senior management performs better than expected (B+ grade) in these areas.
B+	The laboratory enjoys additional benefits above and beyond those associated with managing the laboratory's activities that accrue as a result of this contractor's operation of the laboratory.
B	The laboratory enjoys few additional benefits that accrue as a result of this contractor's operation of the laboratory; help by the contractor is needed to strengthen the laboratory.
C	The laboratory enjoys few additional benefits that accrue as a result of this contractor's operation of the laboratory; the contractor seems unable to help the laboratory.
D	The laboratory enjoys few additional benefits that accrue as a result of this contractor's operation of the laboratory; the contractor's efforts are inconsistent with the interests of the laboratory and the Department.
F	The laboratory enjoys no additional benefits that accrue as a result of this contractor's operation of the laboratory; the contractor's efforts are counter-productive to the interests of the Department.

Notable Outcomes

- **SC/BHSO:** BSA will coordinate with NASA to develop and deploy a governance model that ensures efficient and effective operations for the NASA Space Radiation Laboratory (NSRL) program. (Objective 4.2)
- **SC/BHSO:** By June 30, 2018, develop a Long-Term Stewardship program strategy to ensure regulatory commitments, beyond fiscal year 2018, associated with the Interagency Agreement for clean-up of BNL are achieved. (Objective 4.2)
- **SC/BHSO:** During fiscal year 2018, BSA will continue to be active participants in the Contract Reform Initiative and will collaborate with the other National Laboratories that are also undergoing contract reform to identify and demonstrate possible synergies. (Objective 4.2)

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 4.0 – Provide Sound and Competent Leadership and Stewardship of the Laboratory				
4.1 Leadership and Stewardship of the Laboratory			33%	
4.2 Management and Operation of the Laboratory			33%	
4.3 Contractor Value-Added			34%	
Performance Goal 4.0 Total				

Table 4.1 – Performance Goal 4.0 Score Development

Total Score	**4.3-4.1**	**4.0-3.8**	**3.7-3.5**	**3.4-3.1**	**3.0-2.8**	**2.7-2.5**	**2.4-2.1**	**2.0-1.8**	**1.7-1.1**	**1.0-0.8**	**0.7-0**
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 4.2 – Goal 4.0 Final Letter Grade

GOAL 5.0 Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health, and Environmental Protection

The weight of this Goal is 30%.

This Goal evaluates the Contractor's overall success in deploying, implementing, and improving integrated ES&H systems that efficiently and effectively support the mission(s) of the Laboratory.

5.1 Provide an Efficient and Effective Worker Health and Safety Program
5.2 Provide Efficient and Effective Environmental Management System

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in protecting workers, the public, and the environment. This may include, but is not limited to, minimizing the occurrence of environment, safety and health (ESH) incidents; effectiveness of the Integrated Safety Management (ISM) system; effectiveness of work planning, feedback, and improvement processes; the strength of the safety culture throughout the Laboratory; the effective development, implementation and maintenance of an efficient and effective Environmental Management system; and the effectiveness of responses to identified hazards and/or incidents.

Notable Outcomes

- **BHSO:** By July 31, 2018, develop a risk based multi-year strategy with an implementation schedule to improve the establishment and review of machine-specific Lock Out/Tag Out (LOTO) procedures at BNL. The developed strategy should be commenced prior to the end of fiscal year 2018. (Objective 5.1)

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 5.0 - Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health, and Environmental Protection.				
5.1 Provide an Efficient and Effective Worker Health and Safety Program			60%	
5.2 Provide an Efficient and Effective Environmental Management System			40%	
Performance Goal 5.0 Total				

Table 5.1 – Performance Goal 5.0 Score Development

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 5.2 – Goal 5.0 Final Letter Grade

GOAL 6.0 Deliver Efficient, Effective, and Responsive Business Systems and Resources that Enable the Successful Achievement of the Laboratory Mission(s)

The weight of this Goal is 30%.

This Goal evaluates the Contractor's overall success in deploying, implementing, and improving integrated business systems that efficiently and effectively support the mission(s) of the Laboratory.

6.1 Provide an Efficient, Effective, and Responsive Financial Management System
6.2 Provide an Efficient, Effective, and Responsive Acquisition Management System and Property Management System
6.3 Provide an Efficient, Effective, and Responsive Human Resources Management System and Diversity Program
6.4 Provide Efficient, Effective, and Responsive Contractor Assurance Systems, including Internal Audit and Quality
6.5 Demonstrate Effective Transfer of Knowledge and Technology and the Commercialization of Intellectual Assets

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in the development, deployment and integration of foundational program (e.g., Contractor Assurance, Quality, Financial Management, Acquisition Management, Property Management, and Human Resource Management) systems across the Laboratory. This may include, but is not limited to, minimizing the occurrence of management systems support issues; quality of work products; continual improvement driven by the results of audits, reviews, and other performance information; the integration of system performance metrics and trends; the degree of knowledge and appropriate utilization of established system processes/procedures by Contractor management and staff; benchmarking and performance trending analysis. The DOE evaluator(s) shall consider the Laboratory's performance in making progress toward comprehensive collection and submission to OSTI of peer-reviewed accepted manuscripts for journal articles (and associated metadata) resulting from DOE-funded research as called for in the DOE Public Access Plan[9], and cooperation with the Department in meeting the relevant requirements to provide other forms of scientific and technical information to OSTI per DOE O 241.1B Chg. 1 (Admin Chg.) or its successor version. The DOE evaluator(s) shall also consider the stewardship of the pipeline of innovations and resulting intellectual assets at the Laboratory along with impacts and returns created/generated as a result of technology transfer, work for others and intellectual asset deployment activities.

Notable Outcomes

- **BHSO:** BSA will deliver a Business Plan articulating achievable near-term and long range goals for Technology Transfer, Commercialization and Strategic Partnership Projects (SPP). Additionally, the Business Plan should include BSA's governance model for ensuring SPP projects meet the milestones established within their agreements, especially for high-risk/high-value critical projects. The due date for this action is the third quarter of fiscal year 2018. (Objective 6.5)

[9] https://www.energy.gov/downloads/doe-public-access-plan

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 6.0 - Deliver Efficient, Effective, and Responsive Business Systems and Resources that Enable the Successful Achievement of the Laboratory Mission(s)				
6.1 Provide an Efficient, Effective, and Responsive Financial Management System(s)			25%	
6.2 Provide an Efficient, Effective, and Responsive Acquisition Management System and Property Management System			20%	
6.3 Provide an Efficient, Effective, and Responsive Human Resources Management System and Diversity Program			20%	
6.4 Provide Efficient, Effective, and Responsive Contractor Assurance Systems, including Internal Audit and Quality			15%	
6.5 Demonstrate Effective Transfer of Knowledge and Technology and the Commercialization of Intellectual Assets			20%	
			Performance Goal 6.0 Total	

Table 6.1 – Performance Goal 6.0 Score Development

Total Score	**4.3-4.1**	**4.0-3.8**	**3.7-3.5**	**3.4-3.1**	**3.0-2.8**	**2.7-2.5**	**2.4-2.1**	**2.0-1.8**	**1.7-1.1**	**1.0-0.8**	**0.7-0**
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 6.2 – Goal 6.0 Final Letter Grade

GOAL 7.0 Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs

The weight of this Goal is 30%.

This Goal evaluates the overall effectiveness and performance of the Contractor in planning for, delivering, and operations of Laboratory facilities and equipment needed to ensure required capabilities are present to meet today's and tomorrow's mission(s) and complex challenges.

7.1 Manage Facilities and Infrastructure in an Efficient and Effective Manner that Optimizes Usage, Minimizes Life Cycle Costs, and Ensures Site Capability to Meet Mission Needs
7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to Support the Continuation and Growth of Laboratory Missions and Programs

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in facility and infrastructure programs. This may include, but is not limited to, the management of real property assets to maintain effective operational safety, worker health, environmental protection and compliance, property preservation, and cost effectiveness; effective facility utilization, maintenance and budget execution; day-to-day management and utilization of space in the active portfolio; maintenance and renewal of building systems, structures and components associated with the Laboratory's facility and land assets; management of energy use, conservation, and sustainability practices; the integration and alignment of the Laboratory's comprehensive strategic plan with capabilities; facility planning, forecasting, and acquisition; the delivery of accurate and timely information required to carry out the critical decision and budget formulation process; quality of site and facility planning documents; and Cost and Schedule Performance Index performance for facility and infrastructure projects.

Notable Outcomes

- **BHSO:** Continue with Discovery Park infrastructure, site planning, and commercial engagement to further development of Upton Square in parallel with the Science and User Support Center (SUSC). (Objective 7.1)
- **BHSO:** Provide adequate and sufficient documentation in a timely fashion to support Science Laboratories Infrastructure (SLI) projects, including CD-2 approval for the Core Facility Revitalization (CFR) and CD-1 review for the Science and User Support Center (SUSC). (Objective 7.2)

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 7.0 - Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs.				
7.1 Manage Facilities and Infrastructure in an Efficient and Effective Manner that Optimizes Usage, Minimizes Life Cycle Costs, and Ensures Site Capability to Meet Mission Needs			50%	
7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to support the Continuation and Growth of Laboratory Missions and Programs			50%	
Performance Goal 7.0 Total				

Table 7.1 – Performance Goal 7.0 Score Development

Total Score	**4.3-4.1**	**4.0-3.8**	**3.7-3.5**	**3.4-3.1**	**3.0-2.8**	**2.7-2.5**	**2.4-2.1**	**2.0-1.8**	**1.7-1.1**	**1.0-0.8**	**0.7-0**
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 7.2 – Goal 7.0 Final Letter Grade

GOAL 8.0 Sustain and Enhance the Effectiveness of Integrated Safeguards and Security Management (ISSM) and Emergency Management Systems

The weight of this Goal is 10%.

This Goal evaluates the Contractor's overall success in safeguarding and securing Laboratory assets that supports the mission(s) of the Laboratory in an efficient and effective manner and provides an effective emergency management program.

8.1 Provide an Efficient and Effective Emergency Management System
8.2 Provide an Efficient and Effective Cyber Security System for the Protection of Classified and Unclassified Information
8.3 Provide an Efficient and Effective Physical Security Program for the Protection of Special Nuclear Materials, Classified Matter, Classified Information, Sensitive Information, and Property

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in the safeguards and security, cyber security and emergency management program systems. This may include, but is not limited to, the commitment of leadership to strong safeguards and security, cyber security and emergency management systems; the integration of these systems into the culture of the Laboratory; the degree of knowledge and appropriate utilization of established system processes/procedures by Contractor management and staff; maintenance and the appropriate utilization of Safeguards, Security, and Cyber risk identification, prevention, and control processes/activities; and the prevention and management controls and prompt reporting and mitigation of events as necessary.

Notable Outcomes

- None

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 8.0 - Sustain and Enhance the Effectiveness of Integrated Safeguards and Security management (ISSM) and Emergency Management Systems.				
8.1 Provide an Efficient and Effective Emergency Management System			35%	
8.2 Provide an Efficient and Effective Cyber Security System for the Protection of Classified and Unclassified Information			35%	
8.3 Provide an Efficient and Effective Physical Security Program for the Protection of Special Nuclear Materials, Classified Matter, Classified Information, Sensitive Information, and Property			30%	
			Performance Goal 8.0 Total	

Table 8.1 – Performance Goal 8.0 Score Development

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Table 8.2 – Goal 8.0 Final Letter Grade

APPENDIX H

SMALL BUSINESS SUBCONTRACTING PLAN

Applicable to the Operations of
Brookhaven National Laboratory

FY2018 SMALL BUSINESS SUBCONTRACTING PLAN

Contractor:	Brookhaven Science Associates, LLC.
Contractor Address:	Brookhaven National Laboratory, P.O. Box 5000
City/State/Zip:	Upton, New York 11973-5000
Company Phone:	(631) 344-8000
Point of Contact:	David Paveglio
POC Phone:	(631) 344-8461
POC E-mail:	dpavegli@bnl.gov
Contract Number:	DE-SC0012704
Item/Service:	Management and Operation of BNL
Total Amount of Contract (Including Options):	$1,854,960,925.18 (through mod 0088)
Period of Contract Performance:	01/05/2015 to 01/04/2020

I. Type of Plan

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

II. Goals

a. BSA has established separate dollar and percentage goals for small business (SB) (including Alaska Native Corporations [ANC] and Indian Tribes), small disadvantaged business (SDB - including ANCs and Indian Tribes), women-owned small business (WOB), HUBZone small business (HUB), service-disabled veteran-owned small business (SDVOB) and veteran-owned small business (VOB) concerns (hereafter referred to the six small business categories) as subcontractors, as specified in FAR 19.704.

1. The total estimated dollar value of all planned subcontracting (to all types of business concerns) under this contract, is $136,000,000.
2. The following percentage goals (expressed in terms of a percentage of total planned subcontracting dollars) and associated dollars are applicable to the contract cited above and will be pursued on a best efforts basis consistent with good commercial practices and best value assessments.

(i) Total estimated dollar value and percent of planned subcontracting with Small Business (SB) (including ANCs and Indian Tribes): $68,000,000 and 50%.

(ii) Total estimated dollar value and percent of planned subcontracting with Small Disadvantaged Business (SDB)/ 8(a) (including ANCs and Indian Tribes): $6,800,000 and 5%.

(iii) Total estimated dollar value and percent of planned subcontracting with Woman-Owned Small Business (WOB): $6,800,000 and 5%.

(iv) Total estimated dollar value and percent of planned subcontracting with Historically Underutilized Small Business (HUBZone): $4,080,000 and 3%.

(v) Total estimated dollar value and percent of planned subcontracting with Service-Disabled Veteran-Owned Small Business (SDVOB): $4,080,000 and 3%.

(vi) Total estimated dollar value and percent of planned subcontracting with Veteran-Owned Small Business (VOB): $4,080,000 and 3%.

Small Business Category	BSA Dollar Commitment	BSA Percent Commitment
SB	$68,000,000	50%
SDB	$6,800,000	5%
WOB	$6,800,000	5%
HUBZone	$4,080,000	3%
VOB	$4,080,000	3%
SDVOB	$4,080,000	3%

The following is an indication of the supplies and services to be subcontracted under this Contract, the six categories of small business (including ANCs and Indian Tribes) and large business.

Subcontracted Supplies/Services	SB	SDB	WOB	HUB	SDVOB	VOB	LB
A & E	X				X	X	X
Construction	X	X	X		X	X	X
R & D	X						X
Services	X	X	X	X	X	X	X
Materials & Supplies	X	X	X	X	X	X	X
Electrical	X	X	X	X	X	X	X
IT (Computer)	X	X	X	X	X	X	X
Equipment (Major)	X						X

b. The goals for the six small business categories (including ANCs and Indian Tribes) are based on consultations with the DOE. Potential suppliers will be identified using BSA's current vendor base, and various directories including: System for Award Management (SAM), the DOE-OSDBU Small Business Contacts Database, Women's Chamber of Commerce, New York U.S. Small Business Administration Long Island, New York U.S. Small Business Administration The Suffolk County Women's Business Enterprise Coalition (SCWBEC), The Procurement Technical Assistance Center's (PTAC) Database, the Small Business Administration-Small Business Development Center (SBA-SBDC) databases, and sharing the small business databases from the other DOE National Labs, etc. The areas to be subcontracted to each target small business group have been determined by historic references and current needs. Capabilities to provide goods and services are determined on an individual basis.

c. Timely Payment to Subcontractors:

BSA will ensure timely payment of amounts due pursuant to the terms of its subcontracts with the six small business concerns. BSA will use Small Business Set Asides to support the small business goals stated above.

d. Small Business Set-Asides Types:

1. Small Business Set-Aside:

Each acquisition of supplies or services with an anticipated dollar value exceeding the Micro-Purchase Threshold but not over the Simplified Acquisition Threshold (SAT) (FAR 2.101) will be reserved exclusively for small business concerns and shall be set aside for small business unless there is not a reasonable expectation of obtaining offers from two or more responsible small business concerns that are competitive in terms of market prices, quality, and delivery.

2. Construction Set-Asides:

Acquisition of construction estimated to cost $4 million or less, including new construction, and repair and alteration of structures, shall be a small business set-aside. For acquisition in excess of $4 million, small business will be considered on a case-by-case basis.

III. Sole Source Procurements:

BSA may award contracts on a sole-source basis to these types of small Businesses:

a. Small Business Administration (SBA) certified 8(a) small businesses; in accordance with FAR 19.805 (a)(2) for purchases valued at: $7 million or less for 8(a) small business within North American Industry Classification System (NAICS) codes for manufacturing or $4 million or less for small business within any other NAICS codes. There will be no limit on the anticipated value of contracts awarded on a sole-source basis to ANC; and

b. SBA certified Historically Underutilized Small Businesses (HUB) Zone small businesses in accordance with FAR 19.1306 (a)(2) for purchases valued at: $7 million or less for HUBZone small business within North American Industry Classification System (NAICS) codes for manufacturing or $4 million or less for HUBZone small business within any other NAICS codes. There will be no limit on the anticipated value of contracts awarded on a sole-source basis to ANC; and

c. Service-Disabled Veteran-Owned Small Business (SDVOB) small businesses in accordance with FAR 19.1406 (a)(2) sole-source awards to service-disabled veteran-owned small business concerns for $6.5 million or less for requirement within the NAICS codes for manufacturing; or $4 million for a requirement within any other NAICS codes. There will be no limit on the anticipated value of contracts awarded on a sole-source basis to ANC.

d. Set Asides to Small Business for procurements less than the Simplified Acquisition Threshold (SAT).

   To further facilitate Brookhaven National Laboratory Small Business Program, BSA will, without further documentation to the file, and based on its unilateral decision, utilize the option of making awards without competition up to the simplified acquisition threshold to small business concerns in accordance with the Department of Energy Acquisition Guide, Chapter 19: Small Business Program December 2010;

e. A Protégé under a DOE Prime Contractor Mentor-Protégé Program can be awarded a contract on a noncompetitive basis, without the need for a sole source justification for any value.

f. Indirect costs have not been included in the dollar and percentage subcontracting goals stated above.

IV. Program Administrator

The Contractor's subcontracting program administrator is:

Name: David J. Paveglio
Title: Deputy Manager, PPM Division
Address: Brookhaven National Laboratory
Procurement & Property Management Division
Building 902B Room 8A
Upton, New York 11973

Telephone:(631) 344-8461 Email: dpavegli@bnl.gov

Duties: General overall responsibility for Brookhaven Science Associates (BSA) subcontracting program, i.e., developing, preparing, and executing subcontracting plans and monitoring performance relative to the requirements of this particular plan. These duties include, but are not limited to, the following activities:

a. Developing and promoting laboratory-wide policy initiatives that demonstrate BSA's support for awarding contracts and subcontracts to the six small business categories.

b. Making arrangements for the utilization of various sources for the identification of the six small business categories through some of the following resources: System for Award Management (SAM), the DOE-OSDBU Small Business Contacts Database, GSA Office of Small Business, Women's Chamber of Commerce Database, the Procurement Technical Assistance Center's Database, the SBA-SBDC databases, sharing the Small Business databases from the other DOE National Labs, the National Minority Business Directory, etc. This effort will be focused on identification of reliable, competitive suppliers in the areas where achieving small business goals has been a challenge.

c. Ensuring small businesses are made aware of subcontracting opportunities and basic prerequisites for the preparation of a responsive bid.

d. Conducting or arranging for training for procurement personnel regarding the intent and impact of Public Law 95-507 on purchasing procedures.

e. Supporting the Property and Procurement Manager (PPM) Compliance and Policy Manager in randomly reviewing procurements to ensure the maximum possible participation of the six small business categories.

f. Monitoring the over $700,000 ($1,500,000 for construction) large business subcontractors' performance and making suggestions for the utilization of small business, where applicable, so that any adjustments necessary to achieve the subcontracting plan goals can be made.

g. Preparing, inputting and submitting timely subcontracting reporting through the eSRS.

h. Coordinating BSA's activities during compliance reviews by Federal agencies.

i. Assuring the integrity of supplier information by reviewing the Representations and Certifications, ensuring that supplier NAICS codes and socioeconomic classifications are included in the descriptions of new suppliers.

V. Equitable Opportunity

BSA will ensure that small businesses have an equitable opportunity to compete for subcontracts. The various efforts include, but are not limited to, the following activities:

(i) Utilization of the Internet to obtain new sources.

a. Internal efforts to guide and encourage purchasing personnel:

(i) Presenting workshops, seminars, and/or training programs including training in the use of the SAM.

(ii) Establishing, maintaining, and using small business source lists, guides, and other data for soliciting subcontracts, and encouraging procurement staff to utilize this data.
(iii) Monitoring activities to evaluate compliance with the subcontracting plan.

b. Outreach efforts to promote small business development will include:

(i) Maintaining an annual list of outreach events and activities to attend and participate in.

(ii) Providing contact information for 8(a) and HUB-Zone small businesses to assist them in achieving SBA certification.

(iii) Maintaining an internal Small Business Policy.

(iv) Participating in DOE Small Business Program Manager conference calls.

VI. Flow-Down Clauses

BSA will continue to include the provisions under FAR 52.219-8, "Utilization of Small Business Concerns", in all subcontracts that offer further subcontracting opportunities. BSA will also require all subcontractors, except small business concerns and foreign suppliers, that receive subcontracts in excess of $700,000 ($1,500,000 for construction) to adopt a plan that complies with the requirements of the clause at FAR 52.219-9, "Small Business Subcontracting Plan."

These plans will be reviewed against the provisions of Public Law 95-507 to assure that all minimum requirements of an acceptable subcontracting plan have been satisfied. The acceptability of percentage goals will be determined on a case-by-case basis depending on the supplies/services involved, the availability of the six potential small business categories and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports, and/or, as time and availability of funds permit, periodic visits to subcontractors' facilities to review applicable records and subcontracting program progress.

VII. Reporting and Cooperation

BSA will (1) cooperate in any studies or surveys that may be required by the contracting agency or the Small Business Administration; (2) submit any periodic reports required under its Prime Contract, such as utilization reports, which show compliance with the subcontracting plan; (3) submit timely "Subcontracting Report for Individual Contracts," (ISR) and "Summary Subcontract Report," (SSR) in accordance with the instructions identified on the eSRS website (www.esrs.gov); (4) and ensure that large business subcontractors with subcontracting plans provide electronic input to the eSRS as required.

Reporting Period	**Report Type**	**Due Date**
Oct 1 – Mar 31	ISR	04/30
Apr 1 – Sep 30	ISR	10/31
Oct 1 – Sep 30	SSR	10/31

VIII. Document Retention

Records will be maintained to demonstrate the procedures adopted to comply with the requirements and goals in the subcontracting plan. These records will include, but not be limited to, the following:

a. A list of sources, guides and other data used to identify suppliers and vendors.

b. Documents to support internal guidance and encouragement, provided to buyers through:

(i) Workshops, seminars, training programs
(ii) Monitoring of activities to evaluate compliance

c. The procurement files for all subcontract solicitations over SAT will contain AMS-Form-002 which indicates for each solicitation whether small businesses were solicited, and if any of the solicited the small business concerns received a subcontract award, as well as a justification for not soliciting small businesses or failure to award a subcontract to a solicited small business.

d. Representations and Certifications Information

(i) 8(a) certification approval through copies of their SBA certification letter

(ii) Confirmation of HUB-Zone certification will be verified by searching the companies profile in the System for Award Management (SAM) database.

IX. Mentor-Protégé Program

BSA agrees to establish and implement an official DOE approved "Mentor-Protégé" in accordance with U.S. Department of Energy acquisition regulation (DEAR Part 19). The Small Business Liaison Officer is the individual designated to administer this program.

X. Description of Good Faith Effort

BSA intends to use all reasonable and good faith efforts as described in this Plan to award the stated percentages of the final actual subcontract base amount to the six small businesses concerns. The following steps will be taken:

a. Issue and promulgate company-wide policy statements in support of small businesses. Develop written procedures and work instructions, and assign specific responsibilities regarding requirements of the applicable Public Law.

b. Review specific procurement actions for possible acquisition from eligible small businesses.

c. Demonstrate continuing management interest and involvement in support of this effort through such actions as regular reviews of progress.

d. Train and motivate the procurement personnel regarding the need for the support of small businesses.

e. Assist small businesses by helping with questions on solicitations, quantities, specifications, and delivery requirements.

f. Counsel and discuss subcontracting opportunities with small businesses.

g. Execute Service Agreements, Teaming Agreements, and Basic Ordering Agreements with small business from the six qualified small business categories, as required, in an

attempt to ensure availability and usage of subcontractor personnel to support work efforts when required.

h. Establish and maintain a categorized list of potential subcontractors, including name, address, telephone number, email address, product/service sold, initials of the Buyer and/or Contract Specialist lead given to, and identification of the social economic small business category.

This FY2018 subcontracting plan was submitted by:

Signature: _____ Date: 9/29/2017

Typed Name: Anthony Guadagni
Title: Manager Procurement and Property Management

Approval:

Signature: _____ Date: 10/3/2017

Typed Name: Aundrea Clifton
Title: Contracting Officer
U.S. Department of Energy
Brookhaven Site Office