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14. DESCRIPTION OF AMENDMENT/MODIFICATION continued.

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

Contract Sections:

- a. Part I, Section H Special Contract Requirements
- b. Part II, Section I Contract Clauses
- c. Part III, Section J List of Attachments
- B. Table of Changes

PART I, SECTION H - SPECIAL CONTRACT REQUIREMENTS

Clause	Title	Change & Explanation
No.		
H.38	Definition of unusually hazardous or nuclear risk for Far clause 52.250-1 indemnification under public law 85-804	Change: Add clause. Explanation: This clause is added in accordance with Guidance for PF 2020-21, Secretarial Determination authorizing Public Law 85-804 Indemnification for Contractors Engaged in Activities Responding to COVID-19 dated April 3, 2020 and Memorandum to Senior Procurement Executives dated March 26, 2020.

PART II, SECTION I - CONTRACT CLAUSES

Clause No.	Title	Change & Explanation
I.31	Notice of Price Evaluation for HUBZone Small Business Concerns (Oct 2014)	Change: Update clause 52.219-4. Explanation: This clause is being updated in accordance with FAC 2020-05, FAR Case 2014-002, and Federal Register at 85 FR 11746 dated February 27, 2020.
1.33	Small Business Subcontracting Plan (Aug 2018) (Alternate IV)	Change: Update clause 52.219-9. Explanation: This clause is being updated in accordance with FAC 2020-05, FAR Case 2014-002, and Federal Register at 85 FR 11746 dated February 27, 2020.
I.40A	Child Labor - Cooperation with	Change: Update clause 52.222-19.

PAGE 3

	Authorities and Remedies (Oct 2019)	Explanation: This clause is being updated in accordance with FAC 2020-04, FAR Case 2019-012, and Federal Register at 85 FR 2616 dated January 15, 2020.
1.95	Indemnification Under Public Law 85-804 (APR 1984)	Change: Add FAR 52.250-1
	(ALTERNATE I) (APR	Explanation:
	1984)	This clause is added in accordance with Guidance for PF 2020-
		21, Secretarial Determination authorizing Public Law 85-804
		Indemnification for Contractors Engaged in Activities Responding
		to COVID-19 dated April 3, 2020 and Memorandum to Senior
		Procurement Executives dated March 26, 2020.

PART III, SECTION J - LIST OF ATTACHMENTS

Appendix	Title	Change & Explanation
В	Performance	Change: Revise Goal 4.0
	Evaluation and	
	Measurement Plan	Explanation: Add what is expected to be evaluated under
	FY 2020	Goal 4.0, especially Objective 4.3
1	DOE Directives/List B	Change: DOE Order 142.3A Chg. 2 (Ltd. Chg.)
		Explanation: Update to the latest revision 2/19/2020
		Change: DOE Order 350.1 Chg.7 (Ltd. Chg.)
		Explanation: Update to the latest revision 12/13/2019
		Change: DOE Order 443.1C
		Explanation : Update to the latest revision 11/26/2019
		Change: DOE Order 481.1E Chg. 1 (Ltd. Chg.)
		Explanation: Update to the latest revision 12/13/2019
		Change: DOE Order 483.1B Chg. 2 (Ltd. Chg.)
		Explanation : Update to the latest revision 12/13/2019
		Change: DOE Policy 485.1A
		Evalenation: Undete to the letest revision 19/13/2010
		Explanation: Update to the latest revision 12/13/2019 Change: DOE Policy 550.1 Chg.1 (Ltd. Chg.)
		Change. DOE Policy 550.1 Ong.1 (Ltd. Ong.)
		Explanation: Update to the latest revision 12/13/2019

C. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

END OF MODIFICATION

CLAUSE H.38 – DEFINITION OF UNUSUALLY HAZARDOUS OR NUCLEAR RISK FOR FAR CLAUSE 52.250-1 INDEMNIFICATION UNDER PUBLIC LAW 85-804

- (a) The term "a risk defined in this contract as unusually hazardous or nuclear" as used in FAR Clause 52.250-1 means the risk of legal liability to third parties (including legal costs as defined in paragraph jj. of Section 11 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. Section 2014jj., notwithstanding the fact that the claim or suit may not arise under section 170 of said Act) arising from actions or inactions in the course of the following performed by the Contractor under this contract:
 - (1) Participation in tasks or activities by the Contractor or its subcontractors on or after March 13, 2020 through June 30, 2020 that is directed or authorized by the U.S. Department of Energy or the U.S. Department of Energy National Nuclear Security Administration, including work for others, as an element of activities taken now and through June 30, 2020 in response to COVID-19, including but not limited to efforts to test for the presence of COVID-19, to provide equipment and resources to address COVID-19, and to develop treatments and vaccines for COVID-19, to the extent the task or activity is not exempt from liability under the Public Readiness and Emergency Preparedness Act (PREP Act) or other law, or the exemption under the PREP Act or other law is limited in scope or amount which is not sufficient to provide complete protection against the liability to which the contractor is exposed.
- (b) The unusually hazardous or nuclear risks described above are indemnified only to the extent that they are not covered by the Price-Anderson Act (section 170d. of the Atomic Energy Act of 1954, as amended, (42 U.S.C. Section 2210d.) or where the indemnification provided by the Price-Anderson Act is limited by the restriction on public liability imposed by section 170e. of the Atomic Energy Act of 1954, as amended, (42 U.S.C. Section 2210e.) to an amount which is not sufficient to provide complete indemnification for the legal liability to which the contractor is exposed.

CLAUSE I.31 – FAR 52.219-4 - NOTICE OF PRICE EVALUATION FOR HUBZONE SMALL BUSINESS CONCERNS (MAR 2020)

- (a) Definitions. See 13 CFR 126.103 for the definition of HUBZone.
- (b) Evaluation preference.
 - (1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except-
 - (i) Offers from HUBZone small business concerns that have not waived the evaluation preference; and
 - (ii) Otherwise successful offers from small business concerns.
 - (2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.
 - (3) When the two highest rated offerors are a HUBZone small business concern and a large business, and the evaluated offer of the HUBZone small business concern is equal to the evaluated offer of the large business after considering the price evaluation preference, award will be made to the HUBZone small business concern.
- (c) Waiver of evaluation preference. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraphs (d) and (e) of this clause do not apply if the offeror has waived the evaluation preference.
 - □ Offeror elects to waive the evaluation preference.
- (d) Limitations on subcontracting. The Contractor shall spend—
 - For services (except construction), at least 50 percent of the cost of personnel for contract performance on its own employees or employees of other HUBZone small business concerns;
 - (2) For supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, on the concern or other HUBZone small business concerns;
 - (3) For general construction —

- (i) At least 15 percent of the cost of contract performance to be incurred for personnel on its own employees;
- (ii) At least 50 percent of the cost of the contract performance to be incurred for personnel on its own employees or on a combination of its own employees and employees of HUBZone small business concern subcontractors:
- (iii) No more than 50 percent of the cost of contract performance to be incurred for personnel on concerns that are not HUBZone small business concerns; or
- (4) For construction by special trade contractors
 - (i) At least 25 percent of the cost of contract performance to be incurred on its own employees;
 - (ii) At least 50 percent of the cost of the contract performance to be incurred for personnel on its own employees or on a combination of its own employees and employees of HUBZone small business concern subcontractors;
 - (iii) No more than 50 percent of the cost of contract performance to be incurred for personnel on concerns that are not HUBZone small business concerns.
- (e) A HUBZone joint venture agrees that the aggregate of the HUBZone small business concerns to the joint venture, not each concern separately, will perform the applicable percentage of work requirements.
- (f) Notice. The HUBZone small business offeror acknowledges that a prospective HUBZone awardee must be a HUBZone small business concern at the time of award of this contract. The HUBZone offeror shall provide the Contracting Officer a copy of the notice required by 13 CFR 126.501 if material changes occur before contract award that could affect its HUBZone eligibility. If the apparently successful HUBZone offeror is not a HUBZone small business concern at the time of award of this contract, the Contracting Officer will proceed to award to the next otherwise successful HUBZone small business concern or other offeror.

CLAUSE I.33 – FAR 52.219-9 – SMALL BUSINESS SUBCONTRACTING PLAN (MAR 2020) (ALTERNATE IV)

- (a) This clause does not apply to small business concerns.
- (b) Definitions. As used in this clause—

Alaska Native Corporation (ANC) means any Regional Corporation, Village Corporation, Urban Corporation, or Group Corporation organized under the laws of the State of Alaska in accordance with the Alaska Native Claims Settlement Act, as amended (43 U.S.C. 1601, et seq.) and which is considered a minority and economically disadvantaged concern under the criteria at 43 U.S.C. 1626(e)(1). This definition also includes ANC direct and indirect subsidiary corporations, joint ventures, and partnerships that meet the requirements of 43 U.S.C. 1626(e)(2).

Commercial item means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

Commercial plan means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

Electronic Subcontracting Reporting System (eSRS) means the Governmentwide, electronic, web-based system for small business subcontracting program reporting. The eSRS is located at http://www.esrs.gov.

Indian tribe means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act (43 U.S.C.A. 1601 et seq.), that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs in accordance with 25 U.S.C. 1452(c). This definition also includes Indian-owned economic enterprises that meet the requirements of 25 U.S.C. 1452(e).

Individual subcontracting 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 offeror'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.

Master subcontracting plan means a subcontracting plan that contains all the required elements of an individual subcontracting plan, except goals, and may be incorporated into individual subcontracting plans, provided the master subcontracting plan has been approved.

Reduced payment means a payment that is for less than the amount agreed upon in a subcontract in accordance with its terms and conditions, for supplies and services for which the Government has paid the prime contractor.

Subcontract means any agreement (other than one involving an employeremployee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

Total contract dollars means the final anticipated dollar value, including the dollar value of all options.

Untimely payment means a payment to a subcontractor that is more than 90 days past due under the terms and conditions of a subcontract for supplies and services for which the Government has paid the prime contractor.

(c)

(1) The Contractor, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan, where applicable, that separately addresses subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the Contractor is submitting an individual subcontracting plan, the plan shall separately address subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The subcontracting plan shall be incorporated into the contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. The subcontracting plan does not apply retroactively.

(2)

- (i) The prime Contractor may accept a subcontractor's written representations of its size and socioeconomic status as a small business, small disadvantaged business, veteran-owned small business, service-disabled veteran-owned small business, or a women-owned small business if the subcontractor represents that the size and socioeconomic status representations with its offer are current, accurate, and complete as of the date of the offer for the subcontract.
- (ii) The Contractor may accept a subcontractor's representations of its size and socioeconomic status as a small business, small

disadvantaged business, veteran-owned small business, servicedisabled veteran-owned small business, or a women-owned small business in the System for Award Management (SAM) if—

- (A) The subcontractor is registered in SAM; and
- (B) The subcontractor represents that the size and socioeconomic status representations made in SAM are current, accurate and complete as of the date of the offer for the subcontract.
- (iii) The Contractor may not require the use of SAM for the purposes of representing size or socioeconomic status in connection with a subcontract.
- (iv) In accordance with 13 CFR 121.411, 124.1015, 125.29, 126.900, and 127.700, a contractor acting in good faith is not liable for misrepresentations made by its subcontractors regarding the subcontractor's size or socioeconomic status.
- (d) The Contractor's subcontracting plan shall include the following:
 - (1) Separate goals, expressed in terms of total dollars subcontracted and as a percentage of total planned subcontracting dollars, for the use of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. For individual subcontracting plans, and if required by the Contracting Officer, goals shall also be expressed in terms of percentage of total contract dollars, in addition to the goals expressed as a percentage of total subcontract dollars. The Contractor shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs. In accordance with 43 U.S.C. 1626—
 - (i) Subcontracts awarded to an ANC or Indian tribe shall be counted towards the subcontracting goals for small business and small disadvantaged business concerns, regardless of the size or Small Business Administration certification status of the ANC or Indian tribe; and
 - (ii) Where one or more subcontractors are in the subcontract tier between the prime Contractor and the ANC or Indian tribe, the ANC or Indian tribe shall designate the appropriate Contractor(s) to count the subcontract towards its small business and small disadvantaged business subcontracting goals.

- (A) In most cases, the appropriate Contractor is the Contractor that awarded the subcontract to the ANC or Indian tribe.
- (B) If the ANC or Indian tribe designates more than one Contractor to count the subcontract toward its goals, the ANC or Indian tribe shall designate only a portion of the total subcontract award to each Contractor. The sum of the amounts designated to various Contractors cannot exceed the total value of the subcontract.
- (C) The ANC or Indian tribe shall give a copy of the written designation to the Contracting Officer, the Contractor, and the subcontractors in between the prime Contractor and the ANC or Indian tribe within 30 days of the date of the subcontract award.
- (D) If the Contracting Officer does not receive a copy of the ANC's or the Indian tribe's written designation within 30 days of the subcontract award, the Contractor that awarded the subcontract to the ANC or Indian tribe will be considered the designated Contractor.

(2) A statement of—

- (i) Total dollars planned to be subcontracted for an individual subcontracting plan; or the Contractor's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;
- (ii) Total dollars planned to be subcontracted to small business concerns (including ANC and Indian tribes);
- (iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;
- (iv) Total dollars planned to be subcontracted to service-disabled veteran-owned small business;
- (v) Total dollars planned to be subcontracted to HUBZone small business concerns;
- (vi) Total dollars planned to be subcontracted to small disadvantaged business concerns (including ANCs and Indian tribes); and
- (vii) Total dollars planned to be subcontracted to women-owned small business concerns.

- (3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to—
 - (i) Small business concerns;
 - (ii) Veteran-owned small business concerns;
 - (iii) Service-disabled veteran-owned small business concerns:
 - (iv) HUBZone small business concerns;
 - (v) Small disadvantaged business concerns; and
 - (vi) Women-owned small business concerns.
- (4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.
- (5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, SAM, veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). The Contractor may rely on the information contained in SAM as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of SAM as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.
- (6) A statement as to whether or not the Contractor included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—
 - (i) Small business concerns (including ANC and Indian tribes);
 - (ii) Veteran-owned small business concerns;
 - (iii) Service-disabled veteran-owned small business concerns;
 - (iv) HUBZone small business concerns;

- (v) Small disadvantaged business concerns (including ANC and Indian tribes); and
- (vi) Women-owned small business concerns.
- (7) The name of the individual employed by the Contractor who will administer the Contractor's subcontracting program, and a description of the duties of the individual.
- (8) A description of the efforts the Contractor will make to assure that small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns have an equitable opportunity to compete for subcontracts.
- (9) Assurances that the Contractor will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the Contractor will require all subcontractors (except small business concerns) that receive subcontracts in excess of \$700,000 (\$1.5 million for construction of any public facility) with further subcontracting possibilities to adopt a subcontracting plan that complies with the requirements of this clause.
- (10) Assurances that the Contractor will—
 - (i) Cooperate in any studies or surveys as may be required;
 - Submit periodic reports so that the Government can determine the extent of compliance by the Contractor with the subcontracting plan;
 - (iii) After November 30, 2017, include subcontracting data for each order when reporting subcontracting achievements for an indefinitedelivery, indefinite-quantity contract with an individual subcontracting plan where the contract is intended for use by multiple agencies;
 - (iv) Submit the Individual Subcontract Report (ISR) and/or the Summary Subcontract Report (SSR), in accordance with paragraph (I) of this clause using the Electronic Subcontracting Reporting System (eSRS) at http://www.esrs.gov. The reports shall provide information on subcontract awards to small business concerns (including ANCs and Indian tribes that are not small businesses), veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns (including ANCs)

and Indian tribes that have not been certified by SBA as small disadvantaged businesses), women-owned small business concerns, and for NASA only, Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with this clause, or as provided in agency regulations;

- (v) Ensure that its subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using eSRS;
- (vi) Provide its prime contract number, its unique entity identifier, and the email address of the Contractor's official responsible for acknowledging receipt of or rejecting the ISRs, to all first-tier subcontractors with subcontracting plans so they can enter this information into the eSRS when submitting their ISRs; and
- (vii) Require that each subcontractor with a subcontracting plan provide the prime contract number, its own unique entity identifier, and the email address of the subcontractor's official responsible for acknowledging receipt of or rejecting the ISRs, to its subcontractors with subcontracting plans.
- (11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the Contractor's efforts to locate small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated):
 - (i) Source lists (e.g., SAM), guides, and other data that identify small business, veteran-owned small business, service-disabled veteranowned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.
 - (ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.
 - (iii) Records on each subcontract solicitation resulting in an award of more than the simplified acquisition threshold, indicating—

- (A) Whether small business concerns were solicited and, if not, why not;
- (B) Whether veteran-owned small business concerns were solicited and, if not, why not;
- (C) Whether service-disabled veteran-owned small business concerns were solicited and, if not, why not;
- (D) Whether HUBZone small business concerns were solicited and, if not, why not;
- (E) Whether small disadvantaged business concerns were solicited and, if not, why not;
- (F) Whether women-owned small business concerns were solicited and, if not, why not; and
- (G) If applicable, the reason award was not made to a small business concern.
- (iv) Records of any outreach efforts to contact—
 - (A) Trade associations;
 - (B) Business development organizations;
 - (C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, service-disabled veteran-owned, and women-owned small business sources; and
 - (D) Veterans service organizations.
- (v) Records of internal guidance and encouragement provided to buyers through—
 - (A) Workshops, seminars, training, etc.; and
 - (B) Monitoring performance to evaluate compliance with the program's requirements.
- (vi) On a contract-by-contract basis, records to support award data submitted by the Contractor to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

- Assurances that the Contractor will make a good faith effort to acquire articles, equipment, supplies, services, or materials, or obtain the performance of construction work from the small business concerns that it used in preparing the proposal for the modification, in the same or greater scope, amount, and quality used in preparing and submitting the modification proposal. Responding to a request for a quote does not constitute use in preparing a proposal. The Contractor used a small business concern in preparing the proposal for a modification if—
 - (i) The Contractor identifies the small business concern as a subcontractor in the proposal or associated small business subcontracting plan, to furnish certain supplies or perform a portion of the subcontract; or
 - (ii) The Contractor used the small business concern's pricing or cost information or technical expertise in preparing the proposal, where there is written evidence of an intent or understanding that the small business concern will be awarded a subcontract for the related work when the modification is executed.
- (13) Assurances that the Contractor will provide the Contracting Officer with a written explanation if the Contractor fails to acquire articles, equipment, supplies, services or materials or obtain the performance of construction work as described in (d)(12) of this clause. This written explanation must be submitted to the Contracting Officer within 30 days of contract completion.
- (14) Assurances that the Contractor will not prohibit a subcontractor from discussing with the contracting officer any material matter pertaining to the payment to or utilization of a subcontractor.
- (15) Assurances that the offeror will pay its small business subcontractors on time and in accordance with the terms and conditions of the underlying subcontract, and notify the contracting officer when the prime contractor makes either a reduced or an untimely payment to a small business subcontractor (see 52.242-5).
- (e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:
 - (1) Assist small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business,

veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

- Provide adequate and timely consideration of the potentialities of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.
- (3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.
- (4) Confirm that a subcontractor representing itself as a HUBZone small business concern is certified by SBA as a HUBZone small business concern in accordance with 52.219-8(d)(2).
- (5) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owned small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.
- (6) For all competitive subcontracts over the simplified acquisition threshold in which a small business concern received a small business preference, upon determination of the successful subcontract offeror, prior to award of the subcontract the Contractor must inform each unsuccessful small business subcontract offeror in writing of the name and location of the apparent successful offeror and if the successful subcontract offeror is a small business, veteran-owned small business, service-disabled veteranowned small business, HUBZone small business, small disadvantaged business, or women-owned small business concern.
- (7) Assign each subcontract the NAICS code and corresponding size standard that best describes the principal purpose of the subcontract.
- (f) A master subcontracting plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the Offeror by this clause; provided—
 - (1) The master subcontracting plan has been approved;

- (2) The Offeror ensures that the master subcontracting plan is updated as necessary and provides copies of the approved master subcontracting plan, including evidence of its approval, to the Contracting Officer; and
- (3) Goals and any deviations from the master subcontracting plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.
- (g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Once the Contractor's commercial plan has been approved, the Government will not require another subcontracting plan from the same Contractor while the plan remains in effect, as long as the product or service being provided by the Contractor continues to meet the definition of a commercial item. A Contractor with a commercial plan shall comply with the reporting requirements stated in paragraph (d)(10) of this clause by submitting one SSR in eSRS for all contracts covered by its commercial plan. This report shall be acknowledged or rejected in eSRS by the Contracting Officer who approved the plan. This report shall be submitted within 30 days after the end of the Government's fiscal year.
- (h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.
- (i) A contract may have no more than one subcontracting plan. When a contract modification exceeds the subcontracting plan threshold in 19.702(a), or an option is exercised, the goals of the existing subcontracting plan shall be amended to reflect any new subcontracting opportunities. When the goals in a subcontracting plan are amended, these goal changes do not apply retroactively.
- (j) Subcontracting plans are not required from subcontractors when the prime contract contains the clause at 52.212-5, Contract Terms and Conditions Required to Implement Statutes or Executive Orders—Commercial Items, or when the subcontractor provides a commercial item subject to the clause at 52.244-6, Subcontracts for Commercial Items, under a prime contract.
- (k) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization Of Small Business Concerns," or (2) an approved plan required by this clause, shall be a material breach of the contract and may be considered in any past performance evaluation of the Contractor.

- (I) The Contractor shall submit ISRs and SSRs using the web-based eSRS at http://www.esrs.gov. Purchases from a corporation, company, or subdivision that is an affiliate of the Contractor or subcontractor are not included in these reports. Subcontract awards by affiliates shall be treated as subcontract awards by the Contractor. Subcontract award data reported by the Contractor and subcontractors shall be limited to awards made to their immediate next-tier subcontractors. Credit cannot be taken for awards made to lower tier subcontractors, unless the Contractor or subcontractor has been designated to receive a small business or small disadvantaged business credit from an ANC or Indian tribe. Only subcontracts involving performance in the United States or its outlying areas should be included in these reports with the exception of subcontracts under a contract awarded by the State Department or any other agency that has statutory or regulatory authority to require subcontracting plans for subcontracts performed outside the United States and its outlying areas.
 - (1) *ISR.* This report is not required for commercial plans. The report is required for each contract containing an individual subcontracting plan.
 - (i) The report shall be submitted semi-annually during contract performance for the periods ending March 31 and September 30. A report is also required for each contract within 30 days of contract completion. Reports are due 30 days after the close of each reporting period, unless otherwise directed by the Contracting Officer. Reports are required when due, regardless of whether there has been any subcontracting activity since the inception of the contract or the previous reporting period. When the Contracting Officer rejects an ISR, the Contractor shall submit a corrected report within 30 days of receiving the notice of ISR rejection.

(ii)

- (A) When a subcontracting plan contains separate goals for the basic contract and each option, as prescribed by FAR 19.704(c), the dollar goal inserted on this report shall be the sum of the base period through the current option; for example, for a report submitted after the second option is exercised, the dollar goal would be the sum of the goals for the basic contract, the first option, and the second option.
- (B) If a subcontracting plan has been added to the contract pursuant to 19.702(a)(1)(iii) or 19.301-2(e), the Contractor's achievements must be reported in the ISR on a cumulative basis from the date of incorporation of the subcontracting plan into the contract.

- (iii) When a subcontracting plan includes indirect costs in the goals, these costs must be included in this report.
- (iv) The authority to acknowledge receipt or reject the ISR resides—
 - (A) In the case of the prime Contractor, with the Contracting Officer; and
 - (B) In the case of a subcontract with a subcontracting plan, with the entity that awarded the subcontract.

(2) SSR.

- (i) Reports submitted under individual subcontracting plans.
 - (A) This report encompasses all subcontracting under prime contracts and subcontracts with an executive agency, regardless of the dollar value of the subcontracts. This report also includes indirect costs on a prorated basis when the indirect costs are excluded from the subcontracting goals.
 - (B) The report may be submitted on a corporate, company or subdivision (e.g. plant or division operating as a separate profit center) basis, unless otherwise directed by the agency.
 - (C) If the Contractor or a subcontractor is performing work for more than one executive agency, a separate report shall be submitted to each executive agency covering only that agency's contracts, provided at least one of that agency's contracts is over \$700,000 (over \$1.5 million for construction of a public facility) and contains a subcontracting plan. For DoD, a consolidated report shall be submitted for all contracts awarded by military departments/agencies and/or subcontracts awarded by DoD prime contractors.
 - (D) The report shall be submitted annually by October 30 for the twelve month period ending September 30. When a Contracting Officer rejects an SSR, the Contractor shall submit a revised report within 30 days of receiving the notice of SSR rejection.
 - (E) Subcontract awards that are related to work for more than one executive agency shall be appropriately allocated.
 - (F) The authority to acknowledge or reject SSRs in eSRS, including SSRs submitted by subcontractors with

subcontracting plans, resides with the Government agency awarding the prime contracts unless stated otherwise in the contract.

- (ii) Reports submitted under a commercial plan.
 - (A) The report shall include all subcontract awards under the commercial plan in effect during the Government's fiscal year and all indirect costs.
 - (B) The report shall be submitted annually, within thirty days after the end of the Government's fiscal year.
 - (C) If a Contractor has a commercial plan and is performing work for more than one executive agency, the Contractor shall specify the percentage of dollars attributable to each agency.
- (D) The authority to acknowledge or reject SSRs for commercial plans resides with the Contracting Officer who approved the commercial plan.

CLAUSE I.40A - FAR 52.222-19 - CHILD LABOR — COOPERATION WITH AUTHORITIES AND REMEDIES (JAN 2020)

- (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 \$83,099, 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.95 – FAR 52.250-1 INDEMNIFICATION UNDER PUBLIC LAW 85-804 (APR 1984) (ALTERNATE I)

- (a) "Contractor's principal officials," as used in this clause, means directors, officers, managers, superintendents, or other representatives supervising or directing-
 - (1) All or substantially all of the Contractor's business;
 - (2) All or substantially all of the Contractor's operations at any one plant or separate location in which this contract is being performed; or
 - (3) A separate and complete major industrial operation in connection with the performance of this contract.
- (b) Under Public Law85-804 (50 U.S.C. 1431-1435) and Executive Order10789, as amended, and regardless of any other provisions of this contract, the Government shall, subject to the limitations contained in the other paragraphs of this clause, indemnify the Contractor against-
 - Claims (including reasonable expenses of litigation or settlement) by third persons (including employees of the Contractor) for death; personal injury; or loss of, damage to, or loss of use of property;
 - (2) Loss of, damage to, or loss of use of Contractor property, excluding loss of profit; and
 - (3) Loss of, damage to, or loss of use of Government property, excluding loss of profit.
- (c) This indemnification applies only to the extent that the claim, loss, or damage (1) arises out of or results from a risk defined in this contract as unusually hazardous or nuclear and (2) is not compensated for by insurance or otherwise. Any such claim, loss, or damage, to the extent that it is within the deductible amounts of the Contractor's insurance, is not covered under this clause. If insurance coverage or other financial protection in effect on the date the approving official authorizes use of this clause is reduced, the Government's liability under this clause shall not increase as a result.
- (d) When the claim, loss, or damage is caused by willful misconduct or lack of good faith on the part of any of the Contractor's principal officials, the Contractor shall not be indemnified for-
 - (1) Government claims against the Contractor (other than those arising through subrogation); or

- (2) Loss or damage affecting the Contractor's property.
- (e) With the Contracting Officer's prior written approval, the Contractor may, in any subcontract under this contract, indemnify the subcontractor against any risk defined in this contract as unusually hazardous or nuclear. This indemnification shall provide, between the Contractor and the subcontractor, the same rights and duties, and the same provisions for notice, furnishing of evidence or proof, and Government settlement or defense of claims as this clause provides. The Contracting Officer may also approve indemnification of subcontractors at any lower tier, under the same terms and conditions. The Government shall indemnify the Contractor against liability to subcontractors incurred under subcontract provisions approved by the Contracting Officer.
- (f) The rights and obligations of the parties under this clause shall survive this contract's termination, expiration, or completion. The Government shall make no payment under this clause unless the agency head determines that the amount is just and reasonable. The Government may pay the Contractor or subcontractors, or may directly pay parties to whom the Contractor or subcontractors may be liable.
- (g) The Contractor shall-
 - Promptly notify the Contracting Officer of any claim or action against, or any loss by, the Contractor or any subcontractors that may be reasonably be expected to involve indemnification under this clause;
 - (2) Immediately furnish to the Government copies of all pertinent papers the Contractor receives;
 - (3) Furnish evidence or proof of any claim, loss, or damage covered by this clause in the manner and form the Government requires; and
 - (4) Comply with the Government's directions and execute any authorizations required in connection with settlement or defense of claims or actions.
- (h) The Government may direct, control, or assist in settling or defending any claim or action that may involve indemnification under this clause.
- (i) The cost of insurance (including self-insurance programs) covering a risk defined in this contract as unusually hazardous or nuclear shall not be reimbursed except to the extent that the Contracting Officer has required or approved this insurance. The Government's obligations under this clause are-

- (1) Excepted from the release required under this contract's clause relating to allowable cost; and
- (2) Not affected by this contract's Limitation of Cost or Limitation of Funds clause.



U.S. DEPARTMENT OF ENERGY

AND

BROOKHAVEN SCIENCE ASSOCIATES, LLC

APPENDIX B

PERFORMANCE EVALUATION AND MEASUREMENT PLAN

FISCAL YEAR 2020

BROOKHAVEN NATIONAL LABORATORY

TABLE OF CONTENTS

INTRODUCTION

I. DETERMINING THE CONTRACTOR'S PERFORMANCE RATING, AND PERFORMANCE-BASED FEE

- II. PERFORMANCE GOALS, OBJECTIVES & NOTABLE OUTCOMES
- GOAL 1.0 Provide for Efficient and Effective Mission Accomplishment
 - 1.1 Provide Science and Technology Results with Meaningful Impact on the Field
 - 1.2 Provide Quality Leadership in Science and Technology that Advances Community Goals and DOE Mission Goals
- GOAL 2.0 Provide for Efficient and Effective Design, Fabrication, Construction and Operations of Research Facilities
 - 2.1 Provide Effective Facility Design(s) as Required to Support Laboratory Programs (i.e., activities leading up to CD-2)
 - 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components (execution phase, Post CD-2 to CD-4)
 - 2.3 Provide Efficient and Effective Operation of Facilities
 - 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities
- GOAL 3.0 Provide Effective and Efficient Science and Technology Program Management
 - 3.1 Provide Effective and Efficient Strategic Planning and Stewardship of Scientific Capabilities and Program Vision
 - 3.2 Provide Effective and Efficient Science and Technology Project/Program/Facilities Management
 - 3.3 Provide Efficient and Effective Communications and Responsiveness to Headquarters Needs
- GOAL 4.0 Provide Sound and Competent Leadership and Stewardship of the Laboratory
 - 4.1 Leadership and Stewardship of the Laboratory
 - 4.2 Management and Operation of the Laboratory
 - 4.3 Leadership of External Engagements and Partnerships
 - 4.4 Contractor Value-Added
- 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
 - 5.2 Provide Efficient and Effective Environmental Management System
- 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
 - 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
- 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
 - 7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to Support the Continuation and Growth of Laboratory Missions and Programs
- 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
 - 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

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	B-	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	Numerical	lng scale for the Goal 5.0 – 8.0 Objectives are provided in Figure 1-1, below:
Grade	Grade	Definition
A+	4.3-4.1	Significantly exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). Performance is notable for its significant contributions to the management and operations across the SC system of laboratories, and/or has been recognized by external, independent entities as exemplary.
A	4.0-3.8	Notably exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). Performance is notable for its contributions to the management and operations across the SC system of laboratories, and/or as been recognized by external, independent entities as exemplary.
A-	3.7-3.5	Exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s).
B+	3.4-3.1	Meets expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). No performance has, or has the potential to, adversely impact 1) the delivery of the current and/or future DOE/Laboratory mission(s), 2) the DOE and/or the Laboratory's reputation, or does not 3) provide a sustainable performance platform.
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

<u>Calculating Individual Goal Scores and Letter Grades:</u>

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	

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%			
Initial S&T Score					

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

¹ For Goals 1.0 and 2.0, the weights are based on 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	Numerical Score	Weight		
5.0 Integrated Safety, Health, and Environmental Protection		30%		
6.0 Business Systems		30%		
7.0 Operating, Maintaining, and Renewing Facility and Infrastructure Portfolio		30%		
8.0 Integrated Safeguards and Security Management and Emergency Management Systems		10%		
	•	Initial	M&O Score	

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

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

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

Table C. 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.	Percent S&T Fee Earned	M&O Fee Multiplier
4.3	100%	100%
4.2		
4.1		
4.0	97%	100%
3.9		
3.8		
3.7		100%
3.6	94%	
3.5		
3.4		100%
3.3	91%	
3.2		
3.1		
3.0	88%	95%
2.9		
2.8		
2.7	85%	90%
2.6		
2.5		
2.4	75%	85%
2.3		
2.2		
2.1		
2.0	500/	75%
1.9 1.8	50%	
		60%
1.7 1.6		
1.5		
1.4	0%	
1.3		
1.2		
1.1		
1.0 to 0.8	0%	0%
0.7 to 0.0	0%	0%

Figure 3. Performance-Based Fee Earned Scale

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

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

The Federal Acquisition Regulations (FAR) requirements for using and administering cost-plus-award-fee contracts were modified to provide for a five-level adjectival grading system with associated levels of available fee. 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

- 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
A+	 In addition to satisfying the conditions for B+ There are significant research areas for which the Laboratory has exceeded the expectations of the proposed research plans in significant ways through creative, new, or unconventional methods that allow greater scientific reach than expected. S&T conducted at the Laboratory has resolved one of the most critical questions in the field, or has changed the way the research community thinks about a particular field through paradigm shifting discoveries that would be considered the most influential discovery of the decade for that field.
	• S&T conducted at the Laboratory <i>provided major advances that significantly accelerate</i> DOE or other customer mission(s).
A	 In addition to satisfying the conditions for B+ There are <i>important examples</i> where the Laboratory <i>exceeded the expectations</i> of the proposed research plans <i>in significant ways through creative, new, or unconventional methods that allow greater scientific reach than expected.</i> All areas of S&T conducted at the Laboratory are of <i>exceptional or outstanding</i> merit and quality. S&T conducted at the Laboratory has <i>significant positive impact</i> to DOE or other customer missions.
A-	 In addition to satisfying the conditions for B+ There are <i>important examples</i> where the Laboratory <i>exceeded the expectations</i> of the proposed research plans. <i>Significant areas</i> of S&T conducted at the Laboratory are of <i>exceptional or outstanding</i> merit and quality. S&T conducted at the Laboratory <i>significantly impact</i> DOE or other customer missions.
B+	The Laboratory has achieved each of the following objectives: • The Laboratory has successfully executed proposed research plans. • S&T conducted at the Laboratory are of <i>high</i> scientific merit and quality • S&T conducted at the Laboratory <i>advance</i> 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 of poor merit and quality OR some areas of research, previously supported, have become uncompetitive AND the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities OR the Laboratory has been found to have engaged in gross scientific incompetence and/or scientific fraud. S&T conducted at the Laboratory failed to contribute to DOE or other customer missions.

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

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

- Innovativeness / Novelty of research ideas put forward by the Laboratory;
- Extent to which Laboratory staff members take on substantive or formal leadership roles in their community;
- Extent to which Laboratory staff members take on formal leadership roles in DOE, 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
	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.
A	• The Laboratory program consistently produces and submits competitive proposals that challenge convention and open <i>significant new fields</i> for research that are well aligned with DOE or other supporting agency's mission needs and <i>the Laboratory has a strong recognized role in setting priorities and driving the direction in key research areas.</i>
	 Laboratory staff hold <i>leadership positions</i> in multi-institutional research collaborations. In addition to satisfying the conditions for B+
A-	 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 <i>significant</i> new avenues for research that are well aligned with DOE or other supporting agency's mission needs.
	• Laboratory staff hold <i>leadership positions</i> in multi-institutional research collaborations.
	 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.
\mathbf{B}^{+}	• 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.
	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:
В	• 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 problems that are no longer at the forefront of science and are considered mundane.
F	Review has found the Laboratory staff to be guilty of gross scientific incompetence and/or scientific fraud.

Notable Outcomes

- **BES**: Deliver impactful science 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						
1.1 Impact			50%			
1.2 Leadership			50%			
Overall ASCR Total						
Office of Basic Energy Sciences						
1.1 Impact			50%			
1.2 Leadership			50%			
		Overall 1	BES Total			
Office of Biological and Environmental Research						
1.1 Impact			60%			
1.2 Leadership			40%			
		Overall I	BER Total			
Office of High Energy Physics						
1.1 Impact			50%			
1.2 Leadership			50%			
		Overall l	HEP Total			
Office of Nuclear Physics						
1.1 Impact			50%			
1.2 Leadership			50%			
Overall NP Total						
Office of Defense Nuclear Nonproliferation						
1.1 Impact			56%			
1.2 Leadership			44%			
		Overall D	ONN Total			
Office of Workforce Development for Teachers and Scientists						
1.1 Impact			80%			
1.2 Leadership			20%			
Overall NE Total						
Nuclear Regulatory Commission						
1.1 Impact			50%			
1.2 Leadership			50%			
		Overall N	NRC Total			

Table 1.1 - Program Performance Goal 1.0 Score Development

Program Office ²		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				
Office of Defense Nuclear Nonproliferation				
Office of Workforce Development for Teachers and				
Scientists				
Nuclear Regulatory Commission				
Performance Goal 1.0 Total				

Table 1.2 – Overall Performance Goal 1.0 Score 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+	C	C-	D	F

Table 1.3 – Goal 1.0 Final Letter Grade

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

- 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+, <i>all</i> 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+					
	The Laboratory fails to meet the expectations in several of the areas listed under B+					
C	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					
Ъ	Laboratory fails to provide a compelling justification for the acquisition.					
	The Laboratory fails to meet the expectations in several of the areas listed under B+					
F	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)

- 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 <i>significantly expanded</i> if such were desirable, without impact on baseline cost or schedule; The Laboratory <i>always</i> provides <i>exemplary</i> 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 <i>exemplary</i>. There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline; 						

Letter Grade	Definition					
A-	 In addition to satisfying all conditions for B+, The Laboratory has identified practices that would allow for the project scope to be expanded if such were desirable, without impact on baseline cost or schedule; 					
	 Problems are identified and corrected by the Laboratory promptly, with no impact on scope, cost or schedule The Laboratory provides <i>particularly useful</i> 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;					
B+	 The Laboratory provides sustained leadership and commitment to environment, safety and health; Reviews regularly recognize the Laboratory for being proactive in the management of the execution phase of the project; 					
	• To a large extent, problems are identified and corrected by the Laboratory with little, or no impact on scope, cost or schedule;					
	• DOE is kept informed of project status on a regular basis; reviews regularly indicate project is expected to meet its cost/schedule performance baseline.					
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+.					
В-	The Laboratory provides sustained leadership and commitment to environment, safety and health BUT • The project fails to meet expectations in <i>several</i> of the areas listed under B+					
С	The Laboratory provides sustained leadership and commitment to environment, safety and health BUT The project fails to meet expectations in <i>several</i> of the areas listed under B+ AND					
	 Reviews indicate project remains at risk of breaching its cost/schedule performance baseline; Reports to DOE can vary in degree of completeness 					
D	 The project fails to meet conditions for B+ in at least one of the following areas: Reviews indicate project is likely to breach its cost/schedule performance baseline; Laboratory commitment to environment, safety and health issues is inadequate; 					
	Reports to DOE are largely incomplete; Laboratory commitment to the project has subsided.					
F	 The project fails to meet conditions for B+ in at least one of the following areas: Laboratory falsifies data during project execution phase; Shows disdain for executing the project within minimal standards for environment, safety or health, 					
	 Fails to keep DOE informed of project status; Recent reviews indicate that the project is expected to breach its cost/schedule performance baseline. 					

2.3 Provide Efficient and Effective Operation of Facilities

- 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+; <i>all</i> of the following conditions are also met Performance of the facility <i>exceeds</i> 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 <i>less</i> than planned and are acknowledged to be 'leadership caliber' by reviews; Data on environment, safety, and health continues to be <i>exemplary</i> and widely regarded as among the 'best in class.' 					
A-	 In addition to satisfying all conditions for B+, <i>one</i> of the following conditions is met: Performance of the facility <i>exceeds</i> 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 <i>less</i> 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 <i>meets</i> 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 <i>many</i> 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 <i>many</i> 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					
	In addition to meeting all measures under A,					
A+	The Laboratory took extraordinary means to deliver an extraordinary result for a new user community.					
	In addition to satisfying all conditions for B+; <i>all</i> of the following conditions are met					
	• An <i>aggressive</i> outreach programs is in place and has been documented as attracting new communities to the facility;					
A	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 <i>strong</i> outreach program is in place;					
	 Reviews find that the facility capability or scope of research potential exceeds expectations for 					
A-	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;					
70.1	The scope of facility capabilities is challenged and broadened by resident users;					
\mathbf{B}^{+}	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 <i>one</i> of the areas listed under B+					
B-	The Laboratory fails to meet expectations in <i>one</i> of the areas listed under B+					
C	The Laboratory fails to meet expectations in <i>several</i> of the areas listed under B+					
	Reviews find that there are few facility users, few of whom are using the facility in novel ways to					
D	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 Office ⁴	Letter Grade	Numerical Score	Weight	Overall Score
Office of Basic Energy Sciences				
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			0%	
2.3 Provide Efficient and Effective Operation of Facilities			45%	
2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities			40%	
		Overall 1	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			00/	
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			100/	
Results and Benefits to External User Communities			10%	
		Overall I	BER Total	
Office of High Energy Physics				
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				
		Overall l	HEP 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				
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				
		Overal	l 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				
Office of Biological and Environmental Research				
Office of High Energy Physics				
Office of Nuclear Physics				
	Performance Goal 2.0 Total			

Table 2.2 – Overall Performance Goal 2.0 Score 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	A+	Λ	۸	B+	B	B-	C_{\perp}	C	C	D	F
Grade	ΑT	Λ	Λ-	D⊤	ע	D-	CT	C	C-		1.

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

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

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

- 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 <i>several</i> 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 <i>more than one</i> 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:						
	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.						
B ⁺	• The Laboratory has implemented the project/program/facility plans and has effective methods of tracking progress.						
	• The Laboratory demonstrates willingness to make tough decisions (i.e., cut programs with sub-						
	critical mass of expertise, divert resources to more promising areas, etc.).						
	• The Laboratory's implementation of project/program/facility plans has led directly to effective						
	R&D programs/facility operations.						
	LDRD investments and other overhead funds are managed appropriately.						
	 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 <i>several of</i> the conditions for B+.						
	 Project/program/facility plans exist for most major projects/programs/facilities. 						
C	BUT the Laboratory has failed to implement the project/program/facility plans AND the Laboratory						
	fails to meet several of the conditions for B+.						
D	Project/program/facility plans do not exist for a significant fraction of the Laboratory's major						
	projects/programs/facilities;						
	OR						
Г	Significant work at the Laboratory is not in alignment with the project/program/facility plans The Laboratory Laboratory is not in alignment with the project/program/facility plans The Laboratory Laboratory is not in alignment with the project/program/facility plans The Laboratory Laboratory is not in alignment with the project/program/facility plans The Laboratory Laboratory is not in alignment with the project/program/facility plans The Laboratory Laboratory is not in alignment with the project/program/facility plans The Laboratory Laboratory is not in alignment with the project/program/facility plans The Laboratory Laboratory Laboratory is not in alignment with the project/program/facility plans The Laboratory L						
F	The Laboratory has failed to conduct project/program/facility planning activities.						

3.3 Provide Efficient and Effective Communications and Responsiveness to Headquarters Needs

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

Letter Grade	Definition
A+	In addition to meeting the all expectations under A, • The Laboratory's effective communication and extraordinary responsiveness in the face of extreme situations or a national emergency had a materially positive impact on the outcome of the event and/or DOE 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 channels 						
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 <i>often</i> initiate communication with HQ on emerging Laboratory issues; and						
B^+	 under critical circumstances, essential information is delivered in real-time 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 						
В	Laboratory The Laboratory failed to meet the conditions for B+ <i>in a few instances</i>						
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 <i>one or more</i> 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				
3.1 Effective and Efficient Strategic Planning and			30%	
Stewardship			3070	
3.2 Project/Program /Facilities Management			40%	
3.3 Communications and Responsiveness			30%	
		Overall AS	SCR 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 1	BES Total	
Office of Biological and Environmental Research				
3.1 Effective and Efficient Strategic Planning and Stewardship			20%	
3.2 Project/Program /Facilities Management			30%	
3.3 Communications and Responsiveness			50%	
•		Overall I	BER Total	
Office of High Energy Physics				
3.1 Effective and Efficient Strategic Planning and Stewardship			30%	
3.2 Project/Program /Facilities Management			45%	
3.3 Communications and Responsiveness			25%	
·		Overall l	HEP Total	
Office of Nuclear Physics				
3.1 Effective and Efficient Strategic Planning and Stewardship			30%	
3.2 Project/Program /Facilities Management			40%	
3.3 Communications and Responsiveness			30%	
The Communications and Teoplomatical		Overal	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				
3.1 Effective and Efficient Strategic Planning and			20%	
Stewardship			2070	
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			2.40/	
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						
Office of Nuclear Physics						
Office of Defense Nuclear Nonproliferation						
Office of Workforce Development for Teachers and						
Scientists						
Nuclear Regulatory Commission						
Performance Goal 3.0 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	Λ.	۸	Λ.	B+	D	B-	C	C	C	D	Б
Grade	A+	A	A-	D+	Б	Б-	C+		C-	ע	Г

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%
Goal 2.0 Design, Fabrication,						
Construction and Operation						
of Facilities						
of Facilities						
2.1 Design of Facility (the						
initiation phase and the	00/	00/	1.50/	400/	00/	00/
definition phase, i.e. activities	0%	0%	15%	40%	0%	0%
leading up to CD-2)						
2.2 Construction of Facility /						
Fabrication of Components	0%	0%	0%	40%	0%	0%
(execution phase, Post CD-2 to	070	0 70	0 /0	4070	0 70	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						
User Community						
Goal 3.0 Program						
Management						
3.1 Effective and Efficient	2004	200/	200/	200/	200/	200/
Strategic Planning and	30%	20%	30%	30%	30%	20%
Stewardship						
3.2 Project/Program/Facilities	40%	30%	40%	45%	40%	50%
Management 3.3 Communications and						
	30%	50%	30%	25%	30%	30%
Responsiveness						

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	40%	34%
Stewardship		
3.2 Project/Program/Facilities	34%	33%
Management	3470	3370
3.3 Communications and	26%	33%
Responsiveness	2070	3370

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; and,
- Establish and maintain long-term partnerships/relationships that maintain appropriate relations with the scientific and local communities.

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.
A-	The laboratory senior management performs better than expected (B+ grade) in these areas.
B+	The laboratory has a robust and transparent contractor assurance system in place that integrates internal and external (corporate) evaluation processes to evaluate risk. The laboratory can demonstrate use of this system in making decisions that are aligned with the laboratory's vision and strategic plan. The laboratory understands the drivers of cost at their lab, and are prioritizing and managing these costs commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Laboratory management and processes reflect a sense of accountability and responsibility with is evident down and through the entire organization. Communication between the laboratory and SC headquarters and the Site Office is such that there are no surprises or embarrassments.
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;
- Develop and leverage appropriate relationships with private industry and universities to the benefit of the laboratory, DOE and the U.S. taxpayer (e.g., public-private partnerships, long-term research relationships);
- Facilitate regional partnerships and initiatives that contribute to the local economy and support DOE and laboratory outreach efforts and scientific missions; 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 leadership successfully develops national and regional partnerships that significantly enhance DOE and laboratory outreach efforts and scientific missions. 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 leadership develops national and regional partnerships that positively impact DOE and laboratory outreach efforts and scientific missions. 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. The laboratory leadership develops national and regional partnerships that support DOE and laboratory outreach efforts and scientific missions. 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. The laboratory has limited partnerships to advance DOE and laboratory outreach efforts and scientific missions.
C	The laboratory lacks a vision and the mechanisms to implement a strategy to promote technology transfer at the laboratory and has little success in developing partnerships.
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 including partnership efforts. 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 and partnerships, 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 that facilitate DOE strategic plans and program initiatives and/or deal with operational challenges at the laboratory;
- Using corporate resources to enhance DOE mission objectives by establishing programs/projects/activities that strengthen the laboratory (e.g., joint appointments, integrated research initiatives, novel educational opportunities), and
- Providing other contributions that enable the laboratory to do things that are good for DOE, 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 laboratory as a result of this contractor's support and 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 laboratory as a result of this contractor's support and operation of the laboratory.
A-	The laboratory senior management performs better than expected (B+ grade) in these areas.
B+	The laboratory enjoys additional benefits above and beyond those associated with managing the laboratory's activities that accrue as a result of this contractor's support and 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%		
Performance Goal 4.0 Total					

Table 4.1 – Performance Goal 4.0 Score Development

Total Score	4.3- 4.1	4.0- 3.8	3.7- 3.5	3.4- 3.1	3.0- 2.8	2.7- 2.5	2.4- 2.1	2.0- 1.8	1.7- 1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	В	B-	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%			
Performance Goal 5.0 Total						

Table 5.1 – Performance Goal 5.0 Score Development

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

Table 5.2 – Goal 5.0 Final Letter Grade

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

The weight of this Goal is 30%.

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

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

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in the development, deployment and integration of foundational program (e.g., Contractor Assurance, Quality, Financial Management, Acquisition Management, Property Management, and Human Resource Management) systems across the Laboratory. This may include, but is not limited to, minimizing the occurrence of management systems support issues; quality of work products; continual improvement driven by the results of audits, reviews, and other performance information; the integration of system performance metrics and trends; the degree of knowledge and appropriate utilization of established system processes/procedures by Contractor management and staff; benchmarking and performance trending analysis. The DOE evaluator(s) shall consider the Laboratory's performance in making progress toward comprehensive collection and submission to OSTI of peer-reviewed accepted manuscripts for journal articles (and associated metadata) resulting from DOE-funded research as called for in the DOE Public Access 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%	
	Pe	rformance Go	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 Go	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	A-	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	В-	C+	С	C-	D	F

Table 8.2 – Goal 8.0 Final Letter Grade

Contract No. DE-SC0012704
Section J | Appendix I
Modification No. 0162

APPENDIX I

DOE Directives/List B

Applicable to the Operations of Brookhaven National Laboratory

Contract No. DE-SC0012704 Section J | Appendix I Modification No. 0162

There is no List A to this Appendix.

List B to this Appendix contains the following:

Part I: "Directives List"

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

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
9/29/1995	Order	130.1		Budget Formulation
9/4/2008	Manual	142.2-1	Chg. 1 (Admin Chg.) 6/27/2013	Manual for Implementation of the Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency
12/15/2006	Order	142.2A	Chg. 1 (Admin Chg.) 6/27/2013	Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency
10/14/2010	Order	142.3A	Chg.2 (LtdChg.) 12/13/2019	Unclassified Foreign Visits and Assignments Program
3/31/2014	Order	150.1A		Continuity Programs
8/11/2016	Order	151.1D	Chg.1 (Minor Chg.) 10/4/2019	Comprehensive Emergency Management System
6/27/2007	Order	153.1		Departmental Radiological Emergency Response Assets
12/23/2008	Order	200.1A	Chg.1 (Minor Chg.) 01/13/2017	Information Technology Management
1/7/2005	Order	203.1		Limited Personal Use of Government Office Equipment Including Information Technology
5/15/2019	Order	205.1C		Department of Energy Cyber Security Program
1/16/2009	Order	206.1	Chg.1 (Minor Chg.) 11/1/2018	Department of Energy Privacy Program
2/19/2013	Order	206.2		Identity, Credential and Access Management (ICAM)
4/8/2011	Order	210.2A		DOE Corporate Operating Experience Program
9/27/2016	Order	221.1B		Reporting Fraud, Waste, and Abuse to the Office of Inspector General
2/25/2008	Order	221.2A		Cooperation with the Office of Inspector General
3/4/2011	Order	225.1B		Accident Investigations
12/21/2015	Order	227.1A		Independent Oversight Program
6/27/2011	Order	231.1B	Chg. 1 (Admin Chg.) 11/28/2012	Environment, Safety and Health Reporting
1/17/2017	Order	232.2A	Chg.1 (Minor Chg.) 10/04/2019	Occurrence Reporting and Processing of Operations Information

DOE DIRECTIVES LIST

		1	TURQUOU	TITL C
ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
12/13/2010	Order	241.1B	Chg. 1 (Admin Chg) 4/26/2016	Scientific and Technical Information Management
3/11/2013	Order	243.1B	Chg. 1 (Admin Chg.) 7/8/2013	Records Management Program
2/23/2011	Order	252.1A	Chg. 1 (Admin Chg.) 3/12/2013	Technical Standards Program
11/19/2009	Order	313.1		Management and Funding of the Department's Overseas Presence
10/18/2007	Order	341.1A Parts: 1.(a-b) 2.a(1-3) 2.a(4)(a- h)		Federal Employee Health Services
9/30/1996	Order	350.1	Chg. 7 (LtdChg.) 2/19/2020	Contractor Human Resource Management Programs
8/17/2009	Order	410.2	Chg. 1 (Admin Chg.) 4/10/2014	Management of Nuclear Materials
1/4/2017	Order	411.2		Scientific Integrity
1/4/2017	Policy	411.2A		Scientific Integrity Policy
10/28/2008	Order	413.1B		Internal Control Program
10/22/2015	Order	413.2C	Chg.1 (Minor Chg.) 8/2/2018	Laboratory Directed Research and Development
11/29/2010	Order	413.3B	Chg. 5 (Minor Chg.) 4/12/2018	Program and Project Management for the Acquisition of Capital Assets
4/25/2011	Order	414.1D	Chg. 1 (Admin Chg.) 5/8/2013	Quality Assurance
12/3/2012	Order	415.1	Chg. 2 (Minor Chg.) 1/17/2017	Information Technology Project Management

DOE DIRECTIVES LIST

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
12/4/2012	Order	420.1C	Chg.3 (Ltd Chg.) 11/14/2019	Facility Safety Compliance Note: CRD Chapters 1, 3, and 5 only are applicable to BNL Hazardous Category 1, 2, or 3 nuclear facilities. Currently these type of nuclear facilities do not exist at BNL. The requirements of DOE O 420. 1C Chg. 2 CRD Chapters 2 (Fire Protection) and 5 (Natural Phenomena Hazards Mitigation) apply to BNL
7/21/2011	Order	420.2C		Safety of Accelerator Facilities
6/29/2010	Order	422.1	Chg. 3 (Minor Chg.) 10/4/2019	Conduct of Operations Compliance Note: Applicable to Hazardous Category 1, 2, or 3 nuclear facilities and other facilities as defined by BSA in a Program Plan approved by BHSO
11/25/2016	Policy	434.1B		Conduct and Approval of Select Agent and Toxin Work at Department of Energy Sites
7/9/1999	Order	435.1	Chg. 1 (Pg Chg) 8/28/2001	Radioactive Waste Management
7/9/1999	Manual	435.1-1	Chg. 2 (Admin Chg.) 6/8/2011	Radioactive Waste Management Manual
5/2/2011	Order	436.1		Departmental Sustainability
6/15/2011	Order	440.2C	Chg. 1 (Admin Chg.) 6/22/2011	Aviation Management and Safety
3/7/2008	Manual	441.1-1	Chg. 1 (Admin Chg.) 02/24/2016	Nuclear Material Packaging Manual
1/31/2019	Order	442.1B		Department of Energy Employee Concerns Program
7/29/2011	Order	442.2	Chg.1 (Pg.Chg.) 10/5/2016	Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health
11/26/2019	Order	443.1C		Protection of Human Research Subjects
7/21/2011	Order	452.8		Control of Nuclear Weapon Data
7/15/2016	Order	456.1A		The Safe Handling of Unbound Engineered Nanoparticles
2/11/2011	Order	458.1	Chg. 3 (Admin Chg.) 1/15/2013	Radiation Protection of the Public and the Environment

DOE DIRECTIVES LIST

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
12/20/2016	Order	460.1D		Hazardous Materials Packaging and Transportation Safety
12/22/2004	Order	460.2A		Departmental Material Transportation and Packaging Management
6/4/2008	Manual	460.2-1A		Radioactive Material Transportation Practices Manual
11/23/2016	Order	470.3C		Design Basis Threat (DBT) Order
7/21/2011	Order	470.4B	Chg. 2 (Minor Chg.) 1/17/2017	Safeguards and Security Program
6/2/2014	Order	470.5		Insider Threat Program
9/2/2015	Order	470.6	Chg.1 (Minor Chg.) 1/11/2017	Technical Security Program
3/1/2010	Order	471.1B		Identification and Protection of Unclassified Controlled Nuclear Information
4/9/2003	Order	471.3	Chg. 1 (Admin Chg.) 1/13/2011	Identifying and Protecting Official Use Only Information
4/9/2003	Manual	471.3-1	Chg. 1 (Admin Chg.) 1/13/2011	Manual for Identifying and Protecting Official Use Only Information
6/20/2011	Order	471.6	Chg. 3 (Admin Chg.) 9/12/2019	Information Security
7/21/2011	Order	472.2	Chg. 1 (Pg Chg.) 7/9/2014	Personnel Security
3/23/2016	Order	473.3A	Chg.1 (Minor Chg.) 1/2/2018	Protection Program Operations
6/27/2011	Order	474.2	Chg. 4 (Pg.Chg.) 9/13/2016	Nuclear Material Control and Accountability
12/10/2004	Order	475.1		Counterintelligence Program
10/3/2014	Order	475.2B		Identifying Classified Information
12/20/2018	Order	481.1E	Chg. 1 (LtdChg.) 12/13/2019	Strategic Partnership Projects [Formerly Known as Work for Others (Non-Department of Energy Funded Work)]

DOE DIRECTIVES LIST

ISSUED	TYPE	NUMBER	THROUGH CHANGE	TITLE Includes Compliance Notes as Necessary
12/20/2016	Order	483.1B	Chg. 2 (LtdChg.) 12/13/2019	DOE Cooperative Research and Development Agreements
8/17/2006	Order	484.1	Chg. 2 (Admin Chg.) 6/30/2014	Reimbursable Work for the Department of Homeland Security
12/13/2019	Policy	485.1A		Foreign Engagements with DOE National Laboratories
6/7/2019	Order	486.1		Department of Energy Foreign Government Talent Recruitment Programs
8/2/2018	Order	522.1A		Pricing of Departmental Materials and Services
1/6/2003	Order	534.1B		Accounting
5/2/2019	Order	550.1	Chg. 1 (LtdChg.) 12/13/2019	Official Travel
3/30/2012	Order	580.1A	Chg. 1 (Admin Chg.) 10/22/2012	Department of Energy Personal Property Management Program