ATTACHMENT J.2

APPENDIX B

PERFORMANCE EVALUATION AND MEASUREMENT PLAN

FISCAL YEAR 2017

Applicable to the Operation of the
Princeton Plasma Physics Laboratory

A Department of Energy National Laboratory

Contract No. DE-AC02-09CH11466

PPPL
PRINCETON
PLASMA PHYSICS
LABORATORY

U.S. DEPARTMENT OF
ENERGY
Office of
Science

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INTRODUCTION

This document, the Performance Evaluation and Measurement Plan (PEMP), primarily serves as DOE's Quality Assurance/Surveillance Plan (QASP) for the evaluation of The Trustees of Princeton University (hereafter referred to as "the Contractor") performance regarding the management and operations of the Princeton Plasma Physics Laboratory (hereafter referred to as "the Laboratory") for the evaluation period from October 1, 2016, through September 30, 2017. The performance evaluation provides a standard by which to determine whether the Contractor is managerially and operationally in control of the Laboratory and is meeting the mission requirement and performance expectations/objectives of the Department as stipulated within this contract.

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

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

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

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

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

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

The FY 2017 Contractor performance grades for each Goal will be determined based on the weighted sum of the individual scores earned for each of the Objectives described within this document for Science and Technology (S&T) and for Management and Operations (M&O). Each Goal is composed of two or more

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

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

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

Figure 1. FY 2017 Contractor Letter Grade Scale

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

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

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

The Department sets our expectations high, and expects performance at that level to optimize the efficient and effective operation of the Laboratory. Thus, the Department does not expect routine Contractor performance above expectations against the M&O Goals (5.0 – 8.0). Performance that might merit grades above B+ would need to reflect a Contractor's significant contributions to the management and operations at the system of Laboratories, or recognition by external, independent entities as exemplary performance.

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

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

Letter Grade	Numerical Grade	Definition
		leadership engagement is required to deal with the situation and help the Contractor.
F	0.7-0	All expectations of performance against the Objective in question are missed. Performance failures in this area are not recoverable by the Contractor or DOE.

Figure I-1. Letter Grade and Numerical Grade Definitions

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

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

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

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

Figure 2. Laboratory Report Card

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

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

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

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

M&O Performance Goal	Numerical Score	Weight		
5.0 Integrated Safety, Health, and Environmental Protection		25%		
6.0 Business Systems		30%		
7.0 Operating, Maintaining, and Renewing Facility and Infrastructure Portfolio		25%		
8.0 Integrated Safeguards and Security Management and Emergency Management Systems		20%		
			Initial M&O Score	

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

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

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

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

The percentage of the available performance-based fee that may be earned by the Contractor shall be determined based on the final score for S&T (see Table C) and then compared to Figure 3, below. The final score for M&O from Table C shall then be utilized to determine the final fee multiplier (see Figure 3), which shall be utilized to determine the overall amount of performance-based fee earned for FY 2017 as calculated within Table D.

Overall Final Score for either S&T or M&O from Table C.	Percent S&T Fee Earned	M&O Fee Multiplier
4.3	**100%**	**100%**
4.2		
4.1		
4.0	**97%**	**100%**
3.9		
3.8		
3.7	**94%**	**100%**
3.6		
3.5		
3.4	**91%**	**100%**
3.3		
3.2		
3.1		
3.0	**88%**	**95%**

Overall Final Score for either S&T or M&O from Table C.	Percent S&T Fee Earned	M&O Fee Multiplier
2.9		
2.8		
2.7	85%	90%
2.6		
2.5		
2.4	75%	85%
2.3		
2.2		
2.1		
2.0	50%	75%
1.9		
1.8		
1.7	0%	60%
1.6		
1.5		
1.4		
1.3		
1.2		
1.1		
1.0 to 0.8	0%	0%
0.7 to 0.0	0%	0%

Figure 3. Performance-Based Fee Earned Scale

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

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

The Federal Acquisition Regulations (FAR) requirements for using and administering cost-plus-award-fee contracts were recently modified to provide for a five-level adjectival grading system with associated levels of available fee.[2] SC has addressed the new FAR 16 language by mapping its standard numerical scores and associated fee determinations to the FAR Adjectival Rating System, as noted in Figure 4 on the next page.

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

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

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

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

II. PERFORMANCE GOALS, OBJECTIVES & NOTABLE OUTCOMES

Background

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

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

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

Performance Goals, Objectives, and Notable Outcomes

The following sections describe the Performance Goals, their supporting Objectives, and associated notable outcomes for FY 2017.

GOAL 1.0 Provide for Efficient and Effective Mission Accomplishment

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

The weight of this Goal is TBD

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

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science, other cognizant HQ Program Offices, and other customers as identified below. The overall Goal score from each HQ Program Office and /or customer is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 1.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2017.

- Office of Fusion Energy Sciences (FES)
- Office of Workforce Development for Teachers and Scientists (WDTS)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 1.2 below). The overall score earned is then compared to Table 1.3 to determine the overall letter grade for this Goal. Individual Program Office weightings for each of the Objectives identified below are provided within Table 1.1. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2017 as compared to the total cost for those remaining HQ Program Offices.

<u>Objectives</u>

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

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

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

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

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

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

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

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

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

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

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

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

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

Letter Grade	Definition
B+	The Laboratory has achieved each of the following objectives: • Laboratory staff members are *active participants* in professional organizations, committees, and activities, and take on leadership responsibilities commensurate with experience and expertise. • Laboratory staff members are *active participants* in DOE sponsored workshops and strategic planning activities. • Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. • The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE mission needs. • Laboratory staff are *active participants* in multi-institutional research collaborations
B	• Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. • The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE mission needs. BUT the Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons: • Although *regular participants* in professional organizations, committees, and activities, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff*. • Although *regular participants* in DOE sponsored workshops and strategic planning activities, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff*. • Although *active members of* multi-institutional research collaborations, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff*.
B-	• Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. BUT the Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons: • The Laboratory program submits competitive proposals *but these either lack innovation or are not well aligned with DOE mission needs*. • Laboratory staff are *infrequent participants* in professional organizations, committees, and activities, and *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff*. • Laboratory staff are *infrequent participants* in DOE sponsored workshops and strategic planning activities, and *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff*. • Although *active members of* multi-institutional research collaborations, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff*.
C	The Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons: • Laboratory staff members *do not reliably* contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. • *Some areas of research, previously supported, are no longer competitive*. • Laboratory staff members are *infrequent participants* in professional organizations, committees, and activities, AND *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff*. • Laboratory staff members are *infrequent participants* in DOE sponsored workshops and strategic planning activities, and *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff*. • Although Laboratory staff members are *active members of* multi-institutional research collaborations, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff*.

Letter Grade	Definition
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

- **FES**: Deliver impactful science and provide leadership for the PPPL-led multi-institutional international collaboration on EAST, as measured by the 2017 progress report, research publications and highlights, and participation in periodic progress review videoconferences. (Objective 1.1)
- **FES**: Conduct research to support the completion of key DIII-D research milestones on understanding the use of resonant magnetic field perturbations to mitigate and avoid edge localized modes and the validation of reduced fast-ion transport models in advanced operating regimes. (Objective 1.1)

Program Office[3]	Letter Grade	Numerical Score	Weight	Overall Score
Office of Fusion Energy Sciences				
1.1 Impact			50%	
1.2 Leadership			50%	
			Overall FES Total	
Office of Workforce Development for Teachers and Scientists				
1.1 Impact			80%	
1.2 Leadership			20%	
			Overall WDTS Total	

Table 1.1 –Program Performance Goal 1.0 Score Development

Science Office	Letter Grade	Numerical Score	Funding Weight (cost)	Overall Weighted Score
Office of Fusion Energy Sciences			TBD	
Office of Workforce Development for Teachers and Scientists			TBD	
			Performance Goal 1.0 Total	

Table 1.2 – Overall Performance Goal 1.0 Score Development[4]

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

Table 1.3 –Goal 1.0 Final Letter Grade

[3] A complete listing of the Objectives weightings under the S&T Goals for the SC Programs is provided within Attachment I to this plan.
[4] 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 2017.

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

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

The weight of this Goal is TBD

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

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science Program Office as identified below. The overall Goal score from the HQ Program Office is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 2.1). Final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2017.

- Office of Fusion Energy Sciences (FES)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 2.2 below). The overall score earned is then compared to Table 2.3 to determine the overall letter grade for this Goal. Individual Program Office weightings for each of the Objectives identified below are provided within Table 2.1. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by DOE HQ Office of Science's (SC) Program Office(s) 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 2017 as compared to the total cost for those remaining HQ Program Offices.

<u>Objectives</u>

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

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

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

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

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

Letter Grade	Definition
A+	In addition to satisfying all conditions for B+; the Laboratory *exceeds expectations* in *all* of these categories: • The Laboratory is recognized by the research community as the leader for making the science case for the acquisition; • The Laboratory takes the initiative to demonstrate and thoroughly document the potential for transformational scientific advancement. • Approaches proposed by the Laboratory are widely regarded as innovative, novel, comprehensive, and potentially cost-effective. • Reviews repeatedly confirm strong potential for scientific discovery in areas that support the Department's mission, and potential to change a discipline or research area's direction. • The Laboratory identifies, analyzes and champions novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing and these efforts result in significant cost estimate and/or risk reductions without loss or, or while enhancing capability.
A	In addition to satisfying all conditions for B+, *all* of the following conditions are also met: • The Laboratory is recognized by the research community as a leader for making the science case for the acquisition; • The Laboratory takes the initiative to demonstrate the potential for revolutionary scientific advancement working in partnership with HQ • The Laboratory identifies, analyzes, and champions, to HQ and Site office, novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing.
A-	In addition to satisfying all conditions for B+, *all* of the following conditions are also met: • The approaches proposed by the Laboratory are widely regarded as innovative, novel, comprehensive, and potentially cost-effective • Reviews repeatedly confirm potential for scientific discovery in areas that support the Department's mission, and potential to change a discipline or research area's direction.
B+	The Laboratory has achieved each of the following objectives: • The Laboratory displays leadership and commitment in the development of quality analyses, preliminary designs, and related documentation to support the approval of the mission need (CD-0), the alternative selection and cost range (CD-1) and the performance baseline (CD-2). • Documentation requested by the programs is provided in a timely and thorough manner. • The Laboratory keeps DOE appraised of the status, near-term plans and the resolution of problems on a regular basis; anticipates emerging issues that could impact plans and takes the initiative to inform DOE of possible consequences. • The Laboratory solves problems and addresses issues to avoid adverse impacts to the project.
B	The Laboratory fails to meet expectations in one of the areas listed under B+.

Letter Grade	Definition
B-	The Laboratory fails to meet expectations in several of the areas listed under B+
C	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the required analyses and documentation developed by the Laboratory are EITHER not innovative, OR reflect a lack of commitment and leadership.
D	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the Laboratory fails to provide a compelling justification for the acquisition.
F	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the approaches proposed by the Laboratory are based on fraudulent assumptions; the science case is weak to non-existent, and the business case is seriously flawed.

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

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

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

Letter Grade	Definition
A+	In addition to satisfying all conditions for A, • There is high confidence throughout the execution phase that the project will be completed *significantly* under budget and/or ahead of schedule while meeting or exceeding all performance baselines;
A	In addition to satisfying all conditions for B+, • The Laboratory has identified and implemented practices that would allow the project scope to be *significantly expanded* if such were desirable, without impact on baseline cost or schedule; • The Laboratory *always* provides *exemplary* project status reports on time to DOE and takes the initiative to communicate emerging problems or issues. • Reviews identify environment, safety and health practices to be *exemplary*. • There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline;
A-	In addition to satisfying all conditions for B+, • The Laboratory has identified practices that would allow for the project scope to be expanded if such were desirable, without impact on baseline cost or schedule; • Problems are identified and corrected by the Laboratory promptly, with no impact on scope, cost or schedule • The Laboratory provides *particularly useful* project status reports on time to DOE and regularly takes the initiative to communicate emerging problems or issues. • Reviews identify environment, safety and health practices to *exceed expectations*. • There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline;

Letter Grade	Definition
B+	The Laboratory has achieved each of the following objectives • The project meets CD-2 performance measures; • The Laboratory provides sustained leadership and commitment to environment, safety and health; • Reviews regularly recognize the Laboratory for being proactive in the management of the execution phase of the project; • To a large extent, problems are identified and corrected by the Laboratory with little, or no impact on scope, cost or schedule; • DOE is kept informed of project status on a regular basis; reviews regularly indicate project is expected to meet its cost/schedule performance baseline.
B	The Laboratory provides sustained leadership and commitment to environment, safety and health BUT • The project fails to meet expectations in *one* of the remaining areas listed under B+.
B-	The Laboratory provides sustained leadership and commitment to environment, safety and health BUT • The project fails to meet expectations in *several* of the areas listed under B+
C	The Laboratory provides sustained leadership and commitment to environment, safety and health BUT The project fails to meet expectations in *several* of the areas listed under B+ AND • Reviews indicate project remains at risk of breaching its cost/schedule performance baseline; • Reports to DOE can vary in degree of completeness
D	The project fails to meet conditions for B+ in at least one of the following areas: • Reviews indicate project is likely to breach its cost/schedule performance baseline; • Laboratory commitment to environment, safety and health issues is inadequate; • Reports to DOE are largely incomplete; Laboratory commitment to the project has subsided.
F	The project fails to meet conditions for B+ in at least one of the following areas: • Laboratory falsifies data during project execution phase; • Shows disdain for executing the project within minimal standards for environment, safety or health, • Fails to keep DOE informed of project status; • Recent reviews indicate that the project is expected to breach its cost/schedule performance baseline.

2.3 Provide Efficient and Effective Operation of Facilities

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

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

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

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

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

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

Letter Grade	Definition
A+	In addition to meeting all measures under *A*, • The Laboratory took extraordinary means to deliver an extraordinary result for a new user community.
A	In addition to satisfying all conditions for B+; *all* of the following conditions are met • An *aggressive* outreach programs is in place and has been documented as attracting new communities to the facility; • Reviews consistently find that the facility capability or scope of research potential *significantly* exceeds expectations for example, due to newly discovered capabilities or exposure to new research communities; OR Reviews find that multiple disciplines are using the facility in new and novel ways that the facility is being used to pursue influential science.
A-	In addition to satisfying all conditions for B+, all of the following conditions are met • A *strong* outreach program is in place; • Reviews find that the facility capability or scope of research potential exceeds expectations for example, due to newly discovered capabilities or exposure to new research communities; OR Reviews document how multiple disciplines are using the facility in new and novel ways and/or that the facility is being used to pursue important science.
B^+	The Laboratory has achieved each of the following objectives: • Reviews find / validate that the facility is being used for influential science; • The scope of facility capabilities is challenged and broadened by resident users; • The Laboratory effectively manages user allocations; • The Laboratory effectively maintains the facility to required performance standards (for example, runtime, luminosity, etc) • A healthy outreach program is in place.
B	The Laboratory fails to meet expectations in *one* of the areas listed under B+
B-	The Laboratory fails to meet expectations in *several* of the areas listed under B+
C	The Laboratory fails to meet expectations in *many* of the areas listed under B+
D	Reviews find that there are few facility users, few of whom are using the facility in novel ways to produce impactful science; research base is very thin.
F	Laboratory staff does not possess capabilities to operate and/or use the facility adequately.

<u>Notable Outcomes</u>

- **FES**: Complete an extensive extent-of-condition review of NSTX-U to identify all design, construction, and operational issues. Prepare correction action plan (CAP) to include cost,

schedule, scope, and technical specifications of actions. Complete the CAP review and report to DOE by March 31, 2017. (Objective 2.1)

- **FES**: Provide all TDU scraper project deliverables to the W7-X project site. The deliverables consist of two scraper units, a high heat-flux test sample, an installation mockup article, and final design documentation. (Objective 2.2)

Program Office[5]	Letter Grade	Numerical Score	Weight	Overall Score
Office of Fusion Energy Sciences				
2.1 Provide Effective Facility Design(s)			20%	
2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components			80%	
2.3 Provide Efficient and Effective Operation of Facilities			0%	
2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities			0%	
			Overall FES Total	

Table 2.1 – Program Performance Goal 2.0 Score Development

Program Office	Letter Grade	Numerical Score	Funding Weight (cost)	Overall Weighted Score
Office of Fusion Energy Sciences			TBD	
			Performance Goal 2.0 Total	

Table 2.2 – Overall Performance Goal 2.0 Score Development[6]

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

Table 2.3 –Goal 2.0 Final Letter Grade

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

[6] 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 2017.

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 Office as identified below. The overall Goal score from the HQ Program Office is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 3.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2016.

- Office of Fusion Energy Sciences (FES)
- Office of Workforce Development for Teachers and Scientists (WDTS)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 3.2 below). The overall score earned is then compared to Table 3.3 to determine the overall letter grade for this Goal. Individual Program Office weightings for each of the Objectives identified below are provided within Table 3.1. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2017 as compared to the total cost for those remaining HQ Program Offices.

<u>Objectives</u>

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

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

- The quality of the Laboratory's strategic plan;
- The extent to which the Laboratory shows strategic vision for research
- The extent to which programs of research take advantage of Laboratory capabilities—research programs are more than the sum of their individual project parts;
- The extent to which the Laboratory undertakes research for which it is uniquely qualified;
- The extent to which lab plans are aligned with DOE mission goals;

- The extent to which the Laboratory programs are balanced between high-/low- risk research for a sustainable program; and
- The extent to which the Laboratory is able to retain and recruit staff for a sustainable program

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

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

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

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.
B	The Laboratory fails to satisfy one of the conditions for B+; for example • The Laboratory's strategic plan is only *partially* coherent and is not entirely well-connected with external communities; • The portfolio of Laboratory research does *not* appropriately balance high-risk/ high-payoff research and stewardship of mission-critical research; • The Laboratory has developed and maintained *some, but not all*, of its core competencies. • The plan to attract and retain professional scientific staff is *lacking* strategic vision.
B-	The Laboratory fails to satisfy *several* of the conditions for B+, including at least one of the following: • Weak programmatic vision insufficiently connected with external communities; • Development and maintenance of only a few core competencies • little attention to maintaining the correct balance between high-risk and mission-critical research; • inability to attract and retain talented scientists in some programs.
C	The Laboratory fails to satisfy *several* of the conditions for B+, including at least one of the following reasons: • The Laboratory's strategic plan lacks strategic vision and lacks appropriate coordination with appropriate stakeholders including external research groups. • The Laboratory's strategic plan does not provide for sufficient maintenance of core competencies • Plan to attract and retain professional scientific staff is unlikely to be successful or does not focus on strategic capabilities.
D	The Laboratory fails to satisfy *several* of the conditions for B+, and specifically • The Laboratory has demonstrated little effort in developing a strategic plan. • The Laboratory has done little to develop and maintain core competencies • The Laboratory has had minimal success in attracting and retaining professional scientific staff.
F	The Laboratory has: • Made limited or ineffective attempts to develop a strategic plan; • Not demonstrated the ability to develop and maintain core competencies, has failed to propose high-risk/high-reward research and has failed to steward mission-critical areas; • Failed to attract even reasonably competent scientists and technical staff.

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

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

- The Laboratory's management of R&D programs and facilities according to proposed plans;

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

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

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

Letter Grade	Definition
A+	In addition to meeting the all expectations under A, • The Laboratory has taken extraordinary measures to deliver an extraordinary result of critical importance to DOE missions, which could include the delivery of a critical technology or insight in response to a National emergency
A	In addition to satisfying the conditions for B+, • The Laboratory's implementation of project/program/facility plans has led directly to effective R&D programs/facility operations that exceed program expectations in *several* programmatic areas. Examples are listed under A-.
A-	In addition to satisfying the conditions for B+, • The Laboratory's implementation of project/program/facility plans has led directly to effective R&D programs/facility operations that exceed program expectations in *more than one* programmatic area. Examples of performance that exceeds expectations include: • The Laboratory's implementation of project/program/facility plans has led directly to significant cost savings and/or significantly higher productivity than expected; • Project/program/facility plans prove to be robust against changing scientific and fiscal conditions through contingency planning; • The Laboratory has demonstrated creativity and forceful leadership in development and/or proactive management of its project/program/facility plans to reduce or eliminate risk; • The Laboratory's proposals for new initiatives are funded through reallocation of resources from less effective programs. • Research plans and management actions are proactive, not reactive, as evidenced by making hard decisions and taking strong actions; and • Management is prepared for budget fluctuations and changes in DOE program priorities – multiple contingencies are planned for; and • LDRD investments, overhead funds, and other Laboratory funds are used to strengthen lab plans and fill critical gaps in the Laboratory portfolio enabling it to respond to future DOE initiatives and/or national emergencies;

Letter Grade	Definition
B+	The Laboratory has achieved each of the following objectives: • Project/program/facility plans exist for all major projects/programs/facilities. • Project/program/facility plans are consistent with known budgets, are based on reasonable assessments of technical risk, are well-aligned with DOE interests, provide sufficient flexibility to respond to unforeseen directives and opportunities, and effectively leverage other Laboratory resources and expertise. • The Laboratory has implemented the project/program/facility plans and has effective methods of tracking progress. • The Laboratory demonstrates willingness to make tough decisions (i.e., cut programs with sub-critical mass of expertise, divert resources to more promising areas, etc.). • The Laboratory's implementation of project/program/facility plans has led directly to effective R&D programs/facility operations. • LDRD investments and other overhead funds are managed appropriately.
B	• Project/program/facility plans exist for all major projects/programs/facilities. • The Laboratory has implemented the project/program/facility plans. BUT the Laboratory fails to meet *at least one of* the conditions for B+.
B-	• Project/program/facility plans exist for all major projects/programs/facilities. • The Laboratory has implemented the project/program/facility plans. BUT the Laboratory fails to meet *several of* the conditions for B+.
C	• Project/program/facility plans exist for most major projects/programs/facilities. BUT the Laboratory has failed to implement the project/program/facility plans AND the Laboratory fails to meet *several of* the conditions for B+.
D	• Project/program/facility plans do not exist for a significant fraction of the Laboratory's major projects/programs/facilities; OR • Significant work at the Laboratory is not in alignment with the project/program/facility plans
F	The Laboratory has failed to conduct project/program/facility planning activities.

3.3 Provide Efficient and Effective Communications and Responsiveness to Headquarters Needs

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

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

Letter Grade	Definition
A+	In addition to meeting the all expectations under A, • The Laboratory's effective communication and extraordinary responsiveness in the face of extreme situations or a national emergency had a materially positive impact on the outcome of the event and/or DOE mission objectives

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-	In addition to satisfying the conditions for B+, • Laboratory management has instilled a culture throughout the lab that emphasizes good communication practices; and • Responses to requests for information are prompt, thorough, and economical/succinct at all levels of interaction; • Laboratory representatives *often* initiate communication with HQ on emerging Laboratory issues; • under critical circumstances, essential information is delivered in real-time
B^+	The Laboratory has achieved each of the following objectives: • Staff throughout the Laboratory organization engage in good communication practices; • Responses to requests for information are prompt and thorough; • The accuracy and integrity of the information provided is never in doubt; • Up-to-date point-of-contact information is widely available for all programmatic areas; • Headquarters is always and promptly informed of both positive and negative events at the Laboratory
B	The Laboratory failed to meet the conditions for B+ *in a few instance*s
B-	The Laboratory fails to meet the conditions for B+ for *one* of the following reasons: • Responses to requests for information do not provide the minimum requirements to meet HQ needs; While the integrity of the information provided is never in doubt, its accuracy sometimes is; • Laboratory representatives do not take the initiative to alert HQ to emerging Laboratory issues.
C	The Laboratory fails to meet the conditions for B+ for *one or more* of the following reasons: • Responses to requests for information frequently fail to provide the minimum requirements to meet HQ needs • The Laboratory used outside channels or circumvented HQ in conveying critical information; • The integrity and/or accuracy of information provided is sometimes in doubt; • Laboratory management fails to demonstrate that its employees are held accountable for ensuring effective communication and responsiveness; • Laboratory representatives failed to alert HQ to emerging Laboratory issues.
D	The Laboratory fails to meet the conditions for B+ for one of the following reasons: • Laboratory staff are generally well-intentioned in communication but consistently ineffective and/or incompetent; • The Laboratory management fails to emphasize the importance of effective communication and responsiveness
F	The Laboratory fails to meet the conditions for B+ for one of the following reasons • Laboratory staff are openly hostile and/or non-responsive to requests for information – emails and phone calls are consistently ignored; • Responses to requests for information are consistently incorrect, inaccurate or fraudulent – information is not organized, is incomplete, or is fabricated.

Notable Outcomes

- None

Program Office[7]	Letter Grade	Numerical Score	Weight	Overall Score
Office of Fusion 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 FES Total	
Office of Workforce Development for Teachers and Scientists				
3.1 Effective and Efficient Strategic Planning and Stewardship			20%	
3.2 Project/Program /Facilities Management			50%	
3.3 Communications and Responsiveness			30%	
			Overall WDTS Total	

Table 3.1 –Program Performance Goal 3.0 Score Development

Program Office	Letter Grade	Numerical Score	Funding Weight (cost)	Overall Weighted Score
Office of Fusion Energy Sciences			TBD	
Office of Workforce Development for Teachers and Scientists			TBD	
			Performance Goal 3.0 Total	

Table 3.2 –Office Overall Performance Goal 3.0 Score Development[8]

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

Table 3.3 –Goal 3.0 Final Letter Grade

[7] A complete listing of the Objectives weightings under the S&T Goals for the SC Programs is provided within Attachment I to this plan.
[8] 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 2017.

Attachment I.

Program Office Goal & Objective Weightings
Office of Science[9]

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

[9] 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 FY2017 the preliminary weightings provided shall become final.

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

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

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

Objectives:

4.1 Leadership and Stewardship of the Laboratory

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

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

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

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

4.2 Management and Operation of the Laboratory

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

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

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

4.3 Contractor Value-added

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

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

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

Notable Outcomes

- **SC/PSO**: By October 31, 2016, develop a Staff Resource Plan that delineates the PPPL use of PPPL research and engineering staff during unplanned prolonged NSTX outage across FY17. (Objective 4.2)
- **SC/PSO**: Conduct a review of policies and procedures for design, construction, installation, commissioning and operations of NSTX-U and other construction activities and projects. Develop corrective actions to ensure the highest quality project management across the lab. (Objective 4.2)

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

Table 4.1 – Performance Goal 4.0 Score Development

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

Table 4.2 – Goal 4.0 Final Letter Grade

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

The weight of this Goal is 25%.

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

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

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

Notable Outcomes

- None

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 5.0 - Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health, and				

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Environmental Protection.				
5.1 Provide an Efficient and Effective Worker Health and Safety Program			80%	
5.2 Provide an Efficient and Effective Environmental Management System			20%	
			Performance Goal 5.0 Total	

Table 5.1 – Performance Goal 5.0 Score Development

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

Table 5.2 – Goal 5.0 Final Letter Grade

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

The weight of this Goal is 30%.

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

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

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

- None

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score

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			20%	
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			5%	
			Performance Goal 6.0 Total	

Table 6.1 – Performance Goal 6.0 Score Development

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

Table 6.2 – Goal 6.0 Final Letter Grade

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

The weight of this Goal is 25%.

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

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

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

Notable Outcomes

- **PSO**: Improve workspace utilization by eliminating the storage of materials and equipment in offices and laboratories. (Objective 7.1)
- **PSO**: For the IOI Project achieve CD-3 or CD-3A and award contract by October 31, 2016. Maintain project cost (CPI) and schedule (SPI) within +/- 5% of approved baseline during the remaining part of FY17. (Objective 7.2)

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Overall Score
Goal 7.0 - Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs.				
7.1 Manage Facilities and Infrastructure in an Efficient and Effective Manner that Optimizes Usage, Minimizes Life Cycle Costs, and Ensures Site Capability to Meet Mission Needs			80%	
7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to support the Continuation and Growth of Laboratory Missions and Programs			20%	
			Performance Goal 7.0 Total	

Table 7.1 – Performance Goal 7.0 Score Development

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

Table 7.2 – Goal 7.0 Final Letter Grade

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

The weight of this Goal is 20%.

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

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

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

Notable Outcomes

- None

ELEMENT	Letter	Numerical	Objective	Overall

	Grade	Score	Weight	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			20%	
8.2 Provide an Efficient and Effective Cyber Security System for the Protection of Classified and Unclassified Information			60%	
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			20%	
			Performance Goal 8.0 Total	

Table 8.1 – Performance Goal 8.0 Score Development

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

Table 8.2 – Goal 8.0 Final Letter Grade