AMENDMENT OF SOLICIT	ION OF CONTE	RACT	1. CONTR	RACT ID CODE	PAGE OF	PAGES 2	
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/P NO.	URCHASE	E REQ.	5. PROJECT NO	. (If applicab	le)
0151	See Block 16c						
6. ISSUED BY CODE	892430	7. ADMINISTERED			6) CODE	06005	
SC Chicago Service Cente	er	Brookhaven S	ite Offic	ce			
Office of Science - Chicago	0	U.S. Departme	ent of E	nergy			
U.S. Department of Energy		53 Bell Avenue	e, Build	ding 464			
9800 South Cass Avenue		Upton NY 119		•			
Lemont IL 60439							
8. NAME AND ADDRESS OF CONTRACT	TOR (No. street, county, State	e and ZIP Code)	(x)	9. A. AMEN	IDMENT OF SOLI	CITATION N	IO.
Brookhaven Science Asso	ciates, LLC			9. B. DATE	D (SEE ITEM 11)		
Attn: Kevin Fox							
Brookhaven National Labo	-			10 A MOD	OF CONTRACTOR OF CO	atract/Orda	- NO
Building 460, PO Box 5000						ontract/Orde	, NO.
Upton New York 11973-5	6000			DE-SC00			
					ED (SEE ITEM 13))	
CODE 027579460	FACILITY CODE N/A			12/22/2	2014		
11. Th	IS ITEM ONLY APPLIE	ES TO AMENDMI	ENTS O	F SOLICI	TATIONS		
Iffers 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 ompleting 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) y separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE IECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF OUR 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 elegram 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). 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.)						mitted; or (c) O BE JECTION OF ded each D IN ITEM 14. CONTRACT paying office,	
I.161; revise Part III, Section J – List of Documents, Exhibits, Attachments, TOC; add Appendix B – Performance Evaluation and Measurement Plan; add Appendix H – Small Business Subcontracting Plan; and replace Appendix I – DOE Directives/List B.							
15A. NAME AND TITLE OF SIGNER (Typ George Clark	e or print)	16A. NAME A			ACTING OFFICER	R (Type or p	rint)
Chief Financial Officer		Contracti					
15B. CONTRACTOR/OFFEROR	15C. DATE SIGN				A 160	. DATE SIG	SNED
(Signature of person authorized to signsty 1540-01-152-8070	10/25/1	9 By Jams	Lo K	for length of the contracting Office		10/2	28/19

NSN 7540-01-152-8070 PREVIOUS EDITION UNUSABLE STANDARD FORM 30 (REV 10-83) Prescribed by GSA FAR (48CFR) 53.243

	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF .
CONTINUATION SHEET	DE-SC0012704/0151	2	2

- 14. Description of Amendment/Modification (continued):
 - 1. Part II, Section I Contract Clauses, Table of Contents (TOC): Section I TOC is revised to update clauses I.40A and I.161.

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

- a. Clause I.40A FAR 52.222-19, Child Labor—Cooperation With Authorities and Remedies (OCT 2019): This clause is revised IAW Department of Energy PF 2019-36 Federal Acquisition Circular (FAC) 2019-06, and Federal Register at 84 FR 47860.
- b. Clause I.161 DEAR 970.5244-1, Contractor Purchasing System (Aug 2016) (SC Alternate) (APR 2018): This clause is revised IAW Head of Contracting Activity Office of Science Revolutionary Working Group approved alternates/deviations dated April 2, 2018.
- 2. 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, add Appendix H Small Business Subcontracting Plan, and replace Appendix I DOE Directives/List B.
 - a. Appendix B Performance Evaluation and Measurement Plan: This section is revised to add the FY 2020 Plan. See the attachment provided herein.
 - **b.** Appendix H Small Business Subcontracting Plan: This section is revised to add the FY 2020 Plan. See the attachment provided herein.
 - c. Appendix I DOE Directives/List B identified as Modification No. 0145 has been revised; replace the prior version with the attached Appendix I identified as Modification No. 0151. The revisions are as follows:

	SUMMARY OF DIRECTIVE CHANGES					
ORDER	TITLE	CHANGE	NOTES			
O 580.1A Admin Chg. 1	Department of Energy Personal Property Management Program	Add	Add per the direction of the BHSO Site Office Manager and Contracting Officer.			

CLAUSE I.40A - FAR 52.222-19 - CHILD LABOR - COOPERATION WITH AUTHORITIES AND REMEDIES (OCT 2019)

- (a) Applicability. This clause does not apply to the extent that the Contractor is supplying end products mined, produced, or manufactured in—
 - (1) Canada, and the anticipated value of the acquisition is \$25,000 or more;
 - (2) Israel, and the anticipated value of the acquisition is \$50,000 or more;
 - (3) Mexico, and the anticipated value of the acquisition is \$80,317, or more; or
 - (4) Armenia, Aruba, Australia, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Italy, Japan, Korea, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Montenegro, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, Ukraine, or the United Kingdom and the anticipated value of the acquisition is \$180,000 or more.
- (b) Cooperation with Authorities. To enforce the laws prohibiting the manufacture or importation of products mined, produced, or manufactured by forced or indentured child labor, authorized officials may need to conduct investigations to determine whether forced or indentured child labor was used to mine, produce, or manufacture any product furnished under this contract. If the solicitation includes the provision 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products, or the equivalent at 52.212-3(i), the Contractor agrees to cooperate fully with authorized officials of the contracting agency, the Department of the Treasury, or the Department of Justice by providing reasonable access to records, documents, persons, or premises upon reasonable request by the authorized officials.
- (c) Violations. The Government may impose remedies set forth in paragraph (d) for the following violations:
 - (1) The Contractor has submitted a false certification regarding knowledge of the use of forced or indentured child labor for listed end products.
 - (2) The Contractor has failed to cooperate, if required, in accordance with paragraph (b) of this clause, with an investigation of the use of forced or indentured child labor by an Inspector General, Attorney General, or the Secretary of the Treasury.

- (3) The Contractor uses forced or indentured child labor in its mining, production, or manufacturing processes.
- (4) The Contractor has furnished under the contract end products or components that have been mined, produced, or manufactured wholly or in part by forced or indentured child labor. (The Government will not pursue remedies at paragraph (d)(2) or paragraph (d)(3) of this clause unless sufficient evidence indicates that the Contractor knew of the violation.)

(d) Remedies.

- (1) The Contracting Officer may terminate the contract.
- (2) The suspending official may suspend the Contractor in accordance with procedures in FAR Subpart 9.4.
- (3) The debarring official may debar the Contractor for a period not to exceed 3 years in accordance with the procedures in FAR Subpart 9.4.

CLAUSE I.161 – DEAR 970.5244-1 – CONTRACTOR PURCHASING SYSTEM (AUG 2016) (DEVIATION) (DEVIATION PER AL 2013-10, JUN 2013) (DEVIATION PER POLICY FLASH 2015-17, MAR 2015) (SC ALTERNATE) (APR 2018)

- (a) General. The Contractor shall develop, implement, and maintain formal policies, practices, and procedures to be used in the award of subcontracts consistent with this clause, 48 CFR subpart 970.44, and Appendix G of this Contract. The Contractor's purchasing system and methods shall be fully documented. consistently applied, and acceptable to the Department of Energy (DOE) in accordance with 48 CFR 970.4401-1. The Contractor shall maintain file documentation which is appropriate to the value of the purchase and is adequate to establish the propriety of the transaction and the price paid. The Contractor's purchasing performance will be evaluated against such performance criteria and measures as may be set forth elsewhere in this contract. DOE reserves the right at any time to require that the Contractor submit for approval any or all purchases under this contract. The Contractor shall not purchase any item or service, the purchase of which is expressly prohibited by the written direction of DOE, and shall use such special and directed sources as may be expressly required by the DOE Contracting Officer. DOE will conduct periodic appraisals of the Contractor's management of all facets of the purchasing function, including the Contractor's compliance with its approved system and methods. Such appraisals will be performed through the conduct of Contractor Purchasing System Reviews in accordance with 48 CFR subpart 44.3, or, when approved by the Contracting Officer, through the Contractor's participation in the conduct of the Balanced Scorecard performance measurement and performance management system. The Contractor's approved purchasing system and methods shall include the requirements set forth in paragraphs (b) through (y) of this clause.
- (b) Acquisition of utility services. Utility services shall be acquired in accordance with the requirements of subpart 970.41.
- (c) Acquisition of Real Property. Real property shall be acquired in accordance with 48 CFR subpart 917.74.
- (d) Advance Notice of Proposed Subcontract Awards. Advance notice shall be provided in accordance with 48 CFR 970.4401-3.
- (e) Audit of subcontractors.
 - (1) The Contractor shall provide for—

- (i) Periodic post-award audit of cost-reimbursement subcontractors at all tiers; and
- (ii) Audits, where necessary, to provide a valid basis for pre-award or cost or price analysis.
- (2) Responsibility for determining the costs allowable under each costreimbursement subcontract remains with the contractor or next higher-tier subcontractor. The Contractor shall provide, in appropriate cases, for the timely involvement of the Contractor and the DOE Contracting Officer in resolution of subcontract cost allowability.
- (3) Where audits of subcontractors at any tier are required, arrangements may be made to have the cognizant Federal agency perform the audit of the subcontract or the contractor may employ external auditors to support mandatory subcontract audits required by this contract. These arrangements shall be made administratively between DOE and the other agency involved and shall provide for the cognizant agency to audit in an appropriate manner in light of the magnitude and nature of the subcontract. In no case, however, shall these arrangements preclude determination by the DOE Contracting Officer of the allowability or unallowability of subcontractor costs claimed for reimbursement by the Contractor.
- (4) Allowable costs for cost reimbursable subcontracts are to be determined in accordance with the cost principles of 48 CFR Part 31, appropriate for the type of organization to which the subcontract is to be awarded, as supplemented by 48 CFR part 931. Allowable costs in the purchase or transfer from contractor-affiliated sources shall be determined in accordance with 48 CFR 970.4402-3 and 48 CFR 31.205-26(e).

(f) Bonds and Insurance.

- (1) The Contractor shall require performance bonds in penal amounts as set forth in 48 CFR 28.102-2(a) for all fixed-priced and unit-priced construction subcontracts in excess of \$150,000. The Contractor shall consider the use of performance bonds in fixed-price non-construction subcontracts, where appropriate.
- (2) For fixed-price, unit-priced and cost reimbursement construction subcontracts in excess of \$150,000, a payment bond shall be obtained on Standard Form 25A modified to name the Contractor as well as the United States of America as obligees. The penal amounts shall be determined in accordance with 48 CFR 28.102-2(b).
- (3) For fixed-price, unit-priced and cost-reimbursement construction subcontracts greater than \$25,000, but not greater than \$100,000, the

Contractor shall select two or more of the payment protections at 48 CFR 28.102-1(b), giving particular consideration to the inclusion of an irrevocable letter of credit as one of the selected alternatives.

- (4) A subcontractor may have more than one acceptable surety in both construction and other subcontracts, provided that in no case will the liability of any one surety exceed the maximum penal sum for which it is qualified for any one obligation. For subcontracts other than construction, a co-surety (two or more sureties together) may reinsure amounts in excess of their individual capacity, with each surety having the required underwriting capacity that appears on the list of acceptable corporate sureties.
- (g) Buy American. The Contractor shall comply with the provisions of the Buy American Act as reflected in 48 CFR 52.225-1 and 48 CFR 52.225-9. The Contractor shall forward determinations of non-availability of individual items to the DOE Contracting Officer for approval. Items in excess of \$500,000 require the prior concurrence of the Head of Contracting Activity. If, however, the Contractor has an approved purchasing system, the Head of the Contracting Activity may authorize the Contractor to make determinations of non-availability for individual items valued at \$500,000 or less.
- (h) Construction and architect-engineer subcontracts.
 - (1) Independent Estimates. A detailed, independent estimate of costs shall be prepared for all construction work to be subcontracted above the Simplified Acquisition Threshold.
 - (2) Specifications. Specifications for construction shall be prepared in accordance with the DOE publication entitled "General Design Criteria Manual."
 - (3) Prevention of Conflict of Interest.
 - (i) The Contractor shall not award a subcontract for construction to the architect-engineer firm or an affiliate that prepared the design. This prohibition does not preclude the award of a "turnkey" subcontract so long as the subcontractor assumes all liability for defects in design and construction and consequential damages.
 - (ii) The Contractor shall not award both a cost-reimbursement subcontract and a fixed-price subcontract for construction or architect-engineer services or any combination thereof to the same firm where those subcontracts will be performed at the same site.

- (iii) The Contractor shall not employ the construction subcontractor or an affiliate to inspect the firm's work. The contractor shall assure that the working relationships of the construction subcontractor and the subcontractor inspecting its work and the authority of the inspector are clearly defined.
- (i) Contractor-Affiliated Sources. Equipment, materials, supplies, or services from a contractor-affiliated source shall be purchased or transferred in accordance with 48 CFR 970.4402-3.
- (j) Contractor-Subcontractor Relationship. The obligations of the Contractor under paragraph (a) of this clause, including the development of the purchasing system and methods, and purchases made pursuant thereto, shall not relieve the Contractor of any obligation under this contract (including, among other things, the obligation to properly supervise, administer, and coordinate the work of subcontractors). Subcontracts shall be in the name of the Contractor, and shall not bind or purport to bind the Government.
- (k) Government Property. The Contractor shall establish and maintain a property management system that complies with criteria in 48 CFR 970.5245-1, Property.
- (I) Indemnification. Except for Price-Anderson Nuclear Hazards Indemnity, subcontractors may not be indemnified except with the prior approval of the Senior Procurement Executive or under conditions specified by the Senior Procurement Executive.
- (m) Leasing of Motor Vehicles. Contractors shall comply with 48 CFR subpart 8.11 and 48 CFR subpart 908.11.
- (n) [Reserved]
- (o) Management, Acquisition and Use of Information Resources. Requirements for automatic data processing resources and telecommunications facilities, services, and equipment, shall be reviewed and approved in accordance with applicable DOE Orders and regulations regarding information resources.
- (p) *Priorities, Allocations and Allotments.* Priorities, allocations and allotments shall be extended to appropriate subcontracts in accordance with the clause or clauses of this contract dealing with priorities and allocations.
- (q) Purchase of Special Items. Purchase of the following items shall be in accordance with the following provisions of 48 CFR subpart 8.5, 48 CFR subpart 908.71, Federal Management Regulation 41 CFR part 102, and the Federal Property Management Regulation 41 CFR chapter 101:
 - (1) Motor vehicles—48 CFR 908.7101

- (2) Aircraft—48 CFR 908.7102
- (3) Security Cabinets—48 CFR 908.7106
- (4) Alcohol—48 CFR 908,7107
- (5) Helium—48 CFR subpart 8.5
- (6) Fuels and packaged petroleum products—48 CFR 908.7109
- (7) Coal—48 CFR 908.7110
- (8) Arms and Ammunition—48 CFR 908.7111
- (9) Heavy Water—48 CFR 908.7121(a)
- (10) Precious Metals—48 CFR 908.7121(b)
- (11) Lithium—48 CFR 908.7121(c)
- (12) Products and services of the blind and severely handicapped—41 CFR 101-26.701
- (13) Products made in Federal penal and correctional institutions—41 CFR 101-26,702
- (r) Purchase versus Lease Determinations. Contractors shall determine whether required equipment and property should be purchased or leased, and establish appropriate thresholds for application of lease versus purchase determinations. Such determinations shall be made—
 - (1) At time of original acquisition;
 - (2) When lease renewals are being considered; and
 - (3) At other times as circumstances warrant.
- (s) Quality Assurance. Contractors shall provide no less protection for the Government in its subcontracts than is provided in the prime contract.
- (t) Setoff of Assigned Subcontractor Proceeds. Where a subcontractor has been permitted to assign payments to a financial institution, the assignment shall treat any right of setoff in accordance with 48 CFR 932.803.
- (u) Strategic and Critical Materials. The Contractor may use strategic and critical materials in the National Defense Stockpile.

- (v) Termination. When subcontracts are terminated as a result of the termination of all or a portion of this contract, the Contractor shall settle with subcontractors in conformity with the policies and principles relating to settlement of prime contracts in 48 CFR subparts 49.1, 49.2 and 49.3. When subcontracts are terminated for reasons other than termination of this contract, the Contractor shall settle such subcontracts in general conformity with the policies and principles in 48 CFR subparts 49.1, 49.2, 49.3 and 49.4. Each such termination shall be documented and consistent with the terms of this contract. Terminations which require approval by the Government shall be supported by accounting data and other information as may be directed by the Contracting Officer.
- (w) Unclassified Controlled Nuclear Information. Subcontracts involving unclassified uncontrolled nuclear information shall be treated in accordance with 10 CFR part 1017.
- (x) Subcontract Flowdown Requirements. In addition to terms and conditions that are included in the prime contract which direct application of such terms and conditions in appropriate subcontracts, the Contractor shall include the following clauses in subcontracts, as applicable:
 - (1) Davis-Bacon clauses prescribed in 48 CFR 22.407.
 - (2) Foreign Travel clause prescribed in 48 CFR 952.247-70.
 - (3) Counterintelligence clause prescribed in 48 CFR 970.0404-4(a).
 - (4) Service Contract Act clauses prescribed in 48 CFR 22.1006.
 - (5) State and local taxes clause prescribed in 48 CFR 970.2904-1.
 - (6) Cost or pricing data clauses prescribed in 48 CFR 970.1504-3-1(b).
 - (7) Nondisplacement of Qualified Workers clause prescribed in 48 CFR 22.1207.
 - (8) Service Contract Reporting clause prescribed in 48 CFR 4.1705.
 - (9) Minimum Wages under Executive Order 13658 clause prescribed in 48 CFR 22.1906.
- (y) Legal Services. Contractor purchases of litigation and other legal services are subject to the requirements in 10 CFR part 719 and the requirements of this clause.



U.S. DEPARTMENT OF ENERGY

AND

BROOKHAVEN SCIENCE ASSOCIATES, LLC

APPENDIX B

PERFORMANCE EVALUATION AND MEASUREMENT PLAN

FISCAL YEAR 2020

BROOKHAVEN NATIONAL LABORATORY

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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, 2019, through September 30, 2020. 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.

<u>Section I</u> 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.

<u>Section II</u> provides the detailed information concerning each Goal, its 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 2020 Contractor performance grade 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 Contractor/Laboratory Leadership, and for Management and Operations (M&O). For each Science and Technology (S&T) Goal, an initial weighted sum will be calculated analogously for each evaluating office,

and a cost-based weighted sum of these initial sums will determine the Contractor performance grade. 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). That is, 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+	В	В-	C+	С	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 2020 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 four 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 sponsors' 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 does, 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) fail to 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	ng scale for the Goal 5.0 – 8.0 Objectives are provided in Figure I-1, below: 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.
В	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.
С	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.

Letter Grade	Numerical Grade	Definition
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 for Objectives under M&O Goals

Calculating Individual Goal Scores and Letter Grades:

Each Objective is assigned the earned numerical score by each evaluating office as stated above. For an evaluating office, the Goal score is then computed by multiplying each Objective numerical score under that Goal by the weight assigned to that Objective by that office, and then adding these values together. For Goals 4.0-8.0, this determines the overall Goal score. For Goals 1.0-3.0, the overall Goal score is calculated by multiplying each evaluating office's Goal score by the office's cost-based weight, and then adding them. For the purpose of determining the eight Goal grades, the unrounded raw overall numerical score for each Goal will be rounded to the nearest tenth of a point using the standard rounding convention discussed below following Figure 2, and then will be compared to Figure 1. A set of tables is provided at the end of each Performance Goal section of this document to assist in the calculation from Objective numerical scores to the Goal grade. No overall rollup grade shall be provided.

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	<u> </u>

Figure 2. Laboratory Report Card

Although rounded to convert to letter grades, the unrounded raw numerical score from each calculation shall be carried through to the next stage of the calculation process. The unrounded 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).

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 overall Goal scores for each S&T Performance Goal shall be used to determine an initial numerical score for S&T (see Table A, below), and the overall Goal 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%		
		Initia	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 total fiscal year costs for all evaluating programs distributed between these Goals 1.0 and 2.0; however, a minimum weight of 30% for Goal 1.0 is required regardless of cost distribution. For Goal 3.0, the weight is set as a fixed percentage for all laboratories.

M&O Performance Goal	umerical Score	Weight		
5.0 Integrated Safety, Health, and Environmental Protection		30%		
6.0 Business Systems		30%		tal da jit sa i
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		
		Fina	I S&T Score	
Initial M&O Score		0.75		
Goal 4.0		0.25		
		Final	M&O Score	

Table C. 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 2020 as calculated within Table D.

Overall Final Score for either S&T or M&O from Table C.	S&T Fee	M&O Fee Multiplier	
4.3			
4.2	100%	100%	
4.1			
4.0			
3.9	97%	100%	
3.8			
3.7			
3.6	94%	100%	
3.5			
3.4			
3.3	91%	100%	
3.2	1,70		
3.1			
3.0			
2.9	88%	95%	
2.8			
2.7		000/	
2.6	85%	90%	
2.5			
2.4	-		
2.3	75%	85%	
2.2			
2.1			
2.0	50%	75%	
1.9 1.8	30 /8	/3/0	
1.7	-		
1.6	=		
1.5	†		
1.4	0%	60%	
1.3	1		
1.2	1		
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. SC has addressed the FAR Part 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 Part 16 Adjectival Rating System

Adjustment to the Letter Grade and/or Performance-Based Fee Determination:

The lack of performance objectives and notable outcomes in this plan does 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.

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

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 fiscal 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 2020.

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 (or other relevant supporting agencies') 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 Program Offices, other cognizant HQ Program Offices, and other customers as identified below. The Goal score from each HQ Program Office and/or customer is computed by multiplying each Objective numerical score by the associated weight assigned by that Office/customer, and summing them (see Table 1.1).

- 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 Workforce Development for Teachers and Scientists (WDTS)
- Office of Defense Nuclear Nonproliferation (DNN)
- Nuclear Regulatory Commission (NRC)

The overall Performance Goal score and grade will be determined by multiplying the Goal score assigned by each of the offices identified above by the cost-based weightings identified for each and then summing them (see Table 1.2, below). The cost-based weights to be utilized for determining the overall score will be determined following the end of the performance period and will be based on actual cost for FY 2020. 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 Program Offices, 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 2020 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 (or other customer) 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
	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.
A +	• 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).
	In addition to satisfying the conditions for B+
Α	• 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.
Α,	 All areas 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.
	In addition to satisfying the conditions for B+
	• There are important examples where the Laboratory exceeded the expectations of the
A-	 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 <i>significantly impact</i> DOE or other customer missions.
	The Laboratory has achieved each of the following objectives:
B+	 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
В	 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.
С	 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 af 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, SC and/or other customer activities; and
- Extent to which Laboratory staff members contribute thoughtful and thorough peer reviews and other research assessments as requested by DOE, SC or other supporting customers.

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 and/or in other supporting agency's sponsored workshops and strategic planning activities, for example, Laboratory staff members chair or co-chair DOE-sponsored or other supporting agency-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 and/or other supporting agency's 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 and/or in other supporting agency's 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 or other supporting agency's 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 and/or other supporting agency's 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 or other supporting agency's 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 and/or other supporting agency's sponsored workshops and strategic planning activities and. Laboratory staff members contribute thoughtful thorough peer review in a timely manner, when requested by DOE or other supporting agencies. The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE or other supporting agency's mission needs.
В	 Laboratory staff are active participants in multi-institutional research collaborations Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE and/or other supporting agencies. The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE and/or other supporting agency's 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 and/or other supported agency's 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
В-	 Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE or other supporting agencies. 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 or other supporting agency's 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 or other supported agency's 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.
С	 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 or other supporting agencies. 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 or other supported agency's 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
F	problems that are no longer at the forefront of science and are considered mundane. Review has found the Laboratory staff to be guilty of gross scientific incompetence and/or scientific fraud.

Notable Outcomes

- **BES**: Deliver impactful science from the "Molten Salts in Extreme Environments" Energy Frontier Research Center, as measured by the FY 2020 mid-term review and annual report, research publications and highlights, and participation in periodic conference calls. (Objective 1.1)
- BES: Deliver impactful science to advance the research objectives for the Center for Computational Design of Functional Strongly Correlated Materials and Theoretical Spectroscopy, including strong integration with exascale computing —as measured by the FY 2020 annual report. (Objective 1.1)
- HEP: Having developed a new business model for the BNL Instrumentation Division, it is now important for the lab to develop an implementation plan, which quantitatively incorporates anticipated support for core activities, as well as projected LDRD initiatives and external support; and articulates near-term technology goals and impacts relevant to SC programs. By March 2020 present this implementation plan to SC. (Objective 1.1)

• HEP: By June 2020, submit a plan for ATLAS High-Luminosity LHC software & computing R&D activities planned for the next 2-3 years with specific milestones for deliverables under the U.S. ATLAS operations program. (Objective 1.2)

Program Office ²	Letter Grade	Numerical Score	Weight	Overall Score
Office of Advanced Scientific Computing Research	the result			Take Section
1.1 Impact			50%	
1.2 Leadership			50%	
		Overall A	SCR Total	
Office of Basic Energy Sciences				
1.1 Impact			50%	
1.2 Leadership			50%	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
		Overall	BES Total	
Office of Biological and Environmental Research				Friends Fr
1.1 Impact			60%	3, 37
1.2 Leadership			40%	
		Overall l	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%	
		Overal	NP Total	
Office of Defense Nuclear Nonproliferation			智慧 于	
1.1 Impact			56%	
1.2 Leadership			44%	
		Overall I	ONN Total	
Office of Workforce Development for Teachers and Scientists				
1.1 Impact			80%	
1.2 Leadership			20%	
		Overal	NE Total	
Nuclear Regulatory Commission	Easter T			
1.1 Impact			50%	
1.2 Leadership			50%	
		Overall 1	VRC Total	

Table 1.1 - Program Performance Goal 1.0 Score Development

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				

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 Nuclear Physics				7 - 1
Office of Defense Nuclear Nonproliferation				
Office of Workforce Development for Teachers and				
Scientists	1			
Nuclear Regulatory Commission				
	Per	formance Goa	l 1.0 Total	

Table 1.2 - Overall Performance Goal 1.0 Score Development³

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+	В	В-	C+	С	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 2020.

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 that 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 Goal score from each Program Office is computed by multiplying each Objective numerical score by the associated weight assigned by that Office, and summing them (see Table 2.1).

- 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 Goal score and grade will be determined by multiplying the Goal score assigned by each of the offices identified above by the cost-based weightings identified for each and then summing them (see Table 2.2 below). The cost-based weights to be utilized for determining the overall score will be determined following the end of the performance period and will be based on actual cost for FY 2020. The overall score earned is then compared to Table 2.3 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 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 2020 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 413.3, Program and Project Management for the Acquisition of Capital Assets;
- 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.
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.

Letter Grade	Definition
	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).
B+	 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.
В	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+
С	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 413.3, Program and Project Management for the Acquisition of Capital Assets;
- 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;

Letter = Grade	Definition
	In addition to satisfying all conditions for B+,
A -	• 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;
	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;
B+	 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.
В	The Laboratory provides sustained leadership and commitment to environment, safety and health BUT
	• The project fails to meet expectations in <i>one</i> of the remaining areas listed under B+.
B-	The Laboratory provides sustained leadership and commitment to environment, safety and health BUT
D-	The project fails to meet expectations in several of the areas listed under B+
	The Laboratory provides sustained leadership and commitment to environment, safety and health BUT
С	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
	The project fails to meet conditions for B+ in at least one of the following areas:
D	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.
	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
F	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.
В	The project fails to meet expectations in <i>one</i> of the areas listed under B+.
B-	The project fails to meet expectations in <i>more than one</i> of the areas listed under B+.
С	 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.
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.
	In addition to satisfying all conditions for B+, all of the following conditions are met
	A strong outreach program is in place;
A-	 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.
	The Laboratory has achieved each of the following objectives:
	Reviews find / validate that the facility is being used for influential science;
B ⁺	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.
В	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+
С	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

• BES: Execute the NEXT-II project scope in compliance with DOE Order 413.3B. Advance toward CD-1: Approve Alternative Selection and Cost Range during this performance period. (Objective 2.1)

- **BES:** Provide leadership on the NSRC Recap project by coordinating the actions among the NSRCs to advance toward CD-1: *Approve Alternative Selection and Cost Range* in compliance with DOE Order 413.3B during this performance period. (Objective 2.1)
- **BES:** NSLS-II will complete its fifth year of operations in FY 2020. NSLS-II management should assess its progress in achieving the key design goals for accelerator performance including routine top-off operation at 500 mA, horizontal/vertical emittances of 0.6/0.008 nm-rad respectively, and commensurate high brightness operation. By the end of first quarter FY 2020, NSLS-II should provide BES detailed plans and milestones to achieve these goals. (Objective 2.3)

Program Office4	Letter Grade	Numerical Score	Weight	Overall Score
Office of Basic Energy Sciences		4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		
2.1 Provide Effective Facility Design(s)			15%	
2.2 Provide for the Effective and Efficient Construction of			0%	
Facilities and/or Fabrication of Components			U70	
2.3 Provide Efficient and Effective Operation of Facilities			45%	
2.4 Utilization of Facility(ies) to Provide Impactful S&T			40%	
Results and Benefits to External User Communities			4076	
		Overall I	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			0%	
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			10%	
Results and Benefits to External User Communities			10%	
		Overall E	BER Total	
Office of High Energy Physics		The state of the s		
2.1 Provide Effective Facility Design(s)			40%	
2.2 Provide for the Effective and Efficient Construction of			40%	
Facilities and/or Fabrication of Components			40%	
2.3 Provide Efficient and Effective Operation of Facilities			20%	
2.4 Utilization of Facility(ies) to Provide Impactful S&T			0%	
Results and Benefits to External User Communities			0%	
		Overall I	IEP Total	
Office of Nuclear Physics				
2.1 Provide Effective Facility Design(s)			0%	
2.2 Provide for the Effective and Efficient Construction of			0%	
Facilities and/or Fabrication of Components			U%0	Adder Color (1997) (1) Color (1997) (1997) (1)
2.3 Provide Efficient and Effective Operation of Facilities			85%	
2.4 Utilization of Facility(ies) to Provide Impactful S&T			15%	
Results and Benefits to External User Communities			,	
		Overall	NP Total	

Table 2.1 - Program Performance Goal 2.0 Score Development

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	Letter Grade	Numerical Score	Funding Weight (cost)	Overall Weighted Score
Office of Basic Energy Sciences				1000
Office of Biological and Environmental Research				
Office of High Energy Physics				
Office of Nuclear Physics				
	Pe	rformance Gos	l 2.0 Total	

Table 2.2 - Overall Performance Goal 2.0 Score Development⁵

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+	Α	A-	B+	В	В-	C+	С	C-	D	F

Table 2.3 – Goal 2.0 Final Letter Grade

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 2020.

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 Program Offices, other cognizant HQ Program Offices, and other customers as identified below. The Goal score from each HQ Program Office and/or customer is computed by multiplying each Objective numerical score by the associated weight assigned by that Office/customer, and summing them (see Table 3.1).

- 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 Goal score and grade will be determined by multiplying the Goal score assigned by each of the offices identified above by the cost-based weightings identified for each and then summing them (see Table 3.2 below). The cost-based weights to be utilized for determining the overall score will be determined following the end of the performance period and will be based on actual cost for FY 2020. 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 Program Offices, 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 2020 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 or other supporting agency's 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;
- 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; and
- 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 or other supporting agency's 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 or other supporting agency's missions.
Α-	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.

Letter Grade	Definition
	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.
B+	 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.
	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;
В	 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.
	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;
В-	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.
	The Laboratory fails to satisfy several of the conditions for B+, including at least one of the following
	reasons:
С	 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. The Laboratory fails to satisfy <i>several</i> of the conditions for B+, and specifically
	The Laboratory has demonstrated little effort in developing a strategic plan.
D	 The Laboratory has denionstrated fittle errort in developing a strategic plan. The Laboratory has done little to develop and maintain core competencies
ļ	 The Laboratory has done intile to develop and maintain core competencies The Laboratory has had minimal success in attracting and retaining professional scientific staff.
- 	The Laboratory has:
	Made limited or ineffective attempts to develop a strategic plan;
F	 Not demonstrated the ability to develop and maintain core competencies, has failed to propose
1	high-risk/high-reward research and has failed to steward mission-critical areas;
ĺ	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 or other relevant supporting agency's 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
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 or other supporting agency's 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 or other relevant supporting agency's initiatives and/or national emergencies.

Letter Grade	Definition
	The Laboratory has achieved each of the following objectives:
B ⁺	 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 or other relevant supporting agency's 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 subcritical 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.
_	Project/program/facility plans exist for all major projects/programs/facilities.
В	The Laboratory has implemented the project/program/facility plans.
	BUT the Laboratory fails to meet at least one of the conditions for B+.
_	Project/program/facility plans exist for all major projects/programs/facilities.
B-	The Laboratory has implemented the project/program/facility plans.
	BUT the Laboratory fails to meet several of the conditions for B+.
_	Project/program/facility plans exist for most major projects/programs/facilities.
С	BUT the Laboratory has failed to implement the project/program/facility plans AND the Laboratory
	fails to meet several of the conditions for B+.
	Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the Laboratory's major Project/program/facility plans do not exist for a significant fraction of the laboratory major Project/program/facility plans do not exist for a significant fraction of the laboratory major fraction o
D	projects/programs/facilities; OR
	"
F	 Significant work at the Laboratory is not in alignment with the project/program/facility plans The Laboratory has failed to conduct project/program/facility planning activities.
	The Laboratory has raned to conduct project/program/racinty 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 pointof-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 or other relevant supporting agency's mission objectives

Letter Grade	Definition
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
A-	 channels. In addition to satisfying the conditions for B+, Laboratory management has instilled a culture throughout the lab that emphasizes good communication practices; 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; and 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; and Headquarters is always and promptly informed of both positive and negative events at the Laboratory
В	The Laboratory failed to meet the conditions for B+ in a few instances
В-	The Laboratory fails to meet the conditions for B+ for <i>one</i> 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.
С	 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:** Provide an updated strategic plan for the materials research portfolio supported by BES-MSE. The plan should address BNL's unique capabilities, the context with respect to the broader research community, staff and portfolio evolution, and prioritization of future growth, recognizing budget considerations. (Objective 3.1)
- **BER**: Complete selection leading to recruitment for a lead scientist to manage the cryo-EM facility. (Objective 3.2)
- NP: Work effectively and positively with TJNAF and NP to determine distribution of EIC project scope throughout the national laboratory complex. (Objective 3.1)

Program Office ⁶	Letter Grade	Numerical Score	Weight	Overall Score
Office of Advanced Scientific Computing Research	4. 计图象对象通			
3.1 Effective and Efficient Strategic Planning and Stewardship			30%	
3.2 Project/Program /Facilities Management			40%	
3.3 Communications and Responsiveness			30%	
		Overall AS	CR Total	
Office of Basic Energy Sciences				
3.1 Effective and Efficient Strategic Planning and Stewardship			30%	
3.2 Project/Program /Facilities Management			40%	
3.3 Communications and Responsiveness			30%	
		Overall I	BES Total	A Property of the Control of the Con
Office of Biological and Environmental Research			(1) 山野野	用意理工作。
3.1 Effective and Efficient Strategic Planning and Stewardship			20%	
3.2 Project/Program /Facilities Management			30%	
3.3 Communications and Responsiveness			50%	
	erokov Sili jako	Overall E	ER Total	And the second
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 I	IEP Total	Stage Hills
Office of Nuclear Physics	10 18 18 18 18			
3.1 Effective and Efficient Strategic Planning and Stewardship			30%	
3.2 Project/Program /Facilities Management			40%	
3.3 Communications and Responsiveness			30%	
		Overali	NP Total	
Office of Defense Nuclear Nonproliferation				
3.1 Effective and Efficient Strategic Planning and Stewardship			40%	
3.2 Project/Program /Facilities Management			34%	
3.3 Communications and Responsiveness			26%	

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.

Program Office ⁶	Letter Grade	Numerical Score	Weight	Overall Score
		Overall D	NN Total	
Office of Workforce Development for Teachers and Scientists			4	ender Programme Ender
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 N	IRC 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				11.75
Office of Nuclear Physics		·		4.
Office of Defense Nuclear Nonproliferation				the second
Office of Workforce Development for Teachers and Scientists				
Nuclear Regulatory Commission		-		
	Pe	rformance Goa	13.0 Total	

Table 3.2 – Overall Performance Goal 3.0 Score Development⁷

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+	В	B-	C+	С	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 2020.

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%
1.2 Leadership	30%	4070	3076	3070	30%	20%
Goal 2.0 Design, Fabrication,						<u> </u>
Construction and Operation						
of Facilities						
2.1 Design of Facility (the						
initiation phase and the	0%	0%	15%	40%	0%	0%
definition phase, i.e. activities leading up to CD-2)						
2.2 Construction of Facility /						
Fabrication of Components						
(execution phase, Post CD-2 to	0%	0%	0%	40%	0%	0%
CD-4)						
2.3 Operation of Facility	0%	90%	45%	20%	85%	0%
2.4 Utilization of Facility to						
Grow and Support Lab's	0%	10%	40%	0%	15%	0%
Research Base and External	076	1070	4070	070	1370	U 70
User Community	named n					
Goal 3.0 Program						
Management			•			
Management						
3.1 Effective and Efficient						
Strategic Planning and	30%	20%	30%	30%	30%	20%
Stewardship						
3.2 Project/Program/Facilities	40%	30%	40%	45%	40%	50%
Management	4070	3070	4070	4370	4070	JU70
3.3 Communications and	30%	50%	30%	25%	30%	30%
Responsiveness			50,0	20,0	5070	2070

Attachment I

Program Office Goal & Objective Weightings All Other Customers⁸

	DNN	NRC
	Weight	Weight
Goal 1.0 Mission Accomplishment		
1.1 Impact	56%	50%
1.2 Leadership	44%	50%
Goal 3.0 Program		
Management		
3.1 Effective and Efficient Strategic Planning and Stewardship	40%	34%
3.2 Project/Program/Facilities Management	34%	33%
3.3 Communications and Responsiveness	26%	33%

⁸ Objective weightings indicated for non-science customers are reflective of FY 2020 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 2020 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 Leadership's ability to facilitate and effectively manage external engagements and partnerships; 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.
В	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.
С	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, and
- 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.
Α-	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.
В	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.
С	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 Leadership of External Engagements and Partnerships

By which we mean: the performance of the laboratory leadership team to achieve the following:

- Establish a vision for developing and promoting technology transfer activities at the laboratory that align with the laboratory research portfolio, further DOE missions and promote national and economic security of the United States;
- Identify potential partners, implement outreach activities, and manage external engagements to promote accomplishment of technology transfer objectives, and to develop a feedback loop with industry that both informs planned and ongoing technology transfer activities; and
- Foster a culture of entrepreneurship at the laboratory that encourages staff at all levels to consider potential technology transfer opportunities within their program work and other laboratory activities.

Letter Grade	Definition
A +	Laboratory leadership has an exemplary technology transfer vision and is a leader across the complex in engaging external partners to identify technology transfer activities that are in strategic alignment with the laboratory research portfolio and in furtherance of the DOE mission. The laboratory is recognized as a preeminent leader in the technology transfer community across the DOE complex, and has assisted other national laboratories to develop strategies for identifying and engaging external partnerships. The laboratory staff are strongly encouraged to seek out and pursue potential technology transfer activities that are clearly connected and/or complementary to their research and development work at the laboratory and the laboratory is able to demonstrate how this outreach informs their ongoing technology transfer efforts.
A	The laboratory has a strong vision for engaging strategic partners and identifying strong connections between the laboratory research portfolio and potential technology transfer activities. The laboratory is one of the leaders in the technology transfer community across the DOE complex. The laboratory staff are encouraged to pursue technology transfer activities that are connected and/or complementary to their research and development work at the laboratory.
A-	The laboratory senior management performs better than expected (B+ grade) in these areas.
B+	The laboratory has a vision for engaging external partners, capturing intellectual property, and connecting laboratory research with potential technology transfer activities in furtherance of the DOE mission. Laboratory staff are encouraged to seek out and engage in opportunities for technology transfer activities.
В	The laboratory has some external engagements that support development of a vision for technology transfer activities at the laboratory; however this vision is not fully realized and requires more work to identify potential external partners or challenges in capturing intellectual property.
С	The laboratory lacks a vision and the mechanisms to implement a strategy to promote technology transfer at the laboratory.
D	Laboratory leadership lack a vision and have not supported the mechanisms/resources necessary to develop or implement an external engagement strategy to promote technology transfer activities at the laboratory. Laboratory staff are discouraged from seeking out opportunities to solicit external partner input and are also discouraged from identifying potential activities for technology transfer and from engaging in efforts to protect intellectual property.
F	Lack of vision and resources by the laboratory's senior management has hindered the ability of the laboratory to engage external partners and has hurt the laboratory's ability to identify and plan for technology activities, this failure has significantly hurt the Department's ability to achieve its missions.

4.4 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.
Α-	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.
В	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.
С	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

- NP: Positively and publicly endorse the EIC site selection and strive to promote unity within the general public and scientific community. (Objective 4.1)
- SC: Develop a plan to address the findings and recommendations from the scheduled peer review of the laboratory's diversity and inclusion efforts, conducted by the SC Office of the Deputy Director for Science Programs. Brief SC on the plan by June 1, 2020. (Objective 4.2)
- BHSO/SC: The Laboratory must keep senior SC leadership informed of key events (e.g., VIP/protocol visits, news releases, media requests) through timely population of the <u>Science News Dashboard</u> with all the relevant information on such activities and/or through other appropriate mechanisms. (Objective 4.2)
- BHSO: BSA will develop multiyear metrics and track progress toward its commitment to appropriately diversify and expand the Laboratory portfolio and seek out alternative sources of investment while expanding indirect funding sources. Metrics will be measured quarterly at the ALD level. (Objective 4.2)
- BHSO/SC: Demonstrate full implementation of program(s) that protects sensitive government information, technologies, equipment, intellectual property, and assets as reflected in applicable regulations and DOE Orders; e.g., O 142.3A Unclassified Foreign Visits and Assignments, P 485.1 Foreign Engagements with DOE National Laboratories, O 486.1 Foreign Government Talents Recruitment Programs, 550.1 Official Travel, O 481.1E, Strategic Partnership Projects, and O 483.1B, DOE Cooperative Research and Development Agreements. (Objective 4.2)

• BHSO/SC: The Laboratory and contractor leadership must ensure that all communication with interested stakeholders on DOE/SC program priorities/objectives are aligned with DOE/SC goals, strategies and guidance. (Objective 4.4)

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			30%	
4.2 Management and Operation of the Laboratory		-	30%	
4.3 Leadership of External Engagements and Partnerships			10%	
4.4 Contractor Value-Added			30%	
	Pe	rformance G	oal 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+	В	В-	C+	С	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 strength of the Nuclear/Facility Safety Programs; 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: Complete the set of FY 2020 agreed to critical elements of the Industrial Hygiene Corrective Action Plan. The FY 2020 critical elements will be agreed to between BHSO and BSA by the end of the first quarter. (Objective 5.1)
- BHSO: BSA will deliver to BHSO, for approval, a corrective action plan addressing the issues highlighted in the November 2018 Accelerator Program Review and the July 2019 SC Senior Leadership Accelerator Program Review. (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			65%	
5.2 Provide an Efficient and Effective Environmental Management System			35%	
	Pe	rformance G	oal 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+	В	B-	C+	С	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 Plan⁹, 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 create and implement a plan for recruiting, developing and building the future generation of scientists to enable the Laboratory to address emerging capabilities. (Objective 6.3)

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			25%	
6.3 Provide an Efficient, Effective, and Responsive Human Resources Management System and Diversity Program	-		15%	
6.4 Provide Efficient, Effective, and Responsive Contractor Assurance Systems, including Internal Audit and Quality			25%	
6.5 Demonstrate Effective Transfer of Knowledge and Technology and the Commercialization of Intellectual Assets			10%	
	P	erformance G	oal 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+	В	B-	C+	С	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; planning and executing strategies to promote the resilience and reliability of laboratory infrastructure; 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/SC: Effectively plan, execute, and successfully deliver SC projects equal to or less than \$50 million that have been delegated to the Laboratory Director by SC under DOE O 413.3B [Super Pioneering High Energy Nuclear Interaction (sPHENIX)]. Clearly demonstrate successful accomplishment of all work planned for FY 2020 in accordance with SC guidance. (Objective 7.1)

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%	
	Pe	rformance G	oal 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	Α-	B+	В	B-	C+	С	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

- **BHSO/SC:** Ensure the appropriate completion of Plans of Actions and Associated Milestones (POAMs) for Email Multi-Factor Authentication. (Objective 8.2)
- BHSO: BNL will demonstrate readiness and a robust structure for its vision of classified and intelligence program expansion. (Objective 8.3)
- BHSO: Leveraging BNL internal contractor assurance processes as well as an Office of Science
 assist visit to address identified deficiencies, and to adequately position BNL for a subsequent DOE
 Security Survey. (Objective 8.3)

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			25%	
8.2 Provide an Efficient and Effective Cyber Security System for the Protection of Classified and Unclassified Information			40%	
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			35%	
	Pe	rformance Go	oal 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+	В	B-	C+	С	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



FY2020 SMALL BUSINESS SUBCONTRACTING PLAN

Contractor:	Brookhaven Science Associates, LLC.
C	Brookhaven National Laboratory,
Contractor Address:	P.O. Box 5000
City/State/Zip:	Upton, New York 11973-5000
Company Phone:	(631) 344-8000
Point of Contact:	Sheri Alexander
POC Phone:	(631) 344-8285
POC E-mail:	alexander@bnl.gov
Contract Number:	DE-SC0012704
Item/Service:	Management and Operation of BNL
Total Amount of Contract (Including Options):	\$3,140,739,926.52 (through mod 0146)
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 \$180,000,000.
 - 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): \$81,000,000 and 45%.
 - (ii) Total estimated dollar value and percent of planned subcontracting with Small Disadvantaged Business (SDB)/8(a) (including ANCs and Indian Tribes): \$9,000,000 and 5%.



- (iii)Total estimated dollar value and percent of planned subcontracting with Woman-Owned Small Business (WOB): \$9,000,000 and 5%.
- (iv)Total estimated dollar value and percent of planned subcontracting with Historically Underutilized Small Business (HUBZone): \$5,400,000 and 3%.
- (v) Total estimated dollar value and percent of planned subcontracting with Service-Disabled Veteran-Owned Small Business (SDVOB): \$5,400,000 and 3%.
- (vi)Total estimated dollar value and percent of planned subcontracting with Veteran-Owned Small Business (VOB): \$5,400,000 and 3%.

Small Business Category	BSA Dollar Commitment	BSA Percent Commitment
SB	\$81,000,000	45%
SDB	\$9,000,000	5%
WOB	\$9,000,000	5%
HUBZone	\$5,400,000	3%
VOB	\$5,400,000	3%
SDVOB	\$5,400,000	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			a		8	X

b. The goals for the six small business categories 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 Limit but not over the Simplified Acquisition Threshold (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 (2) for purchases valued at: (A) \$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 (2) for purchases valued at: (A) \$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 (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;
- 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:

Sheri Alexander

Title:

Purchasing, Supervisor

Address:

Brookhaven National Laboratory

Procurement & Property Management Division

Building 902B

Upton, New York 11973

Telephone:(631) 344-8285

Email: alexander@bnl.gov

<u>Duties:</u> 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 Procurement and Property Management Division Manager (PPM) and Compliance 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 and Management & Operating Subcontract Reporting Capability (MOSRC).
- 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
Monthly	MOSRC	20th of each month

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 the Simplified Acquisition Threshold 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 approvals 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 FY2020 subcontracting plan was submitted by:

Lynn McKnight

Manager

Procurement and Property Management Division

Approval:

ature: AUNDREA CLIFTON Digitally signed by AUNDREA CLIFTON Date: 2019.19.07-10:59:58 -04'00'

Aundrea Clifton
Contracting Officer
U.S. Department of Energy
Brookhaven Site Office

Contract No. DE-SC0012704
Section J | Appendix I
Modification No. 0151

APPENDIX I

DOE Directives/List B

Applicable to the Operations of Brookhaven National Laboratory

Contract No. DE-SC0012704
Section J | Appendix I
Modification No. 0151

There is no List A to this Appendix.

List B to this Appendix contains the following:

Part I: "Directives List"

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

DOE DIRECTIVES LIST

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

DOE DIRECTIVES LIST

			THROUGH	TITLE
ISSUED	TYPE	NUMBER	CHANGE	Includes Compliance Notes as Necessary
10/18/2007	Order	341.1A Parts: 1.(a- b) 2.a(1-3) 2.a(4)(a-h)		Federal Employee Health Services
2/23/2010	Order	350.1	Chg. 6 (Minor Chg.) 2/1/18	Contractor Human Resource Management Programs
8/17/2009	Order	410.2	Admin Chg. 1 4/10/14	Management of Nuclear Materials
1/4/2017	Order	411.2		Scientific Integrity
10/28/2008	Order	413.1B		Internal Control Program
4/19/2006	Order	413.2C	Chg. 1 (Minor Chg.) 8/2/2018	Laboratory Directed Research and Development
11/29/2010	Order	413.3B	Chg. 5 (Minor Chg.) 4/12/18	Program and Project Management for the Acquisition of Capital Assets
4/25/2011	Order	414.1D	Admin Chg. 1 5/8/13	Quality Assurance
12/3/2012	Order	415.1	Chg.2 (Minor Chg.) 1/17/17	Information Technology Project Management
12/4/2012	Order	420.1C	Chg. 2 (Minor Chg.) 7/26/2018	Facility Safety Compliance Note: Chapters 1, 3, and 5 are applicable to BNL facilities categorized as hazardous category 1, 2, or 3 nuclear facility is proposed by BNL and approved by DOE
7/21/2011	Order	420.2C		Safety of Accelerator Facilities
6/29/2010	Order	422.1	Admin Chg. 1 6/25/13	Conduct of Operations Compliance Note: Applicable to Hazardous Category 1, 2, or 3 nuclear facilities and other facilities as defined by BSA in a Program Plan to be approved by BHSO for incorporating
11/25/2016	Policy	434.1B		Conduct and Approval of Select Agent and Toxin Work at Department of Energy Sites
7/9/1999	Order	435.1	Admin Chg. 1 8/28/01	Radioactive Waste Management
7/9/1999	Manual	435.1-1	Admin Chg. 1 6/19/01	Radioactive Waste Management Manual
5/2/2011	Order	436.1		Departmental Sustainability
11/27/2002	Order	440.2C	Admin Chg. 1 6/22/11	Aviation Management and Safety

DOE DIRECTIVES LIST

			THROUGH	TITLE
ISSUED	TYPE	NUMBER	CHANGE	Includes Compliance Notes as Necessary
3/7/2008	Manual	441.1-1	Chg. 1 (Admin Chg.) 02/24/16	Nuclear Material Packaging Manual
6/6/2001	Order	442.1B		Department of Energy Employee Concerns Program
7/29/2011	Order	442.2	Chg.1 (Pg.Chg.) 10/4/16	Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health
3/7/2011	Order	443.1B	Chg. 1 (Pg.Chg.) 4/21/16	Protection of Human Research Subjects
7/15/2016	Order	456.1A		The Safe Handling of Unbound Engineered Nanoparticles
2/11/2011	Order	458.1	Admin Chg. 3 1/15/13	Radiation Protection of the Public and the Environment
12/20/2016	Order	460.1D		Hazardous Materials Packaging and Transportation Safety
12/22/2004	Order	460.2A		Departmental Material Transportation and Packaging Management
6/4/2008	Manual	460.2-1A		Radioactive Material Transportation Practices Manual
11/23/2016	Order	470.3C		Design Basis Threat (DBT) Order
7/21/2011	Order	470.4B	Chg.2 (Minor Chg.) 1/17/17	Safeguards and Security Program
6/2/2014	Order	470.5		Insider Threat Program
9/2/2015	Order	470.6	Chg. 1 (Minor Chg.) 1/11/17	Technical Security Program
3/1/2010	Order	471.1B	e	Identification and Protection of Unclassified Controlled Nuclear Information
4/9/2003	Order	471.3	Admin Chg. 1 1/13/11	Identifying and Protecting Official Use Only Information
4/9/2003	Manual	471.3-1	Admin Chg. 1 1/13/11	Manual for Identifying and Protecting Official Use Only Information
6/20/2011	Order	471.6	Admin Chg. 2 5/15/15	Information Security
7/27/2011	Order	472.2	Admin Chg. 1 10/8/13	Personnel Security
1/2/2018	Order	473.3A	Chg.1 (Minor Chg.) 1/2/18	Protection Program Operations
6/27/2011	Order	474.2	Chg. 4 (Pg.Chg.) 9/13/16	Nuclear Material Control and Accountability
12/10/2004	Order	475.1		Counterintelligence Program

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ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
10/3/2014	Order	475.2B		Identifying Classified Information
12/20/2016	Order	483.1B		DOE Cooperative Research and Development Agreements
8/17/2006	Order	484.1	Admin Chg. 2 6/30/14	Reimbursable Work for the Department of Homeland Security
1/19/2017	Policy	485.1	1.5	Foreign Engagements with DOE National Laboratories
6/7/2019	Order	486.1	n 77 r	Department of Energy Foreign Government Talent Recruitement Programs
11/3/2004	Order	522.1		Pricing of Departmental Materials and Services
1/6/2003	Order	534.1B		Accounting
4/2/2012	Order	551.1D	Chg. 2 (Minor Chg.) 8/11/16	Official Foreign Travel
3/30/2012	Order	580.1A	Admin Chg. 1 10/22/2012	Department of Energy Personal Property Management Program