

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 2
2. AMENDMENT/MODIFICATION NO. 0518	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY Idaho Operations Office Idaho Operations U.S. Department of Energy Idaho Operations Idaho Falls ID 89415	CODE 892432	7. ADMINISTERED BY (If other than Item 6) Idaho Operations U.S. Department of Energy Idaho Operations 1955 Fremont Avenue MS 1221 Idaho Falls ID 83415	CODE 00701
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) BATTELLE ENERGY ALLIANCE, LLC Attn: Tara Justesen PO BOX 1625 IDAHO FALLS ID 83415		(x)	9A. AMENDMENT OF SOLICITATION NO.
CODE			9B. DATED (SEE ITEM 11)
FACILITY CODE		x	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC07-05ID14517
			10B. DATED (SEE ITEM 13) 11/09/2004

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) FAR 43.103(a)(3) and DEAR 970.5215-1

E. IMPORTANT: Contractor is not is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: Not Available


UEI: HG7XL5RBNX55

The purpose of this modification is to incorporate the FY2023 Performance Evaluation and Measurement Plan (PEMP) into Part III, Section J, Attachment K, effective date October 1, 2022 (Attached). The FY2022 PEMP remains in effect through September 30, 2022.

All other terms and conditions remain unchanged.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Jeffrey C. Fogg	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 09/30/2022

Previous edition unusable

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
DE-AC07-05ID14517/0518

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NAME OF OFFEROR OR CONTRACTOR
BATTELLE ENERGY ALLIANCE, LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: OR for Idaho U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 6017 Oak Ridge TN 37831 Period of Performance: 11/09/2004 to 09/30/2024				

Contract No. DE-AC07-05ID14517
Section J, Attachment K
Conformed thru Modification No. 518

PART III – SECTION J, ATTACHMENT K

FISCAL YEAR 2023
PERFORMANCE EVALUATION AND MEASUREMENT PLAN

Effective October 01, 2022 – September 30, 2023

FY 2023 INL Performance Evaluation and Measurement Plan

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FY 2023 INL Performance Evaluation and Measurement Plan

INTRODUCTION

This document, the Performance Evaluation and Measurement Plan (PEMP) primarily serves as Department of Energy's (DOE) Quality Assurance/Surveillance Plan (QASP) for the evaluation of Battelle Energy Alliance's (BEA) (hereafter, "the Contractor") performance of DOE Contract No. DE-AC07-05ID14517 (hereafter, "the Contract") for the management and operations of the Idaho National Laboratory (INL), or "the Laboratory") during the evaluation period from October 1, 2022 through September 30, 2023. This PEMP provides a standard, by which DOE can 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 Part I Section B – Supplies or Service and Prices/Costs Section B.2 – Fee, and Part II Section I – Contract Clauses, Section I.17 Department of Energy Acquisition Regulation (DEAR) 970.5215- 1, Total Available Fee: Base Fee Amount and Performance Fee Amount, Alternate I (DEC 2000) Alternate IV (DEC 2000). In partnership with the Contractor, the DOE Office of Nuclear Energy (NE) and DOE-Idaho Operations Office (DOE-ID) have defined the measurement basis that serves as the Contractor's performance-based evaluation and fee determination.

The Performance Goals (hereafter, "Goals"), Performance Objectives (hereafter referred to as "Objectives"), and Notable Outcomes for meeting the Objectives, described in PEMP Section I, were developed in accordance with expectations set forth within the Contract. The Notable Outcomes have been developed in coordination with DOE-NE program offices and other DOE Program Offices or Federal Agencies as appropriate. Except as otherwise provided for within the Contract, the evaluation and fee determination will rest solely on the Contractor's performance of the PEMP Goals and Objectives.

The Fiscal Year (FY) 2023 INL PEMP includes Performance Goals, which emphasize achievements in support of the DOE Vision/Mission for INL (Section C of the Contract), but do not undervalue the expectation of satisfactory performance levels in other areas of the statement of work. DOE expects INL will continue to implement and integrate environment, safety, and health (ES&H), quality, and security into its programs and operations to enhance overall mission success.

The overall measure of performance against each Objective of this PEMP, to include the evaluation of Notable Outcomes, shall be evaluated in accordance with this PEMP document by DOE-ID and shall include DOE-NE program office and major customer input as appropriate. This 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. DOE-ID will work with DOE-NE program offices and major customers throughout the year in evaluating the Contractor's performance, and will provide observations regarding programs and projects, as well as other

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management and operation activities, conducted by the Contractor throughout the year.

This PEMP identifies Performance Goals where INL can impact results supportive of DOE strategic initiatives and, in particular, DOE-NE mission objectives. These Performance Goals provide evaluation of mission achievement with both subjective and objective measures of performance.

I. PERFORMANCE GOALS, OBJECTIVES, AND NOTABLE OUTCOMES

Background

The current performance-based management approach to oversight within DOE has established a culture within the Department with emphasis on the customer-supplier partnership between DOE and the Laboratory contractors. It places a greater focus on mission performance, best business practices, cost management, and improved contractor accountability. Under the performance-based management system, DOE provides clear direction to INL and develops annual performance plans (such as this one) to assess the Contractor's 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 performance against these Performance Goals. Progress against these Goals is measured using a set of Objectives. The success of each Objective will be measured based on demonstrated performance by the INL, 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.

In determining the performance of PEMP Goals and Objectives and Notable Outcomes, the DOE evaluator(s) shall consider progress reports, program office reviews/oversight, deliveries against milestone dates, etc., in accordance with the described Goals. Each of the Objectives identifies significant activities and/or requirements, including but not limited to the Notable Outcomes that are important to the success of the corresponding PEMP Goal and shall be used as one of the primary means of determining the Contractor's success in meeting the desired Goal. The Goals for the PEMP support the DOE Vision/Mission for INL.

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Performance Goals, Objectives, and Notable Outcomes

The following sections describe the Performance Goals, their supporting Objectives, and associated Notable Outcomes for FY 2023.

GOAL 1.0 Efficient and Effective Mission Accomplishment

The science, engineering, technology, and testing programs at the Laboratory produce high-quality, original, and creative results that advance science, engineering, and technology; demonstrate sustained application of scientific progress into deployed solutions having an impact; receive appropriate external recognition of accomplishments; and contribute to overall research, development, and deployment goals of DOE and its customers.

The weight of this Goal is 70%.

Goal 1.0 Efficient and Effective Mission Accomplishment provides the objectives and rating criteria the DOE evaluator(s) shall use to assess the overall effectiveness and performance of the Laboratory in delivering science and technology programs that produce high-quality, original, and creative results that advance science and technology; demonstrate sustained scientific progress and impact; contribute to and achieve DOE's mission of protecting our national and economic security by providing world-class scientific research capacity; and advancing scientific knowledge, which enhances DOE's mission for INL. INL's mission includes achieving a positive impact on DOE-NE's strategic objective to revive, revitalize, and expand nuclear energy to ensure the reliability and resiliency of baseload power in meeting the Nation's energy needs; providing innovative research that enables a new generation of commercial nuclear power; enabling further national recognition and use of INL as a major national security technology development and demonstration center; enhancing INL's role as a multi-disciplinary research center, contributing to other national goals, and obtaining international recognition in the science and engineering fields, consistent with its missions; and making INL's unique scientific and technical capabilities, resources, and services available to DOE, other Federal agencies, state and local governments, academia, and the private sector.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against these mission objectives:

- Impact of research, development, demonstration and deployment (RDD&D) results on the field, as measured primarily by peer review and/or customer/industry/university/national laboratories feedback;
- Effective incorporation of lessons learned from early-stage research and development activities into the scale-up of complex nuclear systems and processes to optimize success and avoid rework;
- Leadership to ensure utilization of, and collaboration with, the best resources of national labs, industry, universities, and stakeholders to carry out laboratory missions, with well-defined roles and responsibilities to effectively leverage expertise inside and/or external to INL;

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

Other factors, which also may be considered in determining the level of performance, include, but are not limited to:

- Leadership to advance research and development of nuclear energy systems through public/private partnerships;
- Initiative to reduce the time and costs associated with development and qualification of nuclear materials and fuels;
- The technical support INL provides DOE-NE for the safe and secure storage, transportation, treatment, and/or disposition of existing inventory of civilian and defense spent nuclear fuel (SNF) and high-level radioactive waste (HLW);
- Leadership of key national and international organizations and committees;
- Development of new and transformative technologies and capabilities that enable principal missions;
- Engagement with the Nuclear Industry and Nuclear-Related Companies/Regulators;
- Technology Transfer, Deployment, and Commercialization;
- Regional, National, and International Partnerships; and
- Impact of national user facilities on research programs at other national institutions.

The above factors to consider for measuring performance are neither inclusive nor are they intended to be a checklist for meeting performance expectations of the Objectives under Goal 1.0. The evaluation of each Objective will use a combination of relevant factors.

Objective 1.1: Nuclear Energy

Lead and implement relevant, high impact RDD&D programs. Continue to build on the INL's position as the preeminent, internationally-recognized National Laboratory in nuclear energy technologies (including advanced fuel cycles). The primary focus areas include, but are not limited to the following:

- Engineering driven science-based approach to the development and performance of nuclear fuels and materials applicable to current and future generations of reactors;

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- Fuel cycle technologies including advancements in pyro and aqueous processing technologies, nuclear materials management and non-proliferation standards, and transient testing capability enabling the design and qualification of fuels and materials;
- Reactor Safety, Material Science, and Human Performance for Life Extension of Light Water Reactors;
- Advanced reactor design and optimization;
- Advanced modeling and simulation including industry and Nuclear Regulatory Commission (NRC) adoption and use of DOE-NE mod-sim tools; and
- Innovative research that supports sustaining the current fleet and demonstration of advanced reactors.

Notable Outcome(s) 1.1 Nuclear Energy:

Notable Outcome 1.1.A – Microreactor Applications Research Validation and Evaluation

*Complete fabrication of key **Microreactor Applications Research Validation and Evaluation (MARVEL) Reactor Components.***

MARVEL will be the first advanced reactor to be built at the INL site after nearly half a century. It will pave the way for future advanced reactors demonstration projects at the INL site, as well as nationwide. The MARVEL project will complete fabrication of (i) primary coolant boundary, (ii) guard vessel, (iii) structural frame, (iv) secondary support structure, (v) reactor support structure, and (vi) Stirling power conversion system, including the engines, and engine controls.

Notable Outcome 1.1.B – National Reactor Innovation Center Test Beds

National Reactor Innovation Center (NRIC) is a national program which is led by INL and is a key part of the INL's mission as the U.S. Department of Energy (DOE) preeminent national laboratory for nuclear energy technologies. One of NRIC's missions is to provide advanced reactor test beds so the private sector can test innovative reactor designs in a safe and secure manner.

Laboratory for Operations and Testing in the United States (LOTUS).

As part of its mission, NRIC is supporting the proposed LOTUS Project, which will be a test bed for testing of small, advanced reactors and associated experiments. LOTUS will provide companies access to INL's unique nuclear, radiological, engineering, and safety expertise for the different stages of reactor development. Through a cost-shared partnership with DOE, Southern Company plans to test/operate the world's first fast spectrum salt reactor at INL. The Molten Chloride Reactor Experiment (MCRE) will be the first project to use LOTUS.

In Fiscal Year (FY) 2023 INL will develop data and technical requirements to enable the design of the LOTUS. Tasks to be completed will include:

- Providing the scientific and technical data to support DOE's acquisition strategy for LOTUS
- Providing the scientific and technical data to support DOE's analysis of alternatives.

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Demonstration of Microreactor Experiments (DOME).

NRIC is also developing the NRIC-DOME test bed for testing advanced microreactors; experimental reactors up to 20 MWth. NRIC-DOME will provide companies access to INL's unique nuclear, radiological, engineering, and safety expertise for the different stages of reactor development and demonstration. By January 30, 2023, INL will deliver a draft DOME plan and schedule to DOE. This plan will lay out all the major necessary steps to be completed to have the DOME available for installation of the first anticipated demonstration/test reactor by the end of calendar year (CY) 2024. Once approved, INL will accomplish activities identified in the plan for completion in FY 2023.

Notable Outcome 1.1.C – Transient Testing/Advanced Fuels

Establish post-Halden capabilities using INL resources, filling gaps left after the Halden Reactor shut down.

In a 2018 report, INL identified four capability needs post-Halden: 1) accelerate loss of coolant accident (LOCA) testing capability in the Transient Reactor Test Facility (TREAT), 2) expand water loop capability with ramp testing at the Advanced Test Reactor (ATR), 3) establish re-fabrication/instrumentation capability, and 4) deploy reliable advanced in-pile instrumentation (INL/EXT-18-46101). Actions required in FY 2023 to complete this Notable Outcome include:

- Commission the Transient Water Irradiation System for TREAT (TWIST) capsule to support LOCA testing in TREAT. The current fleet of light water reactors (LWRs) relies on deployment of advanced LWR fuel technology (e.g., burnup extension and accident tolerant fuels), which requires LOCA experiments/testing to support both design and licensing activities. The TWIST capsule will be designed, deployed, and the first calibration test in TREAT will be performed. This will address the post-Halden need for accelerating loss of coolant accident (LOCA) testing capability
- Demonstrate the mechanical design of the I-Loop tube and experiment test train. A full-scale prototype of the multi-joint test train will be designed, fabricated, demonstrated, and validated at INL to prove the viability of the in-vessel components for the I-Loop. The deployment of the I-Loop into the ATR will expand prototypic pressurized water reactor (PWR) fuel testing capacity, enable boiling water reactor fuel testing, and allow for ramp and failure testing, which would fulfill the second of the four post-Halden recommendations.

Notable Outcome 1.1.D – Light Water Reactor Sustainability

Complete a pre-conceptual design of a Thermal and Electrical Power Delivery System in a candidate PWR to support broad industry utilization of energy to operate up to a 500 MWe High Temperature Electrolysis Plant that supports diversification of energy products and delivery of products beyond electricity, available for public release.

This activity directly supports scale-up of alternative uses of nuclear energy beyond electricity, and the results will address the key questions of operability, safety, and concept of operations for

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an existing PWR plant. It will also provide insights for advanced reactor vendors who are seeking to diversify the use of nuclear energy. INL will provide a technical report documenting the pre-conceptual design to DOE as completion of this Notable Outcome.

Notable Outcome 1.1.E - *Portable Energy for Lasting Effect*

Portable Energy for Lasting Effect (PELE) is a microreactor designed for the Department of Defense (DoD), capable of being transported and able to deliver 1-5 megawatts of electrical power for a minimum of three years. INL will support the demonstration of PELE. Actions required in FY 2023 to complete this Notable Outcome include:

- *The PELE Project Draft Preliminary Safety Analysis Report (PSAR) submittal.* INL will submit a complete draft PELE PSAR to DOE-Idaho Operations Office (DOE-ID) for review and approval. The PSAR will set clear requirements for facility manufacturing, assembly, and operations planning. INL will work with BWX Technologies, Inc. (BWXT) and the DoD Strategic Capabilities Office to develop a comprehensive and regulatorily defensible document that will reduce procurement lead times and support final design and regulatory approval of PELE. INL will review BWXT's analyses, to verify compliance with INL requirements to meet DOE standards. INL will draft, review, and finalize the complete PSAR and transmit it to DOE-ID.

Objective 1.2: National and Homeland Security

Lead and implement relevant, high-impact RDD&D programs. Advance grid security, resiliency and reliability through control systems cyber security innovation and further national recognition and use of INL as a major center for national security technology development and demonstration. The primary focus areas include, but are not limited to the following:

- Critical infrastructure resilience and protection RDD&D in focus areas of industrial control systems cyber security, infrastructure assurance, wireless communications, and grid reliability and security;
- Armor production which meets Department of the Army cost, production schedules, and quality requirements for Specific Manufacturing Capability (SMC) and explosives/blast protection;
- Nuclear nonproliferation and emergency response technology RDD&D and training including work with special nuclear materials; and
- Applied solutions to satisfy requirements for Defense, Homeland Security, and Intelligence Community customers.

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Notable Outcome(s) 1.2 National and Homeland Security:

Notable Outcome 1.2.A – Yukon Thunder

The Cybercore Integration Center will complete the development and delivery of classified cyber enabled capabilities for Department of Defense (DoD). This work includes testing, integration, complete documentation of techniques and procedures, and delivery of software code. This will close out a three-year project partnership for DoD and other integrated partners. By the end of FY 2023, DOE-ID will receive an assessment from the DoD Program Manager documenting satisfaction with capabilities delivered and fulfillment of mission requirements, which will be included as part of DOE's assessment of performance on this outcome.

Notable Outcome 1.2.B – Cyber-Informed Engineering

The National Cyber-Informed Engineering (CIE) Strategy ([FINAL DOE National CIE Strategy - June 2022_0.pdf \(energy.gov\)](#)) integrates cyber resilience into the design, implementation, operation, and maintenance of critical energy infrastructure and embedded energy systems. National and Homeland Security (N&HS) will implement recommendations from the Development and Current Infrastructure pillars of the CIE strategy by:

- Develop implementation guidance and create an open-source library of resources that support adoption of CIE as a common practice (CIE Development Strategic Recommendation 3; and
- Engaging with Enbridge Inc. to complete two phases of Consequence-Driven Cyber-Informed Engineering (CCE), a structured approach to applying CIE-derived principles, on the Algonquin pipeline (CIE Critical Infrastructure Strategic Recommendation 3).

Completion is marked by launch of the resource library containing the CIE implementation guidance, finalization of CCE engagement products delivered during engagement, and a letter from DOE-Cybersecurity, Energy Security, and Emergency Response (CESER) specifying that N&HS tasks meet CIE strategy recommendations the results of which will be demonstrated to the appropriate DOE-ID staff no later than September 30, 2023.

Objective 1.3: Science and Technology Addressing Broad DOE Missions

Lead and implement relevant, high impact RDD&D programs that support DOE's energy missions. Enhance INL's capabilities as a multi-program National Laboratory with world-class nuclear and associated energy research capabilities. The primary focus areas include, but are not limited to the following:

- Research and development of integrated energy systems, including but not limited to energy storage, bioenergy and other relevant clean energy systems;
- Advanced manufacturing and energy critical materials including research vital to ensuring the long-term competitiveness of U.S. industry; and

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- Provide basic research to support key areas of DOE's energy missions.

Notable Outcome(s) 1.3 Science and Technology Addressing Broad DOE Missions:

Notable Outcome 1.3.A – Advancing vehicle electrification through battery improvement and charging infrastructure

The current White House Administration has a goal of deploying 500,000 fast electric vehicle (EV) chargers nationwide by 2026. To support this effort, state and local municipalities, utility companies, and private industry need methods for making good decisions on deploying EV infrastructure.

Additionally, replacing Lithium (Li) ion batteries with Li metal batteries could reduce the cost per kWh of battery capacitance to 40% below current costs. Li metal batteries are currently experimental, and more data is needed on fundamental understanding of lithium metal battery properties to facilitate deployment.

INL will:

- Modify the Caldera EV modeling software tool to support states and other stakeholder's preparation for EV charging infrastructure development. The new software tool will be a scalable EV and grid modeling program, designed to enable users from states, power companies, and other stakeholders to:
 - Forecast load on the local electric grid and on projected National Electric Vehicle Infrastructure Bipartisan Infrastructure Law charging stations;
 - Provide information to support local infrastructure siting and interconnection decisions; and
 - Provide information enabling load management strategy decisions.

INL will work with the Joint Office of Energy and Transportation, to identify stakeholders and demonstrate the web-based modeling tool hosted on INL systems. Stakeholders will include at least three different representatives from utilities, municipalities, or charge station operators. INL will capture feedback on tool use and feasibility for developing enhanced functionality and usability.

- INL will develop new methods and use them to evaluate the fundamental degradation of rechargeable Li metal single layer pouch cells, consistent with a high energy, realistic cell design. INL will identify the primary failure mode of these batteries and the impact of cycling and calendar aging using methods aligned with the *Federal Consortium for Advanced Batteries Pre-application Battery Test Manual* (INL/MIS-21-62073). INL will submit at least one publication on this work to a peer-reviewed journal. INL will also identify at least one mitigation strategy to address the primary failure mode.

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Objective 1.4: Collaborations

Foster new academic, industry, government, and international collaborations to produce the investment, programs and expertise that assure the DOE Vision/Mission for INL is realized. The primary focus areas include, but are not limited to the following:

- Demonstrating innovation in regional workforce advocacy to attract and retain “best and brightest” in areas of relevance to regional industry, including workforce development, university outreach, and K-12;
- Developing human resource pipelines to ensure the Laboratory is connected with universities whose educational programs align with the critical staffing needs of INL;
- Demonstrating progress, impact, and leadership deploying INL capability and through regional partnerships identify and solve regional and industry challenges associated with national clean energy, environmental sustainability, and security challenges;
- Enrich the national research, development, and deployment of advanced science-base technologies through the sharing of Laboratory facilities through a user facility model;
- Establish and maintain long-term partnerships/relationships that maintain appropriate relations with the scientific and local communities; and
- Broadly deploy Laboratory capabilities, intellectual property, and technologies to support and impact industry and other key non-DOE customer needs through Cooperative Research and Development Agreements (CRADA), Strategic Partnership Project (SPP) Agreements, Agreements for Commercializing Technology (ACT), user facility access, and technology based economic development and Intellectual Property (IP) management and licensing.

Notable Outcome(s) 1.4 Collaborations:

Notable Outcome 1.4.A – NASA Programs

INL is supporting the National Aeronautics and Space Administration (NASA) efforts to develop space nuclear power and propulsion systems that will enable missions to the moon and manned missions to Mars, including more efficient and effective safety approaches for nuclear-enabled launches and more effective use of reactor space to produce heat source materials for radioisotope power systems. In FY 2023, INL will:

- Complete the Safety Basis Design Strategy for the Dragonfly mission to Titan, which defines process assumptions, hazards, risks, and opportunities inputs for the Dragonfly Mission Specific Launch Safety Analysis Report;
- Complete the Mod 1 NextGen Radioisotope Thermoelectric Generator System Design Review;
- Have neptunium target assemblies ready for insertion into ATR positions A-, H-, south flux trap, and northeast flux trap for plutonium-238 production; and
- Assemble major components of the NASA Space Nuclear Propulsion Program Sirius-4 test specimen, including the ceramic-metallic (cermet) fuel wafers, moderator material, insulator

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material, and fuel assembly outer structure materials, in the test capsule and ready to irradiate in TREAT.

Table 1.1 - Performance Goal 1.0 Letter Grade and Numerical Grade Definitions

1.0 Efficient and Effective Mission Accomplishment	
Letter Grade	Definition
A+	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> • There are <i>significant research areas for which the Laboratory has exceeded the expectations of the research plans in significant ways through creative, new, or unconventional methods that allow greater scientific and/or engineering reach than expected.</i> • RDD&D conducted at the Laboratory <i>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.</i> • RDD&D conducted at the Laboratory <i>provided major advances that significantly accelerate DOE or other customer mission(s).</i>
A	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> • There are <i>important examples</i> where the Laboratory <i>exceeded the expectations of the research plans in significant ways through creative, new, or unconventional methods that allow greater scientific and/or engineering reach than expected.</i> • <i>All areas</i> of RDD&D conducted at the Laboratory are of <i>exceptional or outstanding merit and quality.</i> • RDD&D conducted at the Laboratory <i>has significant positive impact to DOE or other customer missions.</i>
A-	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> • There are <i>important examples</i> where the Laboratory <i>exceeded the expectations of the research plans.</i> • <i>Significant areas</i> of RDD&D conducted at the Laboratory are of <i>exceptional or outstanding merit and quality.</i> • RDD&D conducted at the Laboratory <i>positively impacts DOE or other customer missions.</i>
B+	<p>The Laboratory has achieved each of the following Objectives:</p> <ul style="list-style-type: none"> • The Laboratory has successfully executed research plans. • RDD&D conducted at the Laboratory are of <i>high</i> scientific merit and quality. • RDD&D conducted at the Laboratory <i>advance</i> DOE or other customer missions.
B	<ul style="list-style-type: none"> • The Laboratory has successfully executed research plans. • RDD&D conducted at the Laboratory <i>advance</i> DOE or other customer missions. <p>BUT the Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons:</p> <ul style="list-style-type: none"> • RDD&D conducted at the Laboratory are <i>not uniformly of high</i> merit and quality OR <i>some areas of research, previously supported, have become uncompetitive OR the Laboratory</i>

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1.0 Efficient and Effective Mission Accomplishment	
Letter Grade	Definition
	<i>does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.</i>
B-	The Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons: <ul style="list-style-type: none"> • The Laboratory has <i>failed to successfully execute</i> research plans <i>but contingencies were in place such that no funding was or will be terminated</i>. OR RDD&D conducted at the Laboratory <i>does little to advance</i> DOE or other customer missions. • <i>Significant areas of</i> RDD&D conducted at the Laboratory are <i>not of high merit and quality</i> OR <i>some areas of research, previously supported, have become uncompetitive</i> OR <i>the Laboratory did not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.</i>
C	The Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons: <ul style="list-style-type: none"> • <i>In several significant aspects, the Laboratory failed to deliver on research plans using available resources such that some funding was or will be terminated</i> OR RDD&D conducted at the Laboratory <i>failed to contribute to</i> DOE or other customer missions. • <i>Significant areas of</i> RDD&D conducted at the Laboratory are <i>of poor merit and quality</i> OR <i>some areas of research, previously supported, have become uncompetitive</i> AND <i>the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.</i>
D	The Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons: <ul style="list-style-type: none"> • <i>Multiple program elements at the Laboratory failed to deliver on research plans using available resources such that significant funding was or will be terminated.</i> • <i>Multiple significant areas of</i> RDD&D conducted at the Laboratory are <i>of poor merit and quality</i> OR <i>some areas of research, previously supported, have become uncompetitive</i> AND <i>the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.</i> • RDD&D conducted at the Laboratory <i>failed to contribute to</i> DOE or other customer missions.
F	The Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons: <ul style="list-style-type: none"> • <i>Multiple program elements at the Laboratory failed to deliver on research plans using available resources resulting in total termination of funding.</i> • <i>Multiple significant areas of</i> RDD&D conducted at the Laboratory are <i>of poor merit and quality</i> OR <i>some areas of research, previously supported, have become uncompetitive</i> AND <i>the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities</i> OR <i>the Laboratory has been found to have engaged in gross scientific incompetence and/or scientific fraud.</i> • RDD&D conducted at the Laboratory <i>failed to contribute to</i> DOE or other customer missions.

Note: Based on the DOE Office of Science model as recommended by the National Academy of Public Administration (NAPA) report to DOE January 2013, specific grading tables supplying more detail for grading Goals 1.0, 2.0 and 3.0 do not contain grades of C+ and C-

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Table 1.2 – Performance Goal 1.0 Score Development

GOAL 1.0 Efficient and Effective Mission Accomplishment					
Objectives		Letter Grade	Numerical Score	Objective Weight	Weighted Score
1.1	Nuclear Energy			55%	
1.2	National and Homeland Security			25%	
1.3	Science and Technology Addressing Broad DOE Missions			10%	
1.4	Collaborations			10%	
Numerical Score for Goal 1.0					

GOAL 2.0 Efficient and Effective Stewardship and Operation of Research Facilities

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

The weight of this Goal is 15%.

Goal 2.0 Efficient and Effective Stewardship and Operation 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 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 if applicable.

This Goal is applicable to the major research facilities at the INL to include those under the Nuclear Science User Facility (NSUF), ATR, Materials and Fuels Complex (MFC), Biomass Feedstock National User Facility, Energy Innovation Laboratory (EIL), Idaho Research Center, Energy Systems Laboratory, and National Security Test Ranges.

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

- Effectiveness in establishing and demonstrating INL as a national test bed for research, development, and demonstration of advanced nuclear energy systems—enabling Small Modular Reactors (SMR) and/or advanced reactor demonstration or development;
- Delivery of accurate and timely information required to carry out the budget formulation process and critical decision processes associated with the operation of major R&D facilities;
- The Laboratory’s ability to meet the intent of DOE Order 413.3B, Program and Project Management for the Acquisition of Capital Assets;

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- The extent to which the Laboratory appropriately assesses risks and contingency needs associated with the operation of major R&D facilities;
- The extent to which the Laboratory is effective in its management role and partnership with DOE;
- The availability, reliability, performance, and efficiency of Laboratory major research facility(ies);
- The degree to which relevant facilities are optimally arranged to support the user community;
- The degree to which the Laboratory addresses and advances the disposition of identified environmental liabilities;
- The extent to which Laboratory RDD&D is conducted to develop/expand the capabilities of the facility(ies); and
- The quality of the process used to allocate facility time to users.

Additional elements to be considered in determining the level of performance for the Laboratory against this Goal include, but are not limited to:

- The quality of the mission related and scientific justification of any proposed facilities;
- The technical quality of conceptual and preliminary designs and the credibility of the associated cost estimates;
- The leveraging of existing facilities and capabilities of the DOE laboratory complex in plans for proposed facilities and capabilities; and
- The innovation and potential impact of new technologies embodied in INL facilities.

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

As applicable, provide quality justifications for new R&D facility needs, quality conceptual and pre-conceptual designs, leveraging with existing facilities, and financing options.

Notable Outcome(s) 2.1:

- None.

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

As applicable, provide successful fabrication of components, meeting of construction schedules and budgets, quality oversight, and transparent communications.

Notable Outcome(s) 2.2:

Notable Outcome 2.2.A – Construction and Commissioning of new facilities/capabilities

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Complete line-item project deliverables and critical decision milestones consistent with approved schedules and plans. This Notable Outcome provides for the effective and efficient construction and commissioning of line items in support of INL's mission.

- Sample Preparation Laboratory: In FY 2023, the project will complete installation of the shielded enclosure steel walls and hot cell liners.

Objective 2.3: Operation and Maintenance of Facilities

- Resources are balanced between facility RDD&D and user support; and a quality process is used to allocate facility time to both internal and external users;
- Ensure efficient use of facilities/capabilities in support of RDD&D activities, utilizing effective use of tools such as the facility Customer Requirements Form, Integrated Strategic Operational Plan (ISOP) and Annual Mission Plan processes and unfunded gap lists;
- Ensure efficient operation of nuclear facilities while optimizing availability and minimizing performance detractors such as unplanned outages and excessive deferred maintenance;
- Ensure effective planning, consolidation and disposition of nuclear material across INL; and
- Continue to develop research capabilities that have been identified as strategically important by INL.

Notable Outcome(s) 2.3 Operation and Maintenance of Facilities:

Notable Outcome 2.3.A – Advanced Test Reactor (ATR) and Materials and Fuels Complex (MFC) Infrastructure Investment for reliability improvement.

Safe and reliable operations of the ATR/ATR Critical Facility (ATR/ATRC) and facilities at MFC are essential for providing mission support to numerous DOE and National Nuclear Security Administration [NNSA] program offices, as well as Nuclear Science User Facilities (NSUF) users and the Gateway for Accelerated Innovation in Nuclear (GAIN) initiative. As such, it is critical for INL to successfully implement the agreed upon ATR/ATRC and MFC investment strategies to improve facility reliability and maintain safe operations. For ATR, two examples of prioritized long-term asset management (LTAM) investments are completing the Low Pressure (LP) Air System and E-1/E-2 Transformer replacements. These two LTAM projects will be completed in FY 2023 assuming the ATR 172-A-1 is executed as planned and ends in September 2023, with passing the system operability testing and turnover to ATR Operations. For MFC, completion of the Analytical Laboratory Ventilation Upgrade Project will allow INL to meet increasing demands of programs and precise operating parameters of new instrumentation for the coming decade. Completion of out-of-cell qualifications and preparation activities to support installation of the Multi-Function Furnace and Scraped Cathode Rod Assembly Prototype Equipment (SCRAPE) in the Fuel Conditioning Facility (FCF) will position MFC to continue to support High Assay Low Enriched Uranium (HALEU) production. These activities will be advanced assuming no production impact. Additionally, well-planned and high-quality maintenance activities, and good conduct of operations will help preserve a high level of

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facility readiness (e.g., reduced deferred maintenance backlog, improved mission reliability) in support of DOE Office of Nuclear Energy (NE) mission priorities.

Notable Outcome 2.3.B – Maximize Experimental Breeder Reactor-II (EBR-II) driver spent nuclear fuel (SNF) receipts at MFC in support of the 2019 Supplemental Agreement milestone.

Maximize the number of shipments of sodium bonded EBR-II Driver SNF that can be accepted at MFC based on available resources, funding, and operating limitations from the Idaho Nuclear Technology and Engineering Center (INTEC) underwater basin storage to the MFC FCF and Radioactive Scrap and Waste Facility (RSWF). The receipt of the maximum number of EBR-II driver fuel bottles to MFC facilities will help contribute toward the successful accomplishment of the Idaho Settlement Agreement deadline of “DOE shall complete the transfer of all spent fuel from wet storage facilities at INEL by December 31, 2023.” The EBR-II driver SNF is part of a larger effort to satisfy the 2019 Supplemental Agreement to the Idaho Settlement Agreement deadline, which states “DOE shall complete treatment of all sodium bonded EBR-II driver fuel pins by December 31, 2028.” Maximize the treatment of EBR-II driver fuel treatment batches through the pyro-processing equipment in the FCF. This is coupled with the production of HALEU regulus consistent with previous planning targets (i.e., PLN-6098) for FY 2023, and is contingent upon available resources, funding, and operating limitations.

Objective 2.4: Utilization of Facility(ies) to Provide Impactful Science and Technology (S&T) Results and Benefits to Internal and External User Communities

Ensures Laboratory facilities are being used to perform influential science and generating impactful S&T results, pushes the envelope of what the facility can do and/or are among the scientific leaders of the community, while balancing both internal and external user communities.

Notable Outcome(s) 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to Internal and External User Communities:

- None.

Table 2.1 - Performance Goal 2.0 Letter Grade and Numerical Grade Definitions

2.0 Efficient and Effective Stewardship and Operation of Research Facilities	
Letter Grade	Definition
A+	In addition to satisfying all conditions for B+, the Laboratory <i>exceeds expectations</i> in <i>all</i> of these categories:

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2.0 Efficient and Effective Stewardship and Operation of Research Facilities	
Letter Grade	Definition
	<ul style="list-style-type: none"> • Approaches proposed by the Laboratory are widely regarded as innovative, novel, comprehensive, and potentially cost-effective; • Reviews repeatedly confirm strong potential for scientific and engineering 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 while reducing cost and/or risk while enhancing capability; • Performance of the facility <i>exceeds</i> expectations for cost of operations, users served, availability, and capability; • The schedule and the costs associated with steady state operations are <i>significantly less</i> 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 program and/or users in the performance/review period.
A	<p>In addition to satisfying all conditions for B+, <i>all</i> of the following conditions are also met:</p> <ul style="list-style-type: none"> • 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 Idaho Operations Office, novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities; • Performance of the facility exceeds expectations in most of these categories: cost of operations, users served, availability, and capability; • The schedule and the costs associated with the ramp-up and/or 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-	<p>In addition to satisfying all conditions for B+, <i>all</i> of the following conditions are also met:</p> <ul style="list-style-type: none"> • 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; • Performance of the facility exceeds expectations in any of these categories: cost of operations, users served, availability, and capability; • The schedule and the costs associated with the ramp-up and/or steady state operations are less than planned and are acknowledged to be among the best by reviews.
B+	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> • The operation and maintenance meets its management performance measures; • The Laboratory provides sustained leadership and commitment to environment, safety and health;

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2.0 Efficient and Effective Stewardship and Operation of Research Facilities	
Letter Grade	Definition
	<ul style="list-style-type: none"> • Reviews regularly recognize the Laboratory for being proactive in the management of the execution phase of the operation and maintenance; • To a large extent, problems are identified and corrected by the Laboratory while minimizing impact on scope, cost or schedule; • DOE is kept informed of operation and maintenance status on a regular basis; reviews regularly indicate operation and maintenance is expected to meet its cost/schedule performance baseline.
B	The Laboratory fails to meet expectations in <i>one</i> of the areas listed under B+.
B-	The Laboratory fails to meet expectations in several of the areas listed under B+.
C	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the required analyses and documentation developed by the Laboratory are EITHER not innovative, OR reflect a lack of commitment and leadership.
D	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the Laboratory fails to provide a compelling justification for the acquisition.
F	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the approaches proposed by the Laboratory are based on fraudulent assumptions; the science case is weak to non-existent, and the business case is seriously flawed.

Note: Based on the DOE Office of Science model as recommended by the National Academy of Public Administration (NAPA) report to DOE January 2013, specific grading tables supplying more detail for grading goals 1.0, 2.0 and 3.0 do not contain grades of C+ and C-

Table 2.2 – Performance Goal 2.0 Score Development

GOAL 2.0 Efficient and Effective Stewardship and Operation of Research Facilities					
Objectives		Letter Grade	Numerical Score	Objective Weight	Weighted Score
2.1	Provide Effective Facility Design(s) as Required to Support Laboratory Programs			10%	
2.2	Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components			20%	
2.3	Operation and Maintenance of Facilities			50%	
2.4	Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to Internal and External User Communities			20%	
Numerical Score for Goal 2.0					

GOAL 3.0 Sound and Competent Leadership and Stewardship of the Laboratory

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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.

The weight of this Goal is 15%.

In measuring this performance Goal, 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, contractor leadership in support of DOE-NE's strategic objective to revive, revitalize, and expand nuclear energy to ensure the reliability and resiliency of baseload power in meeting the Nation's energy needs; developing a culture of innovation that encourages cutting edge research needed to support Nuclear Energy's long-term goals; the quality of strategic planning 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; utilizing a corporate approach to managing programs, which includes collaborations with other DOE laboratories; 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.

Objective 3.1: Leadership and Stewardship of the Laboratory

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/mission for the RDD&D future of the Laboratory;
- Make progress in realizing the DOE Vision/Mission for the Laboratory; and
- Develop and leverage appropriate relations with stakeholders to the benefit of the Laboratory and the U.S. taxpayer.

Notable Outcome(s) 3.1 Leadership and Stewardship of the Laboratory:

- None.

Objective 3.2: Management and Operation of the Laboratory

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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 per DOE O 226.1B, Implementation of Department of Energy Oversight Policy and demonstrates BEA corporate oversight of the INL;
- 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 among the Laboratory, DOE-NE and Idaho Operations Office so DOE can deal effectively with both internal and external constituencies; and
- Demonstrated accountability for senior leadership toward safety.

Notable Outcome(s) 3.2 Management and Operation of the Laboratory:

- None.

Objective 3.3: Contractor Value-Added

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 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 Laboratory; and
- Providing other contributions to the Laboratory that enable the Laboratory to do things that are good for the Laboratory and its community and that DOE cannot supply.

Notable Outcome(s) 3.3 Contractor Value-Added:

- None.

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Table 3.1 - Performance Goal 3.0 Letter Grade and Numerical Grade Definitions

GOAL 3.0 Sound and Competent Leadership and Stewardship of the Laboratory	
Letter Grade	Definition
A+	The Senior Leadership Management Team 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 Management Team of the Laboratory may have been faced with very difficult challenges and plotted, successfully, its own course through difficulty. Partners in the scientific and local communities applaud the Laboratory in national forums, and the Department is strengthened by this.
A	The Senior Leadership Management Team of the Laboratory has made significant progress over the previous year in realizing their vision for the Laboratory, and through this has had a demonstrable positive impact on the Department and the Nation. 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 Management Team 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 forums, and the Department is strengthened by this.
A-	The Laboratory Senior Leadership Management Team performs better than expected (B+ grade) in almost all the areas described for a B+.
B+	The Senior Leadership Management Team 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 Laboratory leadership align work, facilities, equipment and technical capabilities with the Laboratory vision and plan. The Senior Leadership Management Team 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 Management Team 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.
B-	The Senior Leadership Management Team of the Laboratory has made very little progress over the previous year in realizing their vision for the Laboratory. Strategic plans present long range goals that are realistic if routine; 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.

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GOAL 3.0 Sound and Competent Leadership and Stewardship of the Laboratory	
Letter Grade	Definition
C	The Senior Leadership Management Team 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 Management Team 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 Management Team 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 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 Leadership 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.

Note: Based on the DOE Office of Science model as recommended by the National Academy of Public Administration (NAPA) report to DOE January 2013, specific grading tables supplying more detail for grading goals 1.0, 2.0 and 3.0 do not contain grades of C+ and C-

Table 3.2 – Performance Goal 3.0 Score Development

3.0 Sound and Competent Leadership and Stewardship of the Laboratory				
Objectives	Letter Grade	Numerical Score	Objective Weight	Weighted Score
3.1	Leadership and Stewardship of the Laboratory		40%	
3.2	Management and Operation of the Laboratory		40%	

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3.0 Sound and Competent Leadership and Stewardship of the Laboratory					
Objectives		Letter Grade	Numerical Score	Objective Weight	Weighted Score
3.3	Contractor Value-Added			20%	
Numerical Score for Goal 3.0					

GOAL 4.0 Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health and Environmental Protection

The weight of this Goal is 30%.

This Goal evaluates the Contractor’s overall success in deploying, implementing, and improving integrated Environment, Safety, and Health systems that protects workers, the public, and the environment and efficiently and effectively support the mission(s) of the Laboratory.

Objective 4.1: Provide an Efficient and Effective Worker Health and Safety Program

Objective 4.2: 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 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. This Objective will be reported quarterly in synchronization with the DOE Quarterly Evaluation Report.

Notable Outcome(s) 4.0 Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health and Environmental Protection and Quality:

None.

Table 4.1 – Performance Goal 4.0 Score Development

Objectives	Letter Grade	Numerical Score	Objective Weight	Weighted Score
4.1 Provide an Efficient and Effective Worker Health and Safety Program			60%	

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Objectives		Letter Grade	Numerical Score	Objective Weight	Weighted Score
4.2	Provide an Efficient and Effective Environmental Management System			40%	
Numerical Score for Goal 4.0					

Note: The Objectives and Notable Outcomes for Performance Goal 4.0 will be evaluated using the criteria in Figure 3, General Letter Grade, Adjectival Rating, Numeric Range, Definition, and Award-Fee Pool Available To Be Earned.

GOAL 5.0 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 25%.

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.

Objective 5.1: Provide an Efficient, Effective, and Responsive Financial Management System

Provide an assessment annually of the Laboratory cost performance including evaluations of spending and budgeting including Laboratory cost effectiveness. This assessment should include cost management efforts performed throughout the fiscal year and cost management improvement plans for the following fiscal year. BEA’s current Financial Management System Assurance Portfolio Status Report may be used to demonstrate the cost management efforts of this requirement.

Objective 5.2: Provide an Efficient, Effective, and Responsive Acquisition Management System

The Contractor must demonstrate effective subcontract management, including award of subcontracts as scheduled, inclusion of all requirements, subcontractor audits, and subcontract administration. Contractor will monitor subcontractor performance to ensure compliance with all requirements including small business subcontracting plans, Buy American Act, and applicable labor statutes.

Objective 5.3: Provide an Efficient, Effective, and Responsive Human Resources Management System and Diversity Program

Objective 5.4: Provide Efficient, Effective, and Responsive Contractor Assurance Systems, including Internal Audit and Quality

Objective 5.5: Provide Efficient, Effective, and Responsive Information Management System

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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, Human Resource Management, and Information 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.

Objective 5.6: Provide an Efficient, Effective, and Responsive Property Management System

Notable Outcome(s) 5.0 Deliver Efficient, Effective, and Responsive Business Systems and Resources that Enable the Successful Achievement of the Laboratory Mission(s):

None.

Table 5.1 – Performance Goal 5.0 Score Development

Objectives		Letter Grade	Numerical Score	Objective Weight	Weighted Score
5.1	Provide an Efficient, Effective, and Responsive Financial Management System			20%	
5.2	Provide an Efficient, Effective, and Responsive Acquisition Management System			20%	
5.3	Provide an Efficient, Effective, and Responsive Human Resources Management System and Diversity Program			15%	
5.4	Provide an Efficient, Effective, and Responsive Contractor Assurance Systems, including Internal Audit and Quality			15%	
5.5	Provide an Efficient, Effective, and Responsive Information Management System			15%	
5.6	Provide an Efficient, Effective, and Responsive Property Management System			15%	
Numerical Score for Goal 5.0					

Note: The Objectives and Notable Outcomes for Performance Goal 5.0 will be evaluated using the criteria in Figure 3, General Letter Grade, Adjectival Rating, Numeric Range, Definition, and Award-Fee Pool Available to Be Earned.

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GOAL 6.0 Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs

The weight of this Goal is 20%.

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 and tomorrow’s mission(s) and complex challenges.

Objective 6.1: Sustain Excellence in Real Property Asset Management

Conduct effective real property asset life-cycle management in alignment with DOE mission needs and requirements, and including management of assets in a safe, secure, cost-effective, and sustainable manner to ensure real property assets are available, utilized, and in a condition to support efficient mission execution (e.g., achieving a reduction in Deferred Maintenance/Repair Needs (DM/RN) across the INL enterprise, demonstrated action to minimize life-cycle costs).

Notable Outcome(s) 6.0 Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs:

None.

Table 6.1 – Performance Goal 6.0 Score Development

Objectives		Letter Grade	Numerical Score	Objective Weight	Weighted Score
6.1	Sustain Excellence in Real Property Asset Management			100%	
Numerical Score for Goal 6.0					

Note: The Objectives and Notable Outcomes for Performance Goal 6.0 will be evaluated using the criteria in Figure 3, General Letter Grade, Adjectival Rating, Numeric Range, Definition, and Award-Fee Pool Available To Be Earned.

GOAL 7.0 Sustain and Enhance the Effectiveness of Integrated Safeguards and Security Management (ISSM) and Emergency Management Systems

The weight of this Goal is 25%.

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.

Objective 7.1: Provide an Efficient and Effective Emergency Management System

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Objective 7.2: Provide an Efficient and Effective Cyber Security System for the Protection of Classified and Unclassified Information

INL will consistently meet DOE cyber security requirements through effective program management and execution of Information Management cyber security projects.

Objective 7.3: 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 Outcome(s) 7.0 Sustain and Enhance the Effectiveness of Integrated Safeguards and Security Management (ISSM) and Emergency Management Systems:

None.

Table 7.1 – Performance Goal 7.0 Score Development

Objectives		Letter Grade	Numerical Score	Objective Weight	Weighted Score
7.1	Provide an Efficient and Effective Emergency Management System			15%	
7.2	Provide an Efficient and Effective Cyber Security System for the Protection of Classified and Unclassified Information			35%	
7.3	Provide an Efficient and Effective Physical Security Program for the Protection of Special Nuclear Materials, Classified Matter, Classified Information, Sensitive Information, and Property			50%	
Numerical Score for Goal 7.0					

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II. DETERMINING THE CONTRACTOR’S PERFORMANCE RATING AND PERFORMANCE-BASED FEE AND AWARD TERM ELIGIBILITY (as applicable)

The FY 2023 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. Each Goal is composed of weighted Objectives. Additionally, a set of Notable Outcomes have 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 Objective(s). Failure to meet expectations against any Notable Outcome could result in a grade less than B+ for that Objective(s). To achieve an Objective grade above B+, the established Notable Outcome(s) must be met. If a Notable Outcome is not met, performance against the Objective will consider the level of progress and contribution towards achievement of the Notable Outcome(s). This may result in a downward adjustment in the final grade for that Objective.

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 DOE-ID’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. In accordance with Federal Acquisition Regulation (FAR) subpart 16.4, DOE-ID shall provide a proposed adjectival rating, associated description and award-fee pool available to be earned for each Objective. Use Figure 1 (FAR Table 16-1 Contractor Adjectival Rating and Award-Fee Available Scale) for the adjectival rating and associated award-fee pool available to be earned.

Figure 1. Summary of FAR Table 16-1 Contractor Adjectival Rating and Award-Fee Available Scale

Award-Fee Pool Available To Be Earned	Adjectival Rating
91%-100%	Excellent
76%-90%	Very Good
51-75%	Good

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Award-Fee Pool Available To Be Earned	Adjectival Rating
No Greater Than 50%	Satisfactory
0%	Unsatisfactory

DOE-ID shall provide a proposed grade and a score from the corresponding numerical range for each Objective (see Figure 2 for Letter Grade Scale). Each evaluation will measure the degree of effectiveness and performance of the Contractor in meeting the corresponding Objectives.

Figure 2. Letter Grade Scale

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

The Contractor shall be evaluated against the defined levels of performance provided for each Objective based on a specific grading table in each Performance Goal. The specific grading tables are based on the general grading table in Figure 3 (General Letter Grade, Adjectival Rating, Numeric Range, Definition, and Award-Fee Pool Available To Be Earned) and each specific grading table describes in more detail the grading criteria for these Goals. As per FAR subpart 16.4, the adjectival rating description has been supplemented and is included in Figure 3. Goals 1.0, 2.0 and 3.0 each have a specific grading table in each Performance Goal section. Goals 4.0, 5.0, 6.0 and 7.0 will be graded according to the general table in Figure 3 (General Letter Grade, Adjectival Rating, Numeric Range, Definition, and Award-Fee Pool Available To Be Earned).

It is the DOE’s expectation that the Contractor provides for and maintains 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 for Goals 1.0, 2.0 and 3.0, DOE shall assess the degree of effectiveness and performance in meeting each of the Objectives provided under each of the Goals. For Performance Goals 4.0, 5.0, 6.0 and 7.0, 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 (Office of the Inspector General (OIG), Government Accountability Office (GAO), Defense Contract Audit Agency (DCAA), etc.).

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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 3 (General Letter Grade, Adjectival Rating, Numeric Range, Definition, and Award-Fee Pool Available To Be Earned), below.

The Department sets high expectations 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 Goals 4.0, 5.0, 6.0 or 7.0. Performance that might merit grades above B+ would need to reflect the Contractor’s significant contributions to the management and operations at the INL, or recognition by external, independent entities as exemplary performance. Notable Outcomes will be considered against Goals, as applicable.

Figure 3. General Letter Grade, Adjectival Rating, Numeric Range, Definition, and Award-Fee Pool Available To Be Earned

Letter Grade	Adjectival Rating	Numeric Range	Definition	Award-Fee Pool Available To Be Earned
A+	Excellent	4.3-4.1	<p>Contractor has exceeded almost all of the significant award-fee Goals and Objectives and has met overall cost, schedule and technical performance requirements of the contract in the aggregate as defined and measured in the PEMP for the award-fee evaluation period. Contractor performance significantly exceeds expectations made toward realizing strategic objectives with significant positive impact on INL’s or DOE’s mission. Contractor performance significantly exceeds expectations of performance as set within performance Objectives identified for each Goal or within the purview of the Goal.</p> <p>Areas of Notable Performance have or have the potential to significantly improve the overall mission of the Laboratory. No specific deficiency noted within the purview of the overall result being evaluated.</p>	100%

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Letter Grade	Adjectival Rating	Numeric Range	Definition	Award-Fee Pool Available To Be Earned
A	Excellent	4.0-3.8	Contractor has exceeded almost all of the significant award-fee Goals and Objectives and has met overall cost, schedule and technical performance requirements of the contract in the aggregate as defined and measured in the PEMP for the award-fee evaluation period. Contractor performance exceeds expectations made toward realizing strategic objectives with positive impact on INL’s or DOE’s mission. Contractor performance notably exceeds expectations of performance as set within Performance Objectives identified for each Goal or within other areas within the purview of the Goal. Areas of Notable Performance either have or have the potential to improve the overall mission of the Laboratory. Minor deficiencies, if any, noted are more than offset by the positive performance within the purview of the desired Goal being evaluated and have no potential to adversely impact the mission of the Laboratory.	97%
A-	Excellent	3.7-3.5	Contractor has exceeded almost all of the significant award-fee Goals and Objectives and has met overall cost, schedule and technical requirements of the contract in the aggregate as defined and measured in the PEMP for the award-fee evaluation period. Contractor performance exceeds expectations made toward realizing strategic objectives. Contractor performance exceeds expectations of performance as set within Performance Objectives identified for each Goal or within other areas within the purview of the Goal, with some notable areas of increased performance identified. Minor deficiencies, if any, noted are offset by the positive performance within the purview of the Goal being evaluated with little or no potential to adversely impact the mission of the Laboratory.	94%

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Letter Grade	Adjectival Rating	Numeric Range	Definition	Award-Fee Pool Available To Be Earned
B+	Very Good	3.4-3.1	Contractor has exceeded many of the significant award-fee Goals and Objectives and has met overall cost, schedule and technical performance requirements of the contract in the aggregate as defined and measured in the PEMP for the award-fee evaluation period. Contractor performance exceeds many expectations of performance as set within Performance Objectives identified for the Goal. Contractor performance that does not meet expectations is identified, but is offset by positive performance within the purview of the Goal and has little to no potential to adversely impact the mission of the Laboratory.	90%
B	Very Good	3.0-2.8	Contractor has exceeded many of the significant award-fee Goals and Objectives and has met overall cost, schedule and technical performance requirements of the contract in the aggregate as defined and measured in the PEMP for the award-fee evaluation period. Contractor performance meets most identified expectations as set within Performance Objectives identified for the Goal. Minor deficiencies, if any, identified are offset by other exceptional performance within the Goal being evaluated and have little to no potential to adversely impact the mission of the Laboratory.	84%
B-	Very Good	2.7-2.5	Contractor has exceeded many of the significant award-fee Goals and Objectives and has met overall cost, schedule and technical performance requirements of the contract in the aggregate as defined and measured in the PEMP for the award-fee evaluation period. However, one or two expectations of performance within the Performance Objectives identified for some desired Goals are not met and/or minor deficiencies are identified, and although they may be offset by other positive performance, they have some potential to adversely impact the Goal or the mission of the Laboratory.	76%

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Letter Grade	Adjectival Rating	Numeric Range	Definition	Award-Fee Pool Available To Be Earned
C+	Good	2.4-2.1	Contractor has exceeded some of the significant award-fee Goals and Objectives and has met overall cost, schedule and technical performance requirements of the contract in the aggregate as defined and measured in the PEMP for the award-fee evaluation period. However, some expectations of performance set within Performance Objectives identified for some desired Goals are not met and/or other deficiencies are identified, and although they may be offset by other positive performance, they have the potential to adversely impact the desired Goal or the mission of the Laboratory.	51-75%
C	Satisfactory	2.0-1.8	Contractor has met overall cost, schedule and technical performance requirements of the contract in the aggregate as defined and measured in the PEMP for the award-fee evaluation period. Either there are little or no areas of notable contractor performance or the areas of notable performance are offset by the performance that does not meet expectations, and/or several other deficiencies are identified. Deficiencies have the potential to adversely impact the desired Goal or mission of the Laboratory.	No greater than 50%
C-	Unsatisfactory	1.7-1.1	Contractor has failed to meet Goals and Objectives and overall cost, schedule and technical performance requirements of the contract in the aggregate as defined and measured in the PEMP for the award-fee evaluation period. Many expectations as set within Performance Objectives identified for Goals are not met and/or other significant deficiencies are identified that have or will have an adverse impact on the Goal or the mission of the Laboratory if not immediately corrected.	0%
D	Unsatisfactory	1.0-0.8	Contractor has failed to meet Goals and Objectives and overall cost, schedule and technical performance requirements of the contract in the aggregate as defined and measured in the PEMP for the award-fee evaluation period. Most or all expectations as set within Performance Objectives identified for Goals are not met and/or other major deficiencies are identified that have adversely impacted the Goal or the mission of the Laboratory.	0%

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Letter Grade	Adjectival Rating	Numeric Range	Definition	Award-Fee Pool Available To Be Earned
F	Unsatisfactory	0.7-0	Contractor has failed to meet Goals and Objectives and overall cost, schedule and technical performance requirements of the contract in the aggregate as defined and measured in the PEMP for the award-fee evaluation period. However, most or all expectations as set within Performance Objectives identified for Goals are not met and/or other major deficiencies are identified that have a significant, adverse impact on both the Goal and the mission of the Laboratory.	0%

Calculating Individual Goal Scores and Letter Grades

The scoring system used to arrive at the fee determination for INL performance is described below.

- Each PEMP Performance Goal contains a number of PEMP Objectives and associated Notable Outcomes. PEMP Objectives are graded by evaluating the criteria for each and assigning each of the Objectives a letter grade.
- In accordance with Figure 2: *Letter Grade Scale*, each Objective is given a Numerical Score from the corresponding range.
- The Numerical Score is then multiplied by the corresponding weight of the Objective to reach a Weighted Score for the Objective.
- The Weighted Scores for each Objective are then rounded to the nearest hundredth. The rounded scores are then summed to reach a Numerical Score for the Goal. (Example: See Table 1.2 below)

Table 1.2

GOAL 1.0 Efficient and Effective Mission Accomplishment					
Objectives		Letter Grade	Numerical Score	Objective Weight	Weighted Score
1.1	Nuclear Energy	A	3.9	55%	2.15
1.2	National and Homeland Security	A	3.9	25%	0.98
1.3	Science and Technology Addressing Broad DOE Missions	A-	3.6	10%	0.36
1.4	Collaborations	B+	3.3	10%	0.33
Numerical Score for Goal 1.0					3.82

- After a Numerical Score is calculated for each PEMP Goal, the scores are then transferred to Figure 4 (see example below). The Numerical Score for each Goal is

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multiplied by its corresponding weight to determine the Weighted Score for each Goal. The Weighted Scores are rounded to the nearest hundredth and summed to reach Total Numerical Scores for Goals 1.0 – 3.0 and for Goals 4.0 – 7.0.

Figure 4. Performance Goal Calculations

Performance Goals		Numerical Score	Weight	Weighted Score
1.0	Efficient and Effective Mission Accomplishment	3.82	70%	2.67
2.0	Efficient and Effective Stewardship and Operation of Research Facilities	3.67	15%	0.55
3.0	Sound and Competent Leadership and Stewardship of the Laboratory	3.75	15%	0.56
Total Numerical Score (1.0, 2.0, 3.0)				3.78
4.0	Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health and Environmental Protection	3.60	30%	1.08
5.0	Deliver Efficient, Effective, and Responsive Business Systems and Resources that Enable the Successful Achievement of the Laboratory Mission(s)	3.80	25%	0.95
6.0	Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs	3.62	20%	0.72
7.0	Sustain and Enhance the Effectiveness of Integrated Safeguards and Security Management (ISSM) and Emergency Management Systems	3.71	25%	0.93
Total Numerical Score (4.0, 5.0, 6.0, 7.0)				3.68

Determining the Amount of Performance-Based Fee Earned

In order to determine the amount fee earned, Figure 5 (below) is completed, which provides a summary of the fee determination results.

- The Total Numerical Score for Goals 1.0 – 3.0 (rounded to the nearest tenth) is entered into Figure 5 (see example below).
- The corresponding Fee Percentage is derived from Figure 6 below, utilizing the Total Numerical Score.

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- The Fee Multiplier is derived from Figure 6 below utilizing the Total Numerical Score for Goals 4.0 – 7.0.
- The Overall Earned Performance-Based Fee percentage is calculated by multiplying the Fee Percentage by the Fee Multiplier.
- The Overall Earned Performance-Based Fee dollar value is calculated by multiplying the Overall Earned Performance-Base Fee percentage by the total available fee pool of \$16M.
- The Final Letter Grade is derived from Figure 3 utilizing the Overall Earned Performance-Base Fee percentage.
- The Final FAR 16 Adjectival Rating is derived from Figure 1 utilizing the Overall Earned Performance-Based Fee percentage.

Figure 5. Overall Fee Earned and Final Grade Determination

Total Numerical Score (Goals 1.0, 2.0 and 3.0) from Figure 4	3.8
Fee Percentage (Goals 1.0, 2.0 and 3.0) from Figure 6	97%
Fee Multiplier (Goals 4.0, 5.0, 6.0 and 7.0) from Figure 6	x 100%
Overall Earned Performance-Based Fee %	97%
Overall Earned Performance-Based Fee \$ (overall earned fee % x total available fee pool)	\$15,520,000
Final Letter Grade (Figure 3. General Letter Grade, Adjectival Rating, Numeric Range, Definition, and Award-Fee Pool Available To Be Earned)	A
Final FAR part 16 Adjectival Rating (Figure 1. FAR Table 16-1 Contractor Adjectival Rating and Award-Fee Available Scale)	Excellent

Figure 6. Performance-Based Fee Earned and Multiplier Scale

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Overall Weighted Score from Figure 4.	Percent Fee Earned (1.0, 2.0 and 3.0)	Fee Multiplier (4.0, 5.0, 6.0 and 7.0)
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	90%	100%
3.3		
3.2		
3.1		
3.0	88%	95%
2.9		
2.8		
2.7	85%	90%
2.6		
2.5		
2.4	75%	85%
2.3		
2.2		
2.1		
2.0	50%	75%
1.9		
1.8		
1.7	0%	60%
1.6		
1.5		
1.4		
1.3		
1.2		

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Overall Weighted Score from Figure 4.	Percent Fee Earned (1.0, 2.0 and 3.0)	Fee Multiplier (4.0, 5.0, 6.0 and 7.0)
1.1		
1.0 to 0.8	0%	0%
0.7 to 0.0	0%	0%

Unless otherwise stated, all PEMP Goals and associated Objectives are to be completed by September 30, 2023. Each of the Objectives identifies significant activities, requirements, and Notable Outcomes important to the success of the corresponding PEMP Goal and shall be used as the primary means of determining the Contractor’s degree of success in meeting the desired Objective.

Although evaluation of Performance Goal completeness is the primary means for determining performance, other performance information from other sources including, but not limited to, BEA’s self-evaluation report, customer service evaluations, other performance areas within the purview of an Objective, operational awareness (daily oversight) activities, “For Cause” reviews (if any), peer reviews, and other outside agency reviews (OIG and the GAO, etc.) may be used in determining INL’s overall success in meeting an Objective. In addition, DOE will adjust performance scores in areas where external factors prevent INL from meeting established Objectives and Notable Outcomes that are beyond the control of INL.

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 DEAR 970.5215-3 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

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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.

Performance Status Reporting and Evaluation Process

PEMP administration is a formal process that includes requirements for status reports, change control, and final fee determination.

Status of performance will be provided by both DOE and INL on a monthly, bi-monthly, quarterly and/or semi-annual basis as required. Areas of disagreement will be highlighted and addressed. Performance Status Reviews will be conducted periodically as agreed upon by DOE and INL and may be held in lieu of a monthly report. INL is responsible for defining and coordinating the process for conducting the reviews and to ensure the involvement of appropriate DOE and INL counterparts. Reviews will focus on PEMP Objectives and Notable Outcomes as well as other performance expectations.

On an annual basis, INL may conduct a formal self-evaluation of its performance relative to each Performance Goal, PEMP Objective, and associated Notable Outcomes. If INL decides to provide DOE with a written report documenting the self-evaluation, it should be provided to DOE within ten (10) calendar days after the end of the performance period.

In addition to monthly reporting, DOE will perform and document a final evaluation of INL's performance relative to each Performance Goal, PEMP Objective, and Notable Outcome and will provide a final fee determination.

The absence of specific Performance Objectives in this plan does not diminish the need to comply with contractual requirements. The Fee Determination Official (FDO) may unilaterally adjust the fee earned based on the contractor's performance against all contract requirements. It is recognized that at the discretion of the FDO, fee earned may be adjusted upward (not to exceed total eligible fee) based on the Contractor delivering strategic value for real and relevant performance not otherwise specified in the PEMP. Data to support downward fee adjustments may be derived from other sources to include, but not limited to, operational awareness (daily oversight) activities; "For Cause" reviews (if any); other outside agency reviews (OIG, GAO, DCAA, etc.), significant events or incidents within the control of the contractor, or other reviews as appropriate. The FDO may utilize, as appropriate, the definitions to assist in making unilateral adjustment decisions.

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Definitions:

PEMP Performance Goals: These are the seven topical areas that are used to group the PEMP Objectives. They are:

- GOAL 1.0** Efficient and Effective Mission Accomplishment;
- GOAL 2.0** Efficient and Effective Stewardship and Operation of Research Facilities;
- GOAL 3.0** Sound and Competent Leadership and Stewardship of the Laboratory;
- GOAL 4.0** Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health and Environmental Protection;
- GOAL 5.0** Deliver Efficient, Effective, and Responsive Business Systems and Resources that Enable the Successful Achievement of the Laboratory Mission(s);
- GOAL 6.0** Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs; and
- GOAL 7.0** Sustain and Enhance the Effectiveness of Integrated Safeguards and Security Management (ISSM) and Emergency Management Systems.

PEMP Objectives: Objectives that have been agreed upon by INL and DOE for encouraging Contractor performance. PEMP Objectives are part of and make up the PEMP Goals. The grade and numerical score for each Objective will be determined using the definitions in the grading table assigned for each Performance Goal. Performance that meets DOE's expectations is defined as the grade of B+ for each Objective. Grades for Objectives range between A+ and F.

Notable Outcome: A Notable Outcome is intended to focus INL on the specific items that DOE identifies as the most important initiative and/or highest risk issues the INL must address in the coming year. To develop Notable Outcomes, DOE should consider critical priorities and commitments and/or other high-priority site documents and plans. Notable Outcomes must be clearly linked to one or more Objectives but are not required for all Objectives. Notable Outcomes should be objective, measurable, and results-oriented to allow for a definitive determination at the end of the year of whether or not the specific Outcome was achieved. Notable Outcomes should not re-state general expectations already described in the Objective and subjective wording should be avoided. Notable Outcomes shall not be weighted. Notable Outcomes are either met, or not met; they are not given a numerical score or a letter grade at the end of the fiscal year.

Change Control:

The FY 2023 PEMP was developed with the understanding that both parties engaged in good faith to define meaningful and challenging outcomes for success. It is also recognized that circumstances may arise in the course of the execution year that warrant a revisit of the agreed upon Performance Objectives. When the need for a change has been identified and validated in accordance with INL change control principles, INL and DOE will engage in INL PEMP change control process to negotiate and process changes in a timely manner.