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## PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

J.1 Appendix A - Advance Understandings on Human Resources

J.2 Appendix B - Performance Evaluation and Measurement Plan
- FY 2010 Mod M253
- FY 2011 Mod M338
- FY 2012 Mod M436
- FY 2013 Mod M500
- FY 2014 Mod M533
- FY 2015 Mod M563

J.3 Appendix C - Special Financial Institution Account

J.4 Appendix D - Budget Program

J.5 Appendix E - Key Personnel

J.6 Appendix F - Reserved

J.7 Appendix G - Purchasing System Requirements

J.8 Appendix H - Small Business Subcontracting Plan
- FY 2010 Mod M253
- FY 2011 Mod M338
- FY 2012 Mod M436
- FY 2013 Mod M509
- FY 2014 Mod M533
- FY 2015 Mod M563

J.9 Appendix I - DOE Directives/List B

J.10 Appendix J - Treaties and International Agreements/Waived Inventions

J.11 Appendix K - Reserved

J.12 Appendix L - Computation of Fee
- FY 2010 Mod M365
- FY 2011 Mod M436
- FY 2012 Mod M509
- FY 2013 Mod M542
- FY 2014 Mod M533
- FY 2015 Mod M572

J.13 Appendix M - Contract Guidance for Preparation of Diversity Plan

| AWARD/CONTRACT | 1. THIS CONTRACT IS RATED ORDER UNDER DPAS (15 CFR 350) | RATING N/A | PAGE 1 OF PAGES 1 |
|---|---|---|---|

| 2. CONTRACT (Proc. Inst. Ident.) NO. | 3. EFFECTIVE DATE | 4. REQUISITION/PURCHASE REQUEST/PROJECT NO. |
|---|---|---|
| DE-AC02-98CH10886.M120 | See Block 20C | 02-04CH10886.001 |

5. ISSUED BY CODE

U.S. Department of Energy
Chicago Office
9800 S. Cass Avenue
Argonne, IL 60439

6. ADMINISTERED BY (If other than Item 5) CODE

U. S. Department of Energy
Chicago Office
Brookhaven Site Office
53 Bell Avenue
Upton, New York 11973

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

Brookhaven Science Associates, LLC
P.O. Box 5000
Upton, New York 11973-5000

Contractor DUNS Number: 038150264

CODE N/A FACILITY CODE N/A

8. DELIVERY N/A
☐ FOB ORIGIN ☐ OTHER (See below)

9. DISCOUNT FOR PROMPT PAYMENT
N/A

10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN ▶ ITEM N/A

11. SHIP TO/MARK FOR CODE
N/A

12. PAYMENT WILL BE MADE BY CODE
Same as Item 6

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:
☐ 10 U.S.C. 2304(c) ( ) ☒ 41 U.S.C. 253(c) ( 3. )

14. ACCOUNTING AND APPROPRIATION DATA
N/A

| 15A. ITEM NO | 15B. SUPPLIES/SERVICES | 15C. QUANTITY | 15D. UNIT | 15E. UNIT PRICE | 15F. AMOUNT |
|---|---|---|---|---|---|
| N/A | See the Attached Schedule | N/A | N/A | N/A | See Clause B.2. |

15G. TOTAL AMOUNT OF CONTRACT ▶ $ See Clause B.2.

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| X | B | SUPPLIES OR SERVICES AND PRICES/COSTS | 2 | | | PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH. | |
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*CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE*

17. ☒ CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 2 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)

18. ☐ AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number _____, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

19A. NAME AND TITLE OF SIGNER (Type or print)
Praveen Chaudhari
President

20A. NAME OF CONTRACTING OFFICER
Michael Holland
Contracting Officer

19B. NAME OF CONTRACTOR
BY Praveen Chaudhari
(Signature of person authorized to sign)

19C. DATE SIGNED 9/29/04

20B. UNITED STATES OF AMERICA
BY M. Holland
(Signature of Contracting Officer)

20C. DATE SIGNED 9/29/04

# PART I

## SECTION B

## SUPPLIES OR SERVICES AND PRICES/COSTS

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B.2 - Obligation of Funds and Financial Limitations

B.3 - Performance and Other Incentive Fees

# PART I

## SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

### B.1 - SERVICE BEING ACQUIRED

This contract provides for the continuation of work performed under Contract No. DE-AC02-98CH10886.

The Contractor shall provide the personnel, facilities, equipment, materials, supplies, and services, (except such facilities, equipment, materials, supplies and services as are furnished by the Government) necessary to perform the requirements and work set forth in this Contract, and shall perform such requirements and work in a quality, timely, and cost-effective manner.

### B.2 - OBLIGATION OF FUNDS AND FINANCIAL LIMITATIONS

The amount presently obligated by the Government with respect to this contract is specified in Clause I.139 - DEAR 970.5232-4 - Obligation of Funds (DEC 2000). Other financial limitations are also specified in Clause I.139 - DEAR 970.5232-4 - Obligation of Funds (DEC 2000).

### B.3 - PERFORMANCE AND OTHER INCENTIVE FEES

In fulfillment of Clause I.114, the Parties have agreed that the maximum performance fees earnable by the Contractor in accordance with the provisions of Appendix B, Performance Evaluation and Measurement Plan, and Appendix L – Computation of Fee, for the performance of the work under this contract commencing January 5, 2010 are as follows:

January 5, 2010 through September 30, 2010 - $5,550,000.00
October 1, 2010 through September 30, 2011 - $7,400,000.00
October 1, 2011 through September 30, 2012 - $7,400,000.00
October 1, 2012 through September 30, 2013 - $7,400,000.00
October 1, 2013 through September 30, 2014 - $7,400,000.00
October 1, 2014 through January 4, 2015 - $1,850,000.00

The foregoing fees shall be subject to adjustment in the event of a significant change (greater than +/-10% or a lesser amount if appropriate) to the budget or work scope.

# PART I

# SECTION C

# DESCRIPTION/SPECS./WORK STATEMENT

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C.2 - Implementation of DOE's Mission for BNL

C.3 - Performance Expectations, Objectives, and Measures

C.4 - Statement of Work

C.5 - Plans and Reports

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# PART I

# SECTION C - DESCRIPTION/SPECS./WORK STATEMENT

## C.1 - INTRODUCTION

This Performance-Based Management Contract (PBMC) is for the management and operation of the Brookhaven National Laboratory (BNL or the Laboratory). The Contractor shall, using its best efforts, in accordance with the provisions of this contract, accomplish the missions and programs assigned by the Department of Energy (DOE or the Department) and manage and operate the Laboratory. The Laboratory is one of DOE's Office of Science (SC) multi-program national laboratories. The Laboratory is a Federally Funded Research and Development Center (FFRDC) established in accordance with the Federal Acquisition Regulation (FAR) Part 35 and operated under this management and operating (M&O) contract, as defined in FAR 17.6 and DOE Acquisition Regulation (DEAR) 917.6.

This contract reflects the Department's effort to enable the Contractor under a PBMC to achieve highly effective and efficient management of the Laboratory, resulting in a safe and secure environment, outstanding science and technology results, more cost-effective operations, and enhanced Contractor accountability. Toward this end, this contract establishes a process for minimizing the use of unnecessary DOE Orders by tailoring existing and new Orders that will enable the Contractor to propose alternate standards, which rely primarily on state and federal laws and regulations, and management processes based on national standards, certified systems and best business practices. Contractor managers shall be held accountable for maintaining risk mitigation as Laboratory processes and assurance models change.

This contract reflects the application of performance-based contracting approaches and techniques which emphasize results or outcomes and minimizes "how to" performance descriptions. The Contractor has the responsibility for total performance under the contract, including determining the specific methods for accomplishing the work effort, performing quality control, and assuming accountability for accomplishing the work under the contract. Accordingly, this PBMC provides flexibility, within the terms and conditions of the contract, to the Contractor in managing and operating the Laboratory.

Desired results of this contract include improved Contractor operational efficiencies, allocations of Contractor oversight resources to direct mission work, and streamlined and more effective line management focused on a systems-based approach to federal oversight with increased reliance on the results obtained from certified, nationally recognized experts and other independent reviewers.

Under this PBMC, it is the Contractor's responsibility to develop and implement innovative approaches and adopt practices that foster continuous improvement in accomplishing the mission of the Laboratory. DOE expects the Contractor to produce effective and efficient management structures, systems, and operations

that maintain high levels of quality, safety and security in accomplishing the work required under this contract, and that to the extent practicable and appropriate, rely on national, commercial, and industrial standards that can be verified and certified by independent, nationally recognized experts and other independent reviewers. The Contractor shall conduct all work in a manner that optimizes productivity, minimizes waste, and fully complies with all applicable laws, regulations, and terms and conditions of the contract.

To the maximum extent practical, this PBMC shall:

(a) Describe the requirements in terms of outcome or results required rather than the methods of performance of the work.

(b) Use a limited number of systems-based measurable performance standards (i.e., in terms of quality, timeliness, quantity, etc.) to drive improved performance and increased effective and efficient management of the Laboratory;

(c) Provide for appropriate financial incentives (e.g., fee) when performance standards and contract requirements are achieved;

(d) Specify procedures for reduction of fee when services are not performed or do not meet contract requirements; and

(e) Include non-financial performance incentives where appropriate.

## C.2 – IMPLEMENTATION OF DOE'S MISSION FOR BNL

The Contractor shall propose a comprehensive and compelling plan to implement the DOE's SC strategic mission for the Laboratory, as defined below in Section C.4.b. "Mission and Major Programs". Within this plan, the Contractor will map the Laboratory's core capabilities to this Laboratory mission. The Contractor will highlight the unique roles it proposes that the Laboratory fills in SC's capability to accomplish its missions and, more broadly, that of the Department. Upon approval and acceptance by the Department, the plan shall be updated and executed in accordance with instructions to be issued by the DOE Contracting Officer.

The Performance Evaluation and Measurement Plan (PEMP), as called for within the clause entitled, "Standards of Contractor Performance Evaluation", identifies performance goals, objectives, measures, and targets, which are updated and agreed upon by the Parties annually, as standards against which the Contractor's overall performance of scientific, technical, operational, and/or managerial obligations under this contract shall be assessed annually.

# C.3 - PERFORMANCE EXPECTATIONS, OBJECTIVES, AND MEASURES

## C.3.1 - Core Expectations

### C.3.1.1 – General

The relationship between DOE and its national laboratory management and operating contractors is designed to bring best practices for research and development to bear on the Department's missions. Through application of these best practices, the Department seeks to assure both outstanding programmatic and operational performance of today's research programs and the long-term quality, relevance, and productivity of the laboratories against tomorrow's needs. Accordingly, DOE has substantial expectations of the Contractor in the areas of: program delivery and mission accomplishment; laboratory stewardship; and excellence in laboratory operations and financial management.

### C.3.1.2 - Program Development and Mission Accomplishment

The Contractor is expected to provide effective planning, management, and execution of assigned research and development programs. The Contractor is expected to execute assigned programs so as to strive for the greatest possible impact on achieving DOE's mission objectives, to aggressively manage the Laboratory's science and technology capabilities and intellectual property to meet these objectives, and to bring forward innovative concepts and research proposals that are well-aligned with DOE missions. The Contractor shall propose work that is aligned with, and likely to advance, DOE's mission objectives, and that is well matched to Laboratory capabilities. The Contractor shall strive to meet the highest standards of scientific quality and productivity, "on-time, on budget, as promised" delivery of program deliverables, and first-rate service to the research community through user facility operation.

The Contractor is expected to demonstrate benefit to the nation from R&D investments by transferring technology to the private sector and supporting excellence in science and mathematics education to the extent such activities are consistent with achieving continuous progress towards DOE's core missions.

### C.3.1.3 – Laboratory Stewardship

The Contractor shall be an active partner with DOE in assuring that the Laboratory is renewed and enhanced to meet future mission needs. Within the constraints of available resources and other contract requirements, the Contractor, in partnership with DOE, shall:

(a) Maintain an understanding of DOE's evolving Laboratory vision and

long-term strategic plan and address the evolution of Laboratory capabilities to meet anticipated DOE and national needs.

(b) Attract, develop, and retain an outstanding work force, with the skills and capabilities to meet DOE's evolving mission needs.

(c) Renew and enhance research facilities and equipment so that the Laboratory remains at the state-of-the-art over time and is well-positioned to meet future DOE needs.

(d) Build and maintain a viable portfolio of research programs that generates the resources required to renew and enhance Laboratory research capabilities over time**.**

(e) Build and maintain a positive relationship with the broader national and international research community, to enhance the intellectual vitality and research relevance of the Laboratory, and to bring the best possible capabilities to bear on DOE mission needs through partnerships.

(f) Build a positive, supportive relationship founded on openness and trust with the community and region in which the Laboratory is located.

### C.3.1.4 - Operational and Financial Management Excellence

The Contractor shall effectively and efficiently manage and operate the Laboratory through best-in class management practices designed to foster world-class research while assuring the protection and proper maintenance of DOE research and information assets; the health, safety and security of Laboratory staff; and the public and the environment. The Contractor shall operate the Laboratory so as to meet all applicable laws, regulations, and requirements. The Contractor shall manage the Laboratory cost-effectively, while providing the greatest possible research output per dollar of research investment, and, accordingly, develop and deploy management systems and practices that are designed to enhance research quality productivity and mission accomplishment consistent with meeting operational requirements.

## C.4 - Statement of Work

(a) <u>General</u>

The Contractor shall, in accordance with the provisions of this contract, provide the intellectual leadership and management expertise necessary and appropriate to manage, operate, and staff BNL; to accomplish the missions assigned by the DOE to the Contractor; and to perform all other work described in this Statement of Work (SOW). DOE missions are assigned through strategic planning, program coordination, and cooperation between the Contractor and DOE.

Inasmuch as the assigned missions of the Laboratory are dynamic, this SOW is not intended to be all-inclusive or restrictive, but it is intended to provide a broad framework and general scope of the work to be performed at BNL during the term of this contract. This SOW does not represent a commitment to, or imply funding for, specific projects or programs. All projects and programs will be authorized individually by DOE and/or other work sponsors in accordance with the provisions of this contract.

All work under this contract shall be conducted in a manner that protects the environment and assures the safety, health, and security of employees and the public. In performing the contract work, the Contractor shall implement appropriate program and project management systems to track progress and maximize cost-effectiveness of work activities; develop integrated plans and schedules to achieve program objectives, incorporating input from DOE and stakeholders; maintain sufficient technical expertise to manage activities and projects throughout the life of a program; utilize appropriate technologies and management systems to improve cost efficiency and performance; and maintain Laboratory facilities and infrastructure as necessary to accomplish assigned missions.

The next five years present an important challenge and opportunity for BNL. The Contractor is expected to ensure the successful construction of the National Synchrotron Light Source II (NSLS-II) facility and to present a compelling case for the future of the Relativistic Heavy Ion Collider (RHIC). These facilities are deemed critical to the overall health and vitality of BNL.

(b) Mission and Major Programs

Mission:

The Laboratory's primary mission focus is in high-energy and nuclear physics, condensed matter physics and materials sciences, chemistry, and biology, with additional expertise in environmental sciences, energy technologies, and national security. BNL brings specific strengths and competencies to the DOE laboratory system to produce excellent science and advanced technologies with the cooperation and involvement of the scientific and local communities. In support of its Office of Science (SC) mission, BNL builds and operates major scientific facilities. These facilities serve not only the basic research of the DOE, but they reflect BNL and DOE stewardship of national research infrastructure that is made available on a competitive basis to a wide range of university, industry, and government researchers.

Many of the research activities at BNL are designed and conducted by university and industry users, with BNL maintaining the facilities and ensuring that provisions are in place to perform the activities safely and effectively.

(1) Core Capabilities

Twelve core capabilities that can be grouped into five categories underpin activities at Brookhaven National Laboratory:

1. Nuclear Physics, Particle Physics, Applied Nuclear Science and Technology;

2. Condensed Matter Physics and Materials Science, Chemical and Molecular Science;

3. Applied Materials Science and Technology, Chemical Engineering;

4. Climate Change Science, Biological Systems Science;

5. Accelerator Science, Large Scale User Facilities/Advanced Instrumentation, Systems Engineering and Integration.

These capabilities exist within the Laboratory and provide a foundation to deliver its mission and customer focus, to perform a complementary role in the DOE laboratory system, and/or to pursue its vision for scientific excellence and pre-eminence in the following areas:

- Relativistic heavy ion and spin physics research to understand the essence of nuclear matter.
- Photon sciences for advanced characterization of functional nano-materials for energy technology applications, and more broadly for tackling grand challenge questions in condensed matter, materials, chemical and nano-sciences, as well as in life and environmental sciences, that will lead to breakthroughs needed to address the global energy and climate challenges.
- Energy-related research and development to enable breakthroughs in the effective use of renewable energy through improved conversion, transmission, and storage.
- High energy physics at the energy, precision, and cosmology frontiers, supplemented by theory and advanced accelerator research and development (R&D).
- Understanding the impact of natural phenomena and human activity on climate, the environment, and local ecosystems, including the normal and pathological physiology of plants through imaging.

(2) <u>Program Sponsors</u>

Work under this contract includes basic science and applied technical research programs sponsored by major DOE organizations. The primary sponsor of work at BNL is the SC, DOE. Other DOE organizations that sponsor work at BNL include:

Nuclear Nonproliferation
Environmental Management

Nuclear Energy
Energy Efficiency and Renewable Energy
Energy Delivery and Energy Reliability
Health, Safety and Security
Fossil Energy

Additionally, the Contractor may be authorized to pursue other DOE and non-DOE missions [most notably those of the National Aeronautics Space Administration (NASA), Department of Homeland Security (DHS), Nuclear Regulatory Commission (NRC), the National Institutes of Health (NIH), the Department of Defense, the Department of State, and New York State] that derive from the Laboratory's missions and utilize the Laboratory's core capabilities.

Major Programs:

A summary of major Laboratory programs follows:

(1) Office of Science

(i) Nuclear Physics

The Contractor shall perform frontier research in experimental and theoretical nuclear physics; build, maintain, and operate state of the art user facilities for nuclear physics; perform research and development work in accelerator science, experimental detector design and computing for the SC Nuclear Physics program; operate the National Nuclear Data Center (NNDC) and carry out construction projects in the nuclear physics area as assigned.

In support of this program, the Contractor shall manage and operate large user facilities (RHIC) and conduct forefront research in basic nuclear physics. In addition, BNL provides large scale computing support for RHIC experiments by operating the RHIC Computing Facility (RCF) at BNL. The NNDC at the BNL site collects, evaluates, and disseminates nuclear physics data for basic nuclear research and for applied nuclear technologies. BNL is engaged in the R&D of new accelerator technology, future Electron Ion Collider accelerator concepts, and advanced detectors. The work of the nuclear physics program is also supported through the expertise of BNL's Instrumentation Division, a Lab-wide development organization.

(ii) High Energy Physics

The Contractor shall perform frontier research in experimental and theoretical high energy physics; build, maintain and operate state of the art user facilities for high energy physics; perform research and development work in accelerator science, experimental detector design and computing for the SC High Energy Physics (HEP) program, operate the Accelerator Test Facility (ATF), and carry out construction projects in the high energy physics area as assigned.

In support of this program, the Contractor shall conduct forefront research in high energy physics and detector and accelerator science at the energy, intensity, and cosmology frontiers. BNL is the Host Laboratory for the US ATLAS (A Toroidal LHC Apparatus) collaboration and operates the largest ATLAS Tier-1 Computing Center and an Analysis Center. BNL participates in the intensity frontier where rare processes including neutrino interactions can be studied. The most prominent activity in this area is the fabrication of the Daya Bay Reactor Neutrino experiment. BNL is engaged in the HEP Advanced Technology subprogram that develops new tools for high energy physics research, including new types of particle accelerators and new concepts for particle detectors. The work of the high energy physics program is also supported through the expertise of BNL's Instrumentation Division, a Lab-wide development organization.

(iii) Basic Energy Sciences

The Contractor shall perform frontier research in broad areas of condensed matter and materials physics, chemistry, geosciences, and biosciences. Programs that take advantage of the unique scientific user facilities in materials sciences and related disciplines available at the Laboratory - for example, the National Synchrotron Light Source (NSLS), the Center for Functional Nanomaterials (CFN) – are to be encouraged. The Contractor shall manage all aspects of designated scientific user facilities, which serve the needs of academic, industrial, and government scientists. The Contractor shall manage all aspects of the design and construction of NSLS-II including especially the Environment, Safety, and Health (ES&H) aspects associated with its construction and operation. The Contractor shall manage all aspects of the decommissioning of NSLS once NSLS-II begins operations.

(iv) Biological and Environmental Research

The Contractor shall conduct research programs in areas including foundational genomics, radiochemistry and imaging instrumentation, structural and radiobiology, plant and microbial biochemistry, atmospheric systems, terrestrial ecosystem science and carbon sequestration, earth system modeling, and subsurface movement of

nanoparticles that build on the unique facilities and expertise available at the Laboratory.

(v) Computational and Technology Research

The Contractor shall conduct research in computational and data intensive science. The research shall emphasize both excellence and relevance, such that advances in research help the Department solve its most pressing mission-related problems. Teaming and collaboration, which bring different skills together to focus on common problems, shall be actively encouraged. To this end, the Contractor shall create and maintain an environment that reinforces collaboration with researchers world-wide.

The Contractor shall devote appropriate attention to the management of information systems that support major experiments and other scientific data-intensive resources so as to assure their timeliness, security, utility, cost-effectiveness, and responsiveness to customers.

(vi) University and Science Education Program

The Contractor shall work with educational institutions and organizations that support those institutions to develop a highly qualified scientific, technical, engineering and mathematics (STEM) workforce for the Laboratory. The Contractor shall also contribute to the overall national effort to improve scientific literacy, emphasizing increased participation in STEM careers and education by under-represented populations and institutions.

(2) Environmental Management

Unless otherwise directed by the Contracting Officer, the Contractor shall plan and execute the DOE's Environmental Management Program (EM) activities in accordance with DOE program goals, initiatives, strategies, guidance letters, and approved project baselines in areas such as: (i) Environmental remediation and facility deactivation, decommissioning, decontamination, and demolition in accordance with the site's Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Interagency Agreement and with DOE Orders; and (ii) Construction and maintenance of facilities to provide adequate protection of the public, employees, the environment, and Government-owned materials, facilities, and equipment in support of the overall EM mission.

The Environmental Management Program shall be conducted in a safe and cost-effective manner leading to increasing DOE, regulatory and public confidence in cleanup efforts. Program elements will include:
(i) implementing comprehensive project management systems to track progress, maintain regulatory compliance, and increase cost effectiveness of work activities; (ii) developing integrated plans and schedules for involving the participation of DOE, regulators, and other stakeholders in

decision making and priority setting of environmental restoration activities; and (iii) maintaining technical depth to propose and implement cleanup activities commensurate with commercial practices in the areas of cost, implementation, schedule, and public acceptability.

The Contractor shall establish and maintain systems to effectively manage and implement an environmental restoration program in accordance with goals and objectives set forth by the Department. The systems must ensure that the technical approach is consistent with DOE cleanup strategies to complete all Records of Decision in accordance with the current approved baseline; to implement an overall system to effectively and efficiently manage all groundwater and contaminated soil cleanup activities; to expedite final disposition of facilities awaiting decommissioning and decontamination; and to achieve delisting from the National Priority List. Contractor support shall be provided to DOE as directed by the Contracting Officer.

(3) Technology Transfer

The Contractor shall contribute to U.S. technological competitiveness through research and development partnerships with industry that capitalize on the Contractor's expertise and facilities. Principal mechanisms to effect such contributions are: cooperative research and development agreements, access to user facilities, reimbursable work for non-DOE activities, personnel exchanges, licenses, and subcontracting.

The Contractor shall cooperate with industrial organizations to assist in increasing U.S. industrial competitiveness, by assisting in the application of science and technology R&D. Such cooperation may include the development of new integrated programs covering the spectrum from basic discoveries to applied research that lead to an early transfer of information to industry by arranging for the active participation by industrial representatives in the Contractor's programs. Cooperation with industrial partners may include long-term strategic partnerships aimed at commercialization of Laboratory inventions or the improvement of industrial products. The Contractor shall respond to specific near-term technological needs of industrial companies with special emphasis given to working with the types of businesses identified in the Small Business Subcontracting Plan clause of this contract. The Contractor may also capitalize on its location in the Northeast by developing productive relationships with regional and local companies and through forums such as conferences, workshops, and traveling presentations. It is anticipated that these organizations will be particularly effective participants in the Laboratory's technology transfer activities in promoting a mutually beneficial relationship between DOE and the communities surrounding the Laboratory

Cooperation may also include use by industrial organizations of Laboratory facilities and other assistance as may be authorized, in writing, by the Contracting Officer.

(4) International Collaboration

In accordance with DOE policies, and in consultation with DOE, the Contractor shall maintain a program of international collaboration in areas of research of interest to the Laboratory and to DOE.

(5) Other Programs

The Contractor is responsible for the conduct of such other programs and activities as the Parties may mutually agree, including: (i) The providing of the facilities of the Laboratory to the personnel of public and private institutions for the conduct of research, development, and demonstration work, either within the general plans, programs, and budgets agreed upon from time to time between DOE and the Contractor or as may be specifically approved by DOE. The Laboratory facilities shall be made available on such other general bases as DOE may authorize or approve; (ii) The conduct of research and development work for non-DOE sponsors which is consistent with and complementary to the DOE's mission and the Laboratory's mission under the contract, and does not adversely impact or interfere with execution of DOE-assigned programs, does not place the facilities or Laboratory in direct competition with the private sector and for which the personnel or facilities of the Laboratory are particularly well adapted and available, as may be authorized, in writing, by the Contracting Officer; (iii) The dissemination and publication of unclassified scientific and technical data and operating experience developed in the course of the work; (iv) The furnishing of such technical and scientific assistance (including training and other services, material, and equipment), which are consistent with and complementary to the DOE’s and Laboratory's mission under this contract, both within and outside the United States, to the DOE and its installations, Contractors, and interested organizations and individuals.

(6) Major Laboratory and User Facility Operations

The Laboratory shall manage and operate major Laboratory and user facilities and develop other user facilities important to DOE missions such as:

(i) The Relativistic Heavy Ion Collider (RHIC) facility complex, which consists of:

A. Relativistic Heavy Ion Collider Ring
A high energy accelerator in which two beams of ions or polarized protons are brought into collision in order to study the state of matter formed in the first microseconds of the Universe and to study the spin structure of the proton.

B. Alternating Gradient Synchrotron (AGS)
The AGS is the final stage of the accelerator injector chain which accepts beam from the Booster and then accelerates ions and polarized protons to the minimum RHIC energy. The AGS then injects the beam into the two accelerator rings that comprise RHIC.

C. Booster Accelerator
The Booster accepts ions from the Tandem Van de Graaffs and protons from the LINAC, which then accelerates the beam to the minimum AGS energy before injecting the beam into the AGS. The Booster also supplies beam to the NASA Space Radiation Laboratory (NSRL).

D. Linac
A linear accelerator, fed by the Tandem, supplies beams of protons and polarized protons for the RHIC injector system, the Booster for NSRL, and the production of medical isotopes at the Brookhaven Linac Isotope Producer (BLIP) facility.

E. Tandem Van de Graaff
The Tandem Van de Graaff electrostatic accelerators are the sources of ions for the RHIC accelerator injector chain, starting with the Booster. They are also used to supply ions for radiation testing of electronic components and for manufacturing of industrial items.

F. Electron Beam Ion Source (EBIS)
EBIS is a new compact state-of-the-art pre-injector system being constructed for the RHIC and NSRL science programs and will replace the Tandem Van de Graaffs.

G. NASA Space Radiation Laboratory (NSRL)
NASA is working with BNL to understand the risks to human beings exposed to space radiation through the study of radiobiological effects, using beams of heavy ions that simulate the cosmic rays found in space. NSRL features its own beam line dedicated to radiobiology research, as well as state-of-the-art specimen-preparation areas

(ii) National Synchrotron Light Source (NSLS)

The NSLS operates two electron storage rings: an X-Ray ring and a Vacuum UltraViolet (VUV) ring which provide intense light spanning the electromagnetic spectrum from the infrared through x-rays. Each year over 2300 scientists from universities, industries, and government labs perform research at the NSLS. Users of NSLS and a select set of NSLS beamlines will transition to NSLS-II, once complete.

(iii) National Synchrotron Light Source II (NSLS II)

NSLS-II is a new state-of-the-art storage ring designed and being constructed to replace NSLS and will deliver world leading brightness and flux with top-off operation for constant output. The facility will be able to produce x-rays up to 10,000 times brighter than those produced at the NSLS. Operations are expected to begin in 2015.

(iv) Center for Functional Nanomaterials (CFN)

This Center provides researchers with state-of-the-art capabilities to fabricate and study nanoscale materials. Work at the Center has the potential to form the basis of new technologies.

(v) Other facilities:

A. New York Center for Computational Sciences (NYCCS)

NYCCS is a joint venture of Stony Brook University (SBU) and BNL that was formed to foster high performance massively parallel computing. Its hardware consists of an 18 rack IBM Blue Gene/L and a 2 rack Blue Gene/P supercomputer owned by SBU and located at BNL.

B. High-Field Magnetic Resonance Imaging (MRI) Facility

The MRI Facility is used in the development of new instrumentation and biological imaging techniques.

C. Accelerator Test Facility (ATF)

The Accelerator Test Facility is used to explore new ideas on particle acceleration and the production of brighter x-ray beams for research applications.

D. Positron Emission Tomography (PET) Facility

The PET facility is used in the development of new radiotracers and instrumentation for biological imaging.

E. Laser Electron Accelerator Facility (LEAF)

The LEAF is a picosecond laser-electron accelerator facility at BNL's Center for Radiation Chemistry Research.

F. Cyclotron

The EBCO TR19 cyclotron is used for the production of radiotracers for PET studies.

G. Institute for Advanced Electron Microscopy (IAEM)

The IAEM is a cutting-edge transmission electron microscopy facility that is affiliated with both the CFN and the Condensed Matter Physics & Materials Science Department.

H. Scanning Transmission Electron Microscope (STEM)

This custom-built electron microscope is optimized for imaging unstained biological molecules with minimal radiation damage.

I. Joint Photon Sciences Institute

This joint SBU/BNL initiative will serve as an intellectual center for development and application of the photon sciences and as a gateway for users of NSLS-II. It is expected to enable advances in fields that include materials design and function, energy, and health/drug design.

(c) Administration and Operation of the Laboratory

The Contractor is responsible for the operation and management of the Laboratory, including the planning in consultation with DOE and the making of recommendations to DOE for new buildings, facilities and utilities and alteration of existing buildings, facilities, and utilities on the Laboratory site and elsewhere, including the furnishing of all necessary basic design and operating criteria. When requested by DOE, the Contractor shall provide for the design, engineering, construction, and alteration, by subcontract or otherwise, of such buildings, facilities, and utilities on the Laboratory site and elsewhere as authorized or approved, in writing. Where appropriate, the Contractor shall include proposals for the alternative financing of such projects. Before proceeding with other than design aspects of any project which the Contractor, acting in good faith, considers may reasonably be within the coverage of the Davis-Bacon Act (40 U.S.C. 276a and following), the Contractor shall obtain a written determination by the Contracting Officer as to the applicability of the Davis-Bacon Act to such project. When it is determined that the Davis-Bacon Act does cover a particular work project, the Contractor shall procure by subcontract the covered work in accordance with DOE approved procedures, except as otherwise provided in Clause H.43 or as otherwise authorized by the Contracting Officer.

(1) Strategic Planning

The Contractor shall conduct a strategic planning process and develop institutional business plans and strategic facility plans in consideration of DOE provided planning guidance and strategic planning material to assure consistency with DOE missions and goals and with due regard for ES&H issues.

(2) Protection of the Worker, the Public and the Environment

The safety and health of workers and the public and the protection and restoration of the environment are fundamental responsibilities of the Contractor. The Contractor shall establish an environment, safety and health program operated as an integral, but visible, part of how the organization conducts business, including prioritizing work and allocating resources based on risk reduction. Accordingly, the Contractor shall establish a DOE-approved Integrated Safety Management System to ensure all work activities are performed in a manner that prevents disruption of the Laboratory's missions by minimizing injuries and illnesses, preventing fatalities, minimizing exposures to hazardous substances and materials, preventing environmental releases in excess of established limits, and preventing property loss.

The Contractor shall maintain an organization that supports effective ES&H management by ensuring appropriate levels of ES&H staffing and competence at every level within BNL. Specifically, the Contractor shall assure that employees are trained, qualified, and involved in aspects of the organization's activities, including providing input to the planning and execution of work, and identification, mitigation, or elimination of workplace hazards. The Contractor shall, similarly, assure that subcontractor employees are trained and qualified on job tasks, hazards, DOE and BNL Departmental safety policies, expectations and requirements, and shall freely communicate applicable ES&H requirements down to subcontractors.

Finally, the Contractor shall promote effective environmental program management, through continued maintenance of ISO 14001 registration.

(3) Community Involvement

The Contractor shall maintain a systematic approach and commitment to involving the community in all aspects of the Laboratory. Accordingly, the Contractor's overall community involvement program is expected to maintain the following objectives:

(i) Maintenance of organizational and cultural change regarding community involvement, (i.e., implementation of a strong, integrated, and proactive community involvement and communications program).

(ii) Continued indications of agreement within the community that their substantive concerns (e.g., environmental remediation, scientific research, etc.) have been or are being adequately addressed.

(iii) Continued indications of the community's increased awareness of and appreciation for the importance of the long-term basic research supported by DOE and the SC.

(iv) Continued indications from the community of positive and multiple relationships with the Laboratory and expressions of confidence in the Laboratory's decision-making processes.

(v) Evidence of constructive external partnerships in support of DOE's overarching mission and strategic objectives.

(4) Business Management

(i) Human Resources Management.

The Contractor shall have an HR system designed to attract and retain outstanding employees in accordance with DOE expectations, policies, and procedures. The Contractor shall maintain a market based system of compensation and benefit plans to motivate employees to achieve high productivity in scientific research and laboratory operation.

The Contractor also shall create and maintain at the Laboratory an environment that promotes diversity and fully utilizes the talents and capabilities of a diverse workforce. The Contractor shall seek to recruit a diverse workforce by promoting and implementing DOE and Laboratory goals. Special consideration will be given to Historically Black Colleges and Universities/Minority Institutions as potential resource pools. The Contractor shall also strive to promote diversity in all of the Laboratory's subcontracting efforts with emphasis on the use of the types of businesses identified in the Small Business Subcontracting Plan clause of this contract.

(ii) Financial Management.

The Contractor shall maintain a financial management system responsive to the obligations of sound financial stewardship and public accountability. The overall system shall include an integrated accounting system suitable to collect, record, and report all financial activities; a budgeting system that includes the formulation and executions of all resource requirements needed to accomplish projected missions and formulate short- and long-range budgets; an internal control system for all

financial and other business management processes; and a disbursements system for both employee payroll and supplier payments. The internal audit group for the Laboratory shall report to the most senior governing body of the Contractor's parent organization(s).

(iii) Purchasing Management.

The Contractor shall have a DOE-approved purchasing system to provide purchasing support and subcontract administration. The Contractor shall, when directed by DOE, enter into subcontracts for the performance of any part of the work under this Contract. The Contractor may also enter into subcontracts for the performance of any part of the work under this Contract when authorized by DOE.

(iv) Property Management.

The Contractor shall have a DOE-approved property management system that provides assurance that the Government-owned, contractor-held property is accounted for, safeguarded, and disposed of in accordance with DOE's expectations and policies. The Contractor shall perform overall integrated planning, acquisition, maintenance, operation, management, and disposition of Government-owned personal and real property, and Contractor-leased facilities and infrastructure used by the Laboratory.

(v) Other Administrative Services.

The Contractor shall provide other administrative services, including logistics support to the DOE Brookhaven Site Office.

(5) Safeguards and Security (S&S)

The Contractor shall provide a safeguards and security program to ensure that S&S interests and activities are protected from theft, diversion, terrorist attack, industrial sabotage, radiological sabotage, chemical sabotage, biological sabotage, espionage, unauthorized access, compromise, and other acts that may have an adverse impact on national security; the environment; or pose significant danger to the health and safety of DOE Federal and contractor employees or the public. S&S programs must be based on the results of vulnerability and risk assessments which are used to design and provide graded protection in accordance with an asset's importance or the impact of its loss, destruction, or misuse.

The Contractor shall establish and maintain uniform requirements for Protective Force personnel and firearms operations, to include the firearms qualification and re-qualification of Federal Officers, Federal Agents, Special Agents, and Security Police Officers by certified Federal

and contractor firearms instructors.

(6) Cyber Security

The Contractor shall ensure the development, operation, management, and integration of an ongoing program for cyber security management consistent with the DOE SC requirements. The Cyber Security Program must assess the environmental, natural, and man-made risks associated with computer and network security from both external and internal perspectives. The Contractor shall develop and maintain a structured Cyber Security risk management process to ensure that priorities are established and cyber security risks are managed through a process of identifying and assessing threats, vulnerabilities, asset value, and existing protection measures; developing and implementing appropriate policies and controls; promoting awareness of those policies and controls; and monitoring, evaluating, and improving the effectiveness of policies and controls.

(7) Legal Services

The Contractor shall maintain legal support for all contract activities including, but not limited to, those related to patents, licenses, and other intellectual property rights; subcontracts; technology transfer; environmental compliance and protection; employee and labor relations; contractor ethics; and litigation and claims.

(8) Emergency Management

The Contractor shall maintain an emergency management system in accordance with DOE requirements including, but not limited to, emergency preparedness plans, procedures, response, drills and exercises, occurrence notification and reporting, and operation of an Emergency Operations Center.

(9) Radiological Assistance Program

Under existing agreement between BNL and the National Nuclear Security Administration (NNSA), the Contractor commits to continue to provide health physics and radiological protection expertise and capability in support of the NNSA Region 1 Radiological Assistance Program (RAP). The RAP mission is to provide 24-hour first response radiological assistance to protect the health and safety of the general public and the environment. RAP assists Federal, State, Tribal, and local agencies in the detection, identification, analysis, and response to events involving the release of radiological materials in the environment. NNSA Region 1 includes the States of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

As coordinated and directed by the NNSA Region 1 Regional Response Coordinator, the Laboratory will establish DOE-led RAP teams made up of Laboratory personnel who have volunteered for this duty. The Laboratory

will possess and maintain advanced radiation detection equipment, communications equipment, protective gear, and other necessary equipment and supplies to achieve the RAP mission. The Laboratory is to ensure that team members are fully trained in the use of detection equipment and the hazards of radiation materials. RAP services rendered by the Laboratory are reimbursed by the NNSA.

(10) Information Resources Management

The Contractor shall maintain information systems for organizational operations and for activities involving general purpose programming, data collection, data processing, report generation, software, electronic and telephone communications, and computer security. The Contractor shall provide computer resource capacity and capability sufficient to support Laboratory-wide information management requirements. The Contractor also shall conduct a records management program.

(11) Waste Management

Based on DOE funding guidance and other guidance documents, all waste management activities shall be managed in an integrated manner such that waste is managed consistently and in compliance with all applicable regulatory requirements. Plans for all waste generated by site clean-up activities shall be fully implemented to provide appropriate characterization, treatment, storage, transportation, disposal, and technology development. Waste management activities include: (A) timely characterization, consolidation, segregation, and storage of waste; (B) treatment that complies with storage and/or disposal criteria; (C) efficient shipment of waste for treatment, storage, and/or disposal; (D) maintaining sufficient and compliant waste storage space at the Laboratory to accommodate waste generation and waste backlog; and (E) implementation of an effective waste minimization and pollution prevention programs.

Based on DOE funding guidance and other guidance documents, the Contractor shall provide responsive and complete waste management services for characterization, treatment, and storage through the appropriate use of existing facilities, new facilities, other DOE facilities, and private sector capabilities. Additionally, the Contractor shall implement control systems which integrate research and waste management programs to assure DOE that hazardous and radiological waste will not be stockpiled at the site.

The Contractor's short- and long-range plans and activities for treatment, storage, and disposal must be coordinated and integrated with DOE's national waste management program and applicable DOE Strategic Plans.

The Contractor shall fully integrate all research, environmental remediation, and operations activities so that all regulatory requirements and Federal Facility Agreements or Consent Orders related to the generation, characterization, treatment, storage, and disposal of hazardous waste are

met.

(12) Laboratory Facilities

The Contractor shall manage and maintain Government-owned facilities, both provided and acquired, to further national interests and to perform DOE statutory missions. Recognizing that these facilities are a national resource, these facilities may also be made available, with appropriate agreements, to private and public sector entities including universities, industry, and local, state, and other government agencies. The Contractor shall perform overall integrated planning, acquisition, upgrades, and management of Government-owned, leased, or controlled facilities and real property accountable to the Laboratory. The Contractor shall strive to employ facilities management practices that are best-in-class and integrated with mission assignments and business operations. The maintenance management program shall strive to maintain Government property in a manner that (1) promotes and continuously improves operational safety, environmental protection and compliance, property preservation, and cost effectiveness, (2) ensures continuity and reliability of operations, fulfillment of program requirements, and protection of life and property from potential hazards, and (3) ensures the condition of the assets will be maintained or improved using risk-benefit analysis tools and processes.

(13) Facility Operations and Infrastructure

The Contractor shall assist DOE through direct participation and other support in achieving DOE's energy efficiency goals and objectives in electricity, water, and thermal consumption, conservation, and savings, including goals and objectives contained in Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management. The Contractor shall maintain and update, as appropriate, its Site Plan (as required elsewhere in the contract) to include detailed plans and milestones for achieving site-specific energy efficiency goals and objectives. With respect to this paragraph, the Plan shall consider all potential sources of funds, in the following order: 1) the maximum use of private sector, third party financing applied on a life-cycle cost effective basis, particularly from Energy Savings Performance Contracts and Utility Energy Services Contracts awarded by DOE; and 2) only after third-party financing options are evaluated, in the event that energy efficiency and water conservation improvements cannot be effectively incorporated into a private sector financing arrangement that is in the best interests of the Government, then DOE funding and funding from overhead accounts can be utilized.

(14) Project Management

The Contractor shall maintain a project management system, consistent with DOE project management requirements, to ensure that projects are completed within scope, budget, and schedule.

## C.5 - PLANS AND REPORTS

The Contractor shall submit periodic plans and reports, in such form and substance as required by the Contracting Officer. These periodic plans and reports shall be submitted at the interval, to the addresses, and in the quantities as specified by the Contracting Officer. Where specific forms are required for individual plans and reports, the Contracting Officer shall provide such forms to the Contractor. The Contractor shall require subcontractors to provide reports that correspond to data requirements the Contractor shall be responsible for submitting to DOE. Plans and reports which may be submitted in compliance with this provision are in addition to any other reporting requirements found elsewhere in other clauses of this contract. It is the intention of DOE to consult with the Contractor in determining the necessity, form, and frequency of any reports required to be submitted by the Contractor to DOE under this contract.

## C.6 – RECOVERY ACT PROJECTS

This section is created to identify individual Recovery Act Projects as follows:

1. Recovery Act Project Category 1: Basic Energy Sciences (BES)
    - National Synchrotron Light Source II (NSLS-II)
    - Nanoscale Science Research Centers
    - Light Source Improvements
    - Early Career Research Program
    - National Center for Research Resources (NCRR) – U.S. National Institutes of Health (NIH) Work for Others (WFO)

2. Recovery Act Project Category 2: Science Laboratories Infrastructure (SLI)
    - Roofing
    - Mechanical & Electrical Upgrades
    - Chemistry Bldg Fire Safety Corrections
    - Interdisciplinary Science Building

3. Recovery Act Project Category 3: Environmental Management (EM)
    - Accelerated Cleanup of Surplus Nuclear Facilities

4. Recovery Act Project Category 4: Nuclear Physics (NP)
    - PHENIX Silicon Vertex MIE
    - PHENIX Forward Vertex Detector MIE
    - Enhanced AIP Funding at NP User Facilities
    - Enhanced Utilization of Isotope Facilities
    - Nuclear Science Workforce

5. Recovery Act Project Category 5: Energy Efficiency and Renewable Energy (EERE)
    - Federal Lab Support for Recovery Act Transactions ARRA FY09
    - EGS R&D

6. Recovery Act Project Category 6: High Energy Physics (HEP)
    - Advanced Technology R&D Augmentation
    - Long Baseline Neutrino Experiment

7. Recovery Act Project Category 7: Advanced Research Projects Agency – Energy (ARPA-E)
    - Brookhaven National Laboratory (BNL) - Reviewer for ARPA-E

## C.6.1 – Recovery Act Project Category 1: Basic Energy Sciences (BES)

A. The American Recovery and Reinvestment Act of 2009 funds obligated under this Category in FY 2009 and FY 2010 are specified below in Section C.

B. Clause I.139 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

C. The specific on-going work is funded as follows:

**1. National Synchrotron Light Source II (NSLS-II) ($150M)**

**Statement of Work**: These funds provided under 39KC02 are for the construction associated with the NSLS-II, Project Number 07-SC-06. Specifically, this funding is to be used to optimize project execution by acceleration of civil construction and advancement of the designs and procurements of Accelerator System Components as compared to the approved project baseline plan.

Rev 02: The revised Work Authorization changes the completion date from September 2010 to May 2013 to reflect the completion date of the NSLS II Recovery Act scope.

Rev 03: The revised Work Authorization changes the expected completion date from May 2013 to September 2013.

Rev 04: In FY14, the revised Work Authorization changes the expected completion date from September 2013 to December 2013. Additionally, funds in the amount of $0.46 were withdrawn under 39KC02 to reflect the de-obligation and closeout of all actions provided under Work Authorization #KC/CH13/9.

Accordingly, the final obligated amount of the project is $149,999,999.54.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Number | Work Authorization Title |
|---|---|
| KC/CH13/9, Rev 01, Rev 02, Rev 03, & Rev 04<br>Project Code 2005010 | Basic Energy Sciences – NSLS-II |

**2. Nanoscale Science Research Centers (TEC $5.569M)**

**Statement of Work**: These funds provided under KC020401H EQU to update, upgrade, or expand capabilities of the Center for Functional Nanomaterials to conduct leading edge science and serve users. Specifically, funds are provided as follows:

Upgrade of JEOL Electron Beam Lithography System
Mask Aligner for Optical Lithography
Electron Energy-Loss Spectrometer
Reactive Ion Etcher for Metals
Transmission Electron Microscope for Soft Materials

Reactor Scanning Tunneling Microscope
High-Resolution Analytical Scanning Microscopy

Rev 02: The revised Work Authorization changes the expected completion from March 2012 to March 2013.

Rev 03: In FY13, funds in the amount of $14,422.87 under KC020401 are withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization #KC/CH13/9/ARRA-1.

Accordingly, the final obligated amount of the project is $5,554,577.13

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Number | Work Authorization Title |
|---|---|
| KC/CH13/9/ARRA-1, Rev 01, Rev 02, & Rev 03<br>Project Code 2005040 | Basic Energy Sciences – Nanoscale Science Research Centers |

**3. Light Source Improvements ($3M)**

**Statement of Work**: Equipment funds are provided under KC0204011 EQU provided as follows:

- Transmission X-ray Microscope for In-Situ Study of Materials for Energy and Microelectronics Research at the National Synchrotron Light Source (NSLS)
- Advanced X-Ray Detectors for Enhanced NSLS Capabilities and User Throughput

Rev 01: The revised Work Authorization re-distributes funds and changes the Expected Completion Date from Sept. 2011 to June 30, 2012

Rev 02: In FY12, funds in the amount of $171.20 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization #KC/CH13/9/ARRA-2.

Accordingly, the final obligated amount of the project is $2,999,828.80

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Number | Work Authorization Title |
|---|---|
| KC/CH13/9 ARRA-2, Rev 01 & Rev 02<br>Project Code 2005045 | Basic Energy Sciences – Light Source Improvements |

**4. Early Career Research Program ($2.5M)**

**Statement of Work**: Funds provided under KC020101 are provided in FY 10 as follows:

- Investigation of the role of inhomogeneities and phase segregation on correlated

and phase segregation on correlated electron dynamics by optical spectroscopy and nano-imaging

Rev 01 - The revised Work Authorization changes the Performance Period Covered by Funds date to: 02/17/2009 – 09/30/2010 to reflect the correct date Recovery Act funding expires for obligation.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| **Work Authorization Number** | **Work Authorization Title** |
|---|---|
| KC/CH13/9 ARRA-3 and Rev 01<br>Project Code 2005410 | Basic Energy Sciences – Early Career Research Program |

**5. National Center for Research Resources (NCRR) – U.S. National Institutes of Health (NIH) Work for Others (WFO) ($12M)**

**Statement of Work**: Funds are provided under 75-0847 in FY 10 as follows:

The fabrication and installation of three insertion devices (IDs) for beam lines specifically for the NSLS II project:

In accordance with amended Statement of Work (SOW):

The NSLS-II will undertake the fabrication and fabrication and installation of three insertion device (ID) beamlines to be specified by NIH. Two beamlines will support macromolecular crystallography (MX), one of these is identified as AMX for flexible access and highly automated MX and the other is FMX for frontier MX with x-ray beams that can be focused to 1 micron diameter. The third beamline is identified as LIX, and it will be a high brightness x-ray scattering instrument for biological applications.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Interagency Agreement (IAA) and Memorandum of Understanding (MOU) :*

| **Interagency Agreement Number:** | **Memorandum of Understanding (MOU)** |
|---|---|
| **DOE -** CHAGRY1RR0001<br>**NIH/NCRR –** Y1-RR 0001-01<br>**BSA Proposal Number -** 10-07 | MOU between: NCRR / NIH and SC / DOE:<br>*In support of the BNL's NSLS II Project, as Amended in September of 2011* |

D. The work described above shall be performed using funds obligated under this contract, which have been appropriated under the Recovery Act of 2009, Pub. L. 111-5, and as such, is subject to the special statutory conditions, the additional contractual terms and conditions that are listed in paragraph E below and the changes made to Sections E and G of the contract pertaining to the Recovery Act. The funds obligated hereunder shall only be used to accomplish the work as set forth in paragraph C. above and may not be used for any other purpose without the prior written consent of the Contracting Officer.

E. The Contractor shall complete all Recovery Act Work included within this work scope in accordance with Recovery Act requirements, including the required completion dates specified therein, and by the completion date identified in the approved work authorization for the activity.

**Note: Paragraph F pertains to the NSLS-II project only.**

F. ACCELERATED WORK: The Contractor shall submit to the CO a revised project baseline that clearly identifies the changes to the baseline due to the acceleration of work to include a detailed description of accelerated work, a budget of estimated costs for the accelerated work, and a schedule for the performance of this work within 60 days of this modification.

## C.6.2 – Recovery Act Project Category 2: Science Laboratories Infrastructure (SLI)

A. The American Recovery and Reinvestment Act of 2009 funds obligated under this Category in FY 2009 are specified below in Section C.

B. Clause I.139 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

C. The specific work funded included within this work scope is as follows:

**Science Laboratories Infrastructure - General Plant Projects (GPP)**

***Statement of Work***

**1. Mission Critical Building Roofing (TEC $8.710M)**

These funds are provided under KG09: this project will re-roof several Mission Critical science and utility buildings. The buildings include Medical (490), Physics (510), Instrumentation (535), Light Source (725), Collider-Accelerator (several buildings), Firehouse (599), and Water Plant (624).

Rev 03: This revised Work Authorization changes the Performance Period Covered by Funds date to: 02/17/09 - 09/30/10 to reflect the correct date Recovery Act funding expires for obligation.

Rev 04: This revised Work Authorization reduces the Mission Critical Roofing by $290,000.00.

Rev 05: In FY12, funds in the amount of $4136.79 were withdrawn under KG/CH13/9/ARRA-1 and redistributed to Mission Critical Building Mechanical and Electrical Upgrades Project under KG/CH13/9/ARRA-2 to reflect the de-obligation and closeout of all actions provided under Work Authorization # KG/CH13/9/ARRA-1.

Accordingly, the final obligated amount of the project is $8,705,863.21.

**2. Mission Critical Building Mechanical & Electrical Upgrades TEC ($.004M + .039M = Revised TEC $7.333M)**

These funds are provided under KG09; this project will upgrade the HVAC in portions of several Mission Critical buildings used by BNL's science programs. Included will be the replacement of worn-out air handlers and the removal and replacement of highly flammable polystyrene duct insulation to reduce potential fire hazards. Aged and "overdutied" electrical equipment will be replaced. In addition, several elevators will also be rehabilitated and brought up to current standards. The buildings are all Mission Critical and include Biology (463), Physics (510), Central Scientific Computing (515) Instrumentation/NSLS (535), Chemistry (555), and Isotope Research (801).

Rev 03: This revised Work Authorization changes the Performance Period Covered by Funds date to: 02/17/09 - 09/30/10 to reflect the correct date Recovery Act funding expires for obligation. Additionally, the Expected Completion Date changed from 9/30/10 to 11/30/10 which accurately reflects the completion of the project.

Rev 04: This revised Work Authorization transfers $290,000.00 to the Mission Critical Building Mechanical & Electrical Upgrades.

Rev 05: The revised Work Authorization changes the Expected Completion Date from 11/30/10 to 6/30/12.

Rev 06: Funds in the amount of $4,136.79 were withdrawn from Mission Critical Building Roofing Project under KG/CH13/9/ARRA-1, and $39,245.15 from Chemistry Bldg. 555, Fire Safety Corrections Project under KG/CH13/9/ARRA-3 and redistributed to Mission Critical Building & Electrical Upgrades to enhance the electrical scope in Bldg. 610 and additional HVAC work in Bldg. 480 under Work Authorization #KG/CH/9/ARRA-2.

Rev 07: In FY12, funds in the amount of $1,419.27 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization # KG/CH13/9/ARRA-2.

Accordingly, the final obligated amount of the project is $7,331,962.67.

**3. <u>Chemistry, Bldg 555, Fire Safety Corrections (TEC $2.5M)</u>**

These funds are provided under KG09; the Mission Critical Chemistry building, B/555, will have fire barrier established around required building fire zones, vertical fire separations will be provided, and automatic fire sprinklers will be provided throughout the “unsprinklered” 2/3 of the building.

Rev 02: In FY12, funds in the amount of $39,245.15 were withdrawn under KG/CH13/9/ARRA-3 and redistributed to Mission Critical Building and Electrical Upgrades Project under KG/CH13/9/ARRA-2 to reflect the de-obligation and closeout of all actions provided under Work Authorization #KG/CH13/9/ARRA-3.

Accordingly, the final obligated amount of the project is $2,460,754.85.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Number | Work Authorization Title |
|---|---|
| KG/CH13/9 : Rev 01, Rev 02, Rev 03, Rev 04, Rev 05, Rev 06 & Rev 07<br>Project Code 2005380 | Science Laboratories Infrastructure - General Plant Projects (GPP) |

**<u>Science Laboratories Infrastructure - SLI Construction, Interdisciplinary Science Building (ISB)</u>**

***Statement of Work***

**1. Interdisciplinary Science Building (ISB), Phase I (TEC $18.673M)**

These funds are provided under KG01, the project will begin site clearing work at the ISB-Phase I.

Rev 02: This Work Authorization obligates the balance of funding for Line item construction project 09-SC-73, Interdisciplinary Science Building – Phase I.

Rev 03: This revised Work Authorization changes the Performance Period Covered by Funds date to: 02/17/09 - 09/30/10 to reflect the correct date Recovery Act funding expires for obligation.

Rev 04: In FY12, funds in the amount of $46.56 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization # KG/CH13/9/ARRA-4.

Accordingly, the final obligated amount of the project is $18,672,953.44

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Number | Work Authorization Title |
|---|---|
| KG/CH13/9/ARRA-4,Rev 01, Rev 02, Rev 03 & Rev 04<br>Project Code 2005370 | Science Laboratories Infrastructure - SLI Construction, Interdisciplinary Science Building (ISB), Ph.I |

D. The work described above shall be performed using funds obligated under this contract, which have been appropriated under the Recovery Act of 2009, Pub. L. 111-5, and as such, is subject to the special statutory conditions and the additional contractual terms and conditions that are listed in paragraph E below and the changes made to Sections E and G of the contract pertaining to the Recovery Act. The funds obligated hereunder shall only be used to accomplish the work as set forth in paragraph C. above and may not be used for any other purpose without the prior written consent of the Contracting Officer.

E. The Contractor shall complete all Recovery Act Work included within this work scope in accordance with Recovery Act requirements, including the required completion dates specified therein, and by the completion date identified in the approved work authorization for the activity.

## C.6.3 –Recovery Act Project Category 3: Environmental Management (EM) Accelerated Cleanup of Surplus Nuclear Facilities

A. The American Recovery and Reinvestment Act of 2009 funds obligated under this Category in FY 2009 and FY 2010 are specified below in Section C.

B. Clause I.139 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

C. The specific work funded included within this work scope is as follows:

### Environmental Management Projects (TEC $70.810 M)

**Section A: Statement of Work:** This project accelerates cleanup of nuclear facilities and contamination areas for completion in 2011. Specific accomplishments include:

- Removal of contaminated soil from the former Hazardous Waste Management Facility perimeter area.
- Demolition and disposal of the High Flux Beam Reactor fan houses, stack silencers, underground utilities, and isolation and stabilization of Building 750.
- Removal and disposal of the A/B waste lines.
- Removal and disposal of the Brookhaven Graphite Research Reactor graphite pile and bioshield; and installation of an engineered cap and monitoring wells

Additional funding for FY10 provided under Work Authorization #: FY10 – EM BNL ARRA
Revs: EM-0003-10, EM-0004-10.

Rev EM-0001-11 for FY11 provided under Work Authorization #: FY11-EM BNL ARRA reflects a transfer of obligated funds:

- $5,644,154 to be transferred from HFBR to BGRR
- $64K including burdens to be transferred from OPE to CAP for equipment to be used for the HFBR project.

Rev EM-0002-11 for FY11 provided under Work Authorization #: FY11-EM BNL ARRA restates activities for the High Flux Beam Reactor as indicated above to indicate the amended work scope.

Revs EM0003-11, EM0004-11, & EM0005-11 for FY11 provided under Work Authorization # FY11-EM BNL ARRA reflect the following:

- $500K of obligated funds transferred from HFBR to BGRR

Revs EM-0001-12, EM-0002-12, EM-0003-12 and EM-0004-12 for FY12 provided under Work Authorization #: FY12-EM BNL ARRA changes dates in accordance with the revised project completion date.

Rev EM-0005-12 for FY12 provided under Work Authorization # FY12-EM BNL ARRA reflects a de-obligation in the amount of $383.58 to finalize the close out of all actions authorized by the listed Work Authoriztions.

Accordingly, the final obligated amount of the project is $70,809,616.42

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Numbers: | Work Authorization Numbers: |
|---|---|
| **FY09 – EM BNL ARRA**<br>Revs: EM-0000-9, EM-0001-9<br>**FY10 – EM BNL ARRA**<br>Revs: EM-0003-10, EM-0004-10<br>**FY11 – EM BNL ARRA**<br>Revs: EM-0001-11, 0002-11, 0003-11, 0004-11, & EM-0005-11<br>**FY12 – EM BNL ARRA**<br>Rev: EM-0001-12, EM-0002-12, EM-0003-12, EM-0004-12 & EM-0005-12 | Accelerated Cleanup of Surplus Nuclear Facilities<br><br>**Project Code:** 2002010 |

D. The work described above shall be performed using funds obligated under this contract, which have been appropriated under the Recovery Act of 2009, Pub. L. 1115, and as such, is subject to the special statutory conditions and the additional contractual terms and conditions that are listed in paragraphs E through G below and the changes made to Sections E and G of the contract pertaining to the Recovery Act. The funds obligated hereunder shall only be used to accomplish the work as set forth in paragraph C. above and may not be used for any other purpose without the prior written consent of the Contracting Officer.

E. The Contractor shall complete all Recovery Act Work included within this work scope in accordance with Recovery Act requirements, including the required completion dates specified therein, and by the completion date identified in the approved work authorization for the activity.

F. FUNDING CONSTRAINT**:** Brookhaven Science Associates (BSA) is to begin work. However, BSA is authorized to incur costs in accordance with the direction provided in the most current Work Authorization which establishes the cost authority amount.

## C.6.4–Recovery Act Project Category 4: Nuclear Physics (NP)

A. The American Recovery and Reinvestment Act of 2009 funds obligated under this Category in FY 2009 and FY 2010 are specified below in Section C.

B. Clause I.139 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

C. The specific work funded under this Category is as follows:

### 1. PHENIX Silicon Vertex MIE (TEC $.250M)

**Statement of Work:** These funds are provided under KB-02-01-02-1 EQU to advance funding for equipment purchases for the PHENIX Silicon Vertex Tracker MIE (71RD) project, including data acquisition crates for front-end modules for strip detectors; data collection modules, and installation fixtures and external cooling system.

Per Work Authorization, Rev 02, Attachment A, Contractor Recovery Act Performance Requirements has been revised.

Per Work Authorization for FY11, Rev 03, Block 13, "Expected Completion Date" is revised to 12/2010 in order to reflect the correct date of project completion.

Per Work Authorization for FY12, Rev 04, Block 13, "Expected Completion Date" is revised from 12/2010 to 09/2012 in order to reflect the correct date of project completion and funds are redistributed.

Rev 05: In FY12, funds in the amount of $21.70 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization #KB/CH13/9/ARRA-1.

Accordingly, the final obligated amount of the project is $249,978.30.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Number | Work Authorization Title |
|---|---|
| KB/CH13/9/ARRA-1, Rev 01, Rev 02, Rev 03, Rev 04 & Rev 05<br>Project Code 2005200 | Nuclear Physics – PHENIX Silicon Vertex MIE |

### 2. PHENIX Forward Vertex Detector MIE (TEC $.967M)

**Statement of Work:** These funds are provided under KB-02-01-02-1 EQU to advance funding for the purchase of two silicon end caps for the PHENIX Forward Vertex Detector MIE (81SF)

Rev 03: The revised Work Authorization changes the Expected Completion Date from 6/11 to 12/11.

Rev 04: The revised Work Authorization changes the Expected Completion Date from 12/2011 to 09/2012 in order to reflect the correct project completion date and redistribute funds from EQU to OPE.

Rev 05: In FY12, funds in the amount of $697.16 were withdrawn to reflect the de-obligation under Work Authorization #KB/CH13/9/ARRA-2.

Rev 06: In FY13, funds in the amount of $1,195.93 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization #KB/CH13/9/ARRA-2

Accordingly, the final obligated amount of the project is $965,106.91.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| **Work Authorization Number** | **Work Authorization Title** |
|---|---|
| KB/CH13/9/ARRA-2, Rev 01, Rev 02, Rev 03, Rev 04, Rev 05, & Rev 06<br>Project Code 2005210 | Nuclear Physics – PHENIX Forward Vertex Detector MIE |

**3. Enhanced AIP Funding at NP User Facilities (TEC $8M)**

**Statement of Work:** These funds are provided under KB-02-02-01-1 for accelerated implementation of the stochastic cooling in both storage rings and implementation of electron lenses for the RHIC (Initial funds of $7,200,000).

Rev 01: Additional funding in the amount of $800K is provided in support of the AIP efforts related to the luminosity upgrade of the RHIC beams.

Rev 02: Revises Attachment A of the Work Authorization entitled "Contractor Recovery Act Performance Requirements" to reflect the following:

- The original scope was revised to include the engineering and design of lenses and the manufacture of the components of one lens in order to remain within the ARRA funded amount. The components will be tested and ready for installation in the RHIC accelerator at the completion of this ARRA project consistent with the revised milestones contained in Attachment A.

Rev 03: The revised Work Authorization changes the Expected Completion Date from: 03/2012 to 09/2012.

Rev 04: The revised Work Authorization changes the Expected Completion Date from: 09/2012 to 3/2013.

Rev 05: In FY13, funds in the amount of $5.07 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization #KB/CH13/9/ARRA-3.

Accordingly, the final obligated amount of the project is $7,999,994.93.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Number | Work Authorization Title |
|---|---|
| KB/CH13/9/ARRA-3, Rev 01, Rev 02, Rev 03, Rev 04, & Rev 05<br>Project Code 2005220 | Nuclear Physics – Enhanced AIP Funding at NP User Facilities |

**4. Enhanced Utilization of Isotope Facilities (TEC $1.878M)**

**Statement of Work**: These funds are provided under ST-60-01-03 for procuring and commissioning a new inductively coupled plasma (ICP) mass spectrometer. This funding will enhance isotope production and processing capabilities at BNL to enable the program to better meet the need for isotopes in short supply (Initial funding $225,000).

Rev 01: Provides $1,316,000 in OPE funding under ST-60-01-02 for:

- FWP #2009-BNL-MO086 for the "Development of Zn-68 targets for improved yields and production of Cu-67" ($724,000). The project period is October 2009 – October 2011.
- FWP#2009-BNL-MO087 for the "Development of large scale production of PET isotope Yttrium-86 at Brookhaven Linac Isotope Production" ($592,000). The project period is October 2009 – October 2011.

Rev 02: Provides $337,000 in additional funding :

- OPE ($25,000) "Brookhaven Linear Isotope Producer" for the development support for accelerator production of actinium-225 (Ac-225).
- EQU ($262,000) Procurement of new equipment to include a portable contamination monitor ($123,000), a small portable Ge gamma ray spectrometer ($89,000) and a lifting device to assist with Model 7 manipulator replacement ($50,000).
- OPE ($50,000) Engineering and design of new lifting device for Model 7 manipulator replacement through the roof of the hot cells.

Rev 03: Provides a transfer of obligated funds provided in Rev02 as follows:

- EQU ($312,000) Procurement of new equipment to include a portable contamination monitor ($123,000), a small portable Ge gamma ray spectrometer ($89,000) and a lifting device to assist with Model 7 manipulator replacement ($100,000).
- OPE ($0.00) Engineering and design of new lifting device for Model 7 manipulator replacement through the roof of the hot cells.

Rev 04: Changes the Expected Completion Date of the project from 10/2011 to 10/2012 to ensure completion of the final tasks to develop labeling protocols for the Copper-67 and Yttrium-86 projects as specified in the Work Authorization.

Rev 05: Changes the Expected Completion Date of the project from 10/2012 to 09/2013 and redistributes obligated funds as indicated in the Work Authorization. The new totals are as follows:

- OPE $1,576,049.37
- EQU $301,950.63

Rev 06: In FY14, funds in the amount of $2,728.62 under ST-50-01-02 and $511.75 under ST-60-01-03 are withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization #ST/CH13/9/ARRA-4.

Accordingly, the final obligated amount of the project is $1,874,759.63.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| **Work Authorization Number** | **Work Authorization Title** |
|---|---|
| ST/CH13/9 /ARRA-4 and Rev 01, Rev 02, Rev 03, Rev 04, Rev 05, and Rev 06<br>**Project Code:** 2005230 | Nuclear Physics – Enhanced Utilization of Isotope Facilities |

5. **Nuclear Science Workforce ($1.808M)**

**Statement of Work:** These funds ($1,400,000) are provided under KB-03-01-04-2 for FWP#22675 entitled "Neutron Cross Section Covariances for the ENDF/B-VII Library." The Principal Investigator is Pavel Oblozinsky. The project period is 09/2009 to 09/2012.

These funds ($408,000) are provided under KB-04-01-02-2 for FWP#22555 entitled, "Use of Covariances in a Consistent Data Assimilation for Improvement of Basic Nuclear Parameters in Nuclear Reactor Applications: From Meters to Femtometers." The Principal Investigator is Michael Herman. The project period is 10/2009 to 09/2012.

Rev 01: Transfers obligated funds from KB-03 to KB-04 in the amount of $241,281.55 and authorizes expenditure. The new totals are as follows:

- KB-03 $1,158,718.45
- KB-04 $649,281.55

Rev 02: In FY12, funds in the amount of $1,196.23 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization #KB/CH13/9/ARRA-5.

Accordingly, the final obligated amount of the project is $1,806,803.77.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Number | Work Authorization Title |
|---|---|
| KB/CH13/9/ARRA-5 and Rev 01<br>Project Code 2005270 | Nuclear Physics – Nuclear Science Workforce |

D. The work described above shall be performed using funds obligated under this contract, which have been appropriated under the Recovery Act of 2009, Pub. L. 111-5, and as such, is subject to the special statutory conditions and the additional contractual terms and conditions that are listed in paragraph E below and the changes made to Sections E and G of the contract pertaining to the Recovery Act. The funds obligated hereunder shall only be used to accomplish the work as set forth in paragraph C. above and may not be used for any other purpose without the prior written consent of the Contracting Officer.

E. The Contractor shall complete all Recovery Act Work, included within this work scope, in accordance with Recovery Act requirements, including the required completion dates specified therein, and by the completion date identified in the approved work authorization for the activity.

## C.6.5 – Recovery Act Project Category 5: Energy Efficiency and Renewable Energy (EERE)

A. The American Recovery and Reinvestment Act of 2009 funds obligated under this Category in FY 2009 and FY 2010 are specified below in Section C.

B. Clause I.139 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

C. The specific work included within this work scope is as follows:

**1. Federal Lab Support for Recovery Act Transactions (TEC $113,950.63)**

***Statement of Work:***

These funds are for Management and Oversight (Program Direction) to enable the Laboratory to provide project management and technical staff assistance to applicants of DOE's Office of Energy Efficiency and Renewable Energy.

Funding in the amount of ($1,050.63) have been withdrawn and distributed to Agreement # 11951.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Number | Work Authorization Title |
|---|---|
| 480004-20476-09, Rev 01 and Rev 02 Project Code 2004040 | Federal Lab Support for Recovery Act Transactions |

**2. EGS R&D (TEC $1.897K)**

***Statement of Work:***

Agreement # 19965: Brookhaven National Laboratory will elucidate comprehensively the carbonation reaction mechanisms between the supercritical carbon dioxide and reservoir rocks in aqueous and non-aqueous environments, and develop chemical modeling of CO2-reservoir rock interactions. ($334K + 159.87K FY10 = $493.87K) - ($97.73) = $493.772K

Rev 07: For FY12 provided under Work Authorization GT-480004-20685-12, changes the the Expected Completion Date of the project from 09/30/2011 to 09/30/2012.

Rev 13: In FY 13, funds in the amount of $97.73 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization #GT-480004-20685-13.

Agreement # 19964: Brookhaven National Laboratory, working with Los Alamos National Laboratory and Pacific Northwest National Laboratory, will develop and implement 1) suites of tracers consisting of compounds with different chemical and

physical properties that will interact in measurable ways with fractured rock matrix, and 2) single and interwell test designs and corresponding interpretation methods to extract the temperature distribution and surface area information from breakthrough curves. ($375K +155.625K FY10 = $530.625K) – ($78.89) = $530.546K

Rev 08: For FY12 provided under Work Authorization GT-480004-20685-12, changes the Expected Completion Date of the project from 09/30/2011 to 09/30/2012.

Rev 12: In FY13, funds in the amount of $78.89 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization #GT-480004-20685-13.

Agreement # 19963: Brookhaven National Laboratory will develop and characterize field-applicable geopolymer sealing materials in the laboratory and transfer the developed material technology to geothermal drilling service companies. ($579K + $293.41K FY10 = $872.41K) – ($782.80) = $871,627K

Rev 09: For FY12 provided under Work Authorization GT-480004-20685-12, changes the the Expected Completion Date of the project from 09/30/2011 to 09/30/2012.

Rev 10: For FY12 provided under Work Authorization GT-480004-20685-12, revises Section A of Attachment A entitled: "Contractor Recovery Act Performance Requirements".

Rev 11: In FY 13 funds in the amount of $782.80 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization #GT-480004-20685-13.

Accordingly, the final obligated amount of the project is $1,895,945.58.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| **Work Authorization Number** | **Work Authorization Title** |
|---|---|
| GT-480004-20685-09, Rev 01, Rev 02, Rev 03<br>GT-480004-20685-10, Rev 01, Rev 02, Rev 03<br>GT-480004-20685-10, Rev 04, Rev 05, Rev 06<br>GT-480004-20685-12, Rev 07, Rev 08, Rev 09, & Rev 10<br>GT-480004-20685-13, Rev 11, Rev 12, & Rev 13<br>Project Code 2004190 | EGS R&D |

D. The work described in this modification shall be performed using funds obligated under this contract, which have been appropriated under the Recovery Act of 2009, Pub. L. 111-5, and as such, is subject to the special statutory conditions and the additional contractual terms and conditions that are listed in paragraph E below and the changes made to Sections E and G of the contract pertaining to the Recovery Act. The funds obligated hereunder shall only be used to accomplish the work as set forth in paragraph C. above and may not be used for any other purpose without the prior written consent of the Contracting Officer.

E. The Contractor shall complete all Recovery Act Work funded by this modification in

accordance with Recovery Act requirements, including the required completion dates specified therein, and by the completion date identified in the approved work authorization for the activity.

## C.6.6 – Recovery Act Project Category 6: High Energy Physics (HP)

A. The American Recovery and Reinvestment Act of 2009 funds obligated under this Category in FY 2009 and FY 2010 are specified below in Section C.

B. Clause I.139 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

C. The specific work included within this work scope is as follows:

**1. Advanced Technology R&D Augmentation ($.055M + .047M = Revised TEC $.102 M)**

**Statement of Work:** These funds are provided under KA-15-02-01-1 for the first year's work on "A Laboratory-University-Industry Collaboration for the Development of Magnets with Fields > 22 Tesla Using HTS Conductor" program under the direction of Drs. Peter Wanderer and Arup Ghosh as described in the Field Work Proposal (FWP) KACH139 Rev 0 submitted 05/15/2009. Additional funding has been provided to extend work for another year under KACH139 Rev 1 submitted 05/15/2010.

Rev 02: The revised Work Authorization in FY12 changes the Expected Completion Date of the project from 12/2011 to 6/2012.

Rev 03: In FY12, funds in the amount of $56.72 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization # KA/CH13/9/ARRA-1.

Accordingly, the final obligated amount of the project is $101,943.28.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Number | Work Authorization Title |
|---|---|
| KA/CH13/9/ARRA-1, Rev 01, Rev 02 & Rev 03<br>Project Code 2005170 | High Energy Physics – Advanced Technology R&D Augmentation |

**2. Long Baseline Neutrino Experiment ($6M)**

**Statement of Work:** $5,000,000 under KA-11-02-03-3 and $1,000,000 under KA-11-02-03-4 is provided to support the Long Baseline Neutrino Experiment (LBNE) at Brookhaven National Laboratory for preconceptual R&D and the contributions to the conceptual design of the Long Baseline Neutrino Experiment required for Critical Decision-1. This work is subject to the detailed reporting requirements under Recovery Act.

Rev 02: The revised Work Authorization in FY12 redistributes funds and changes the Expected Completion Date of the project from 11/2010 to 6/2012.

Rev 03: In FY12, funds in the amount of $204.03 under KA-11-02-03-3 and $1.79

under KA-11-02-03-4 were withdrawn to reflect the de-obligation and closeout of all actions provided under Work Authorization # KA/CH13/9/ARRA-2.

Accordingly, the final obligated amount of the project is $5,999,794.18.

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| **Work Authorization Number** | **Work Authorization Title** |
|---|---|
| KA/CH13/9/ARRA-2, Rev 01 & Rev 02<br>Project Code 2005175 | High Energy Physics – Long Baseline Neutrino Experiment |

D. The work described above shall be performed using funds obligated under this contract, which have been appropriated under the Recovery Act of 2009, Pub. L. 111-5, and as such, is subject to the special statutory conditions and the additional contractual terms and conditions that are listed in paragraph E below and the changes made to Sections E and G of the contract pertaining to the Recovery Act. The funds obligated hereunder shall only be used to accomplish the work as set forth in paragraph C. above and may not be used for any other purpose without the prior written consent of the Contracting Officer.

E. The Contractor shall complete all Recovery Act Work funded by this work scope in accordance with Recovery Act requirements, including the required completion dates specified therein, and by the completion date identified in the approved work authorization for the activity.

## C.6.7 – Recovery Act Project Category 7: Advanced Research Projects Agency – Energy (ARPA-E)

A. The American Recovery and Reinvestment Act of 2009 funds obligated under this Category in FY 2009 are specified below in Section C.

B. Clause I.139 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

C. The specific work funded by this work scope is as follows:

**1. Brookhaven National Laboratory (BNL) – Reviewer for ARPA-E (TEC $7,917.15)**

**Statement of Work:** This WAS covers expenses for one (1) BNL employee to review proposals in support of the ARPA-E Program (FOA #DE-FOA-0000065). The employee will work during the performance period as noted on this WAS. The employee will participate in the review of full applications received from the ARPA-E solicitation. The reviews will follow the established procedures, as communicated, and the employee will report his/her review findings to the responsible Assistant Secretary, (acting) Director, or other senior program official.

Funding in the amount of ($82.85) (balance of uncosted funding) has been withdrawn and distributed under WA 09/CJ000/00/03 to finalize the close out of all actions previously authorized and funded by ARPA-E

*The specific Contractor Recovery Act Statement of Work, Milestones, Outcomes and Measures, and Deliverables funded by this modification are identified in the following referenced Work Authorization:*

| Work Authorization Number | Work Authorization Title |
|---|---|
| 09/CJ000/00/02<br>09/CJ000/00/03 Rev 01<br>Project Code 2010000 | Brookhaven National Laboratory (BNL)<br>Reviewer for ARPA-E |

D. The work described above shall be performed using funds obligated under this contract, which have been appropriated under the Recovery Act of 2009, Pub. L. 111-5, and as such, is subject to the special statutory conditions and the additional contractual terms and conditions that are listed in paragraph E below and the changes made to Sections E and G of the contract pertaining to the Recovery Act. The funds obligated hereunder shall only be used to accomplish the work as set forth in paragraph C. above and may not be used for any other purpose without the prior written consent of the Contracting Officer.

E. The Contractor shall complete all Recovery Act Work funded by this work scope in accordance with Recovery Act requirements, including the required completion dates specified therein, and by the completion date identified in the approved work authorization for the activity.

# PART I

# SECTION D

# PACKAGING

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D.1 -- Packaging

# PART I

# SECTION D - PACKAGING

## D.1 - PACKAGING

Preservation, packaging, and packing for shipment or mailing of all work delivered hereunder shall be in accordance with good commercial practice and adequate to insure acceptance by common carrier and safe transportation at the most economical rates.

# PART I

# SECTION E

# INSPECTION AND ACCEPTANCE

E.1 - FAR 52.246-9 - Inspection of Research and Development (Short Form) (APR 1984)

E.2 - Inspection and Acceptance Applicable Only to Recovery Act Work

# PART I

## SECTION E - INSPECTION AND ACCEPTANCE

### E.1 - FAR 52.246-9 - INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM) (APR 1984)

The Government has the right to inspect and evaluate the work performed or being performed under the contract, and the premises where the work is being performed, at all reasonable times and in a manner that will not unduly delay the work. If the Government performs inspection or evaluation on the premises of the Contractor or a subcontractor, the Contractor shall furnish and shall require subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

### E.2 - INSPECTION AND ACCEPTANCE APPLICABLE ONLY TO RECOVERY ACT WORK

In order for the Contracting Officer to accept any products or services funded by the Recovery Act, the Contractor shall certify that the items were delivered and/or work was performed for a purpose authorized under the Recovery Act.

# PART I

# SECTION F

# DELIVERIES OR PERFORMANCE

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F.1 - Period of Performance

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F.3 – Stop Work and Shutdown Authority

F.4 - Principal Place of Performance

# PART I

## SECTION F - DELIVERIES OR PERFORMANCE

### F.1 - PERIOD OF PERFORMANCE

This contract shall be effective as specified in Block No. 3 – Effective Date, of Standard Form 30 for this contract modification, except as otherwise provided, and shall continue up to and including January 4, 2015, unless sooner terminated according to its terms or extended in accordance with the appropriate FAR and DEAR provisions.

### F.2 - FAR 52.242-15 - STOP WORK ORDER (AUG 1989) - ALTERNATE I (APR 1984)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either --

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Termination clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule, the estimated cost, the fee, or a combination thereof, and in any other terms of the contract that may be affected, and the contract shall be modified, in writing, accordingly, if --

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

## F.3 - STOP WORK AND SHUTDOWN AUTHORITY

FAR 52.242-15 – Stop Work Order – Alternate I, allows only the Contracting Officer to stop work or shutdown facilities for reasons other than harm or imminent danger to the environment or health and safety of employees and the public.

Due to the immediate need to stop work due to situations where the Contractor's acts or failures to act cause substantial harm or present an imminent danger to the environment or health and safety of employees or the public, any DOE employee may exercise the stop work authority contemplated in DEAR 970.5223-1 – Integration of Environment, Safety, and Health Into Work Planning and Execution.

## F.4 - PRINCIPAL PLACE OF PERFORMANCE

The principal place of contract performance is at the site of Brookhaven National Laboratory, Upton, Suffolk County, New York.

# PART I

# SECTION G

# CONTRACT ADMINISTRATION DATA

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G.3 - Contract Administration

G.4 - Reporting Procedures Applicable Only to Recovery Act Work

G.5 - Indirect Charges

# PART I

## SECTION G - CONTRACT ADMINISTRATION DATA

### G.1 - DOE CONTRACTING OFFICER

For the definition of Contracting Officer see FAR 2.101 – Definitions. The Contracting Officer is the only individual who has the authority on behalf of DOE to take the following actions under the contract:

(1) assign additional work within the general scope of the Statement of Work of the contract;

(2) issue a change as defined in the "Changes" clause of the contract;

(3) change any of the expressed terms, conditions or specifications of the contract;

(4) accept non-conforming work; or

(5) waive any requirement of this contract.

### G.2 - DOE CONTRACTING OFFICER'S REPRESENTATIVE(S) (COR)

Performance of the work under this contract shall be subject to the technical direction of DOE Contracting Officer's Representative(s) in accordance with Clause I.102 - DEAR 952.242-70 - Technical Direction (DEC 2000). Any change in any DOE COR may be made administratively by letter from the Contracting Officer consistent with Clause I.102 - DEAR 952.242-70 - Technical Direction (DEC 2000).

### G.3 - CONTRACT ADMINISTRATION

The contract will be administered by:

U.S. Department of Energy
Brookhaven Site Office
53 Bell Avenue, Bldg 464
Upton, New York 11973

Written communications regarding the contract shall be mailed to the above address except for correspondence regarding patent or intellectual property related matters which should be addressed to:

U.S. Department of Energy
Office of Chief Counsel - Intellectual Property Law Division
9800 South Cass Ave.
Argonne, Illinois 60439

Information copies of patent related correspondence should be sent to the Contracting Officer.

## G.4 – REPORTING PROCEDURES APPLICABLE ONLY TO RECOVERY ACT WORK

The following reporting procedure will apply to submission of monthly cost reports for Recovery Act work specified in the work scope baseline.

(a) The Contractor will separately identify costs that pertain to the Recovery Act work. The Contractor will provide a monthly report that identifies the total amount drawn on the letter of credit. The contractor shall submit a monthly report that separates and identifies Recovery Act costs associated with each appropriation at the Recovery Act program and project levels.

(b) The Contractor shall certify in each monthly report that the costs included in the report for Recovery Act work were incurred only to accomplish the Recovery Act work in accordance with the work scope.

## G.5 – INDIRECT CHARGES

In accordance with the general principles of the Recovery Act the Contractor must take the following steps to minimize the impacts of indirect costs and enhance transparency and accountability of project:

(a) Clearly identify the estimated full cost of projects to include total direct and indirect costs, indirect costs rates, and adjust existing indirect cost rate to account for the material infusion of funds provided in the Recovery Act;

(b) Exempt funds from contract cost base for distributing Laboratory Directed Research and Development or similar funds taxing programs;

(c) Ensure all funds transferred by Brookhaven Science Associates are completed using the Approved Funding Program process described in Chapter 12 of the Accounting Handbook; and

(d) The Federal Administrative Charge (FAC) of three percent is waived on reimbursable work funded by the Recovery Act and performed by Departmental Federal offices or Brookhaven Science Associates.

(e) In all cases listed above and otherwise, the Contractor shall develop and maintain prudent management and good business practices regarding their indirect rate structure as it applies to Recovery Act funding.

# PART I

## SECTION H

## SPECIAL CONTRACT REQUIREMENTS

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# SPECIAL CONTRACT REQUIREMENTS

## CLAUSE H.1 - FACILITIES

DOE agrees to furnish and make available to the Contractor, for its possession and use in performing the work under this contract, the facilities designated as follows:

(a) The Government-owned or leased land, buildings, utilities, equipment and other facilities situated at or near the Brookhaven National Laboratory Site at Upton, Suffolk County, New York;

(b) Government-owned or leased facilities at such other locations as may be approved by DOE for use under this contract.

(c) Subject to mutual agreement, other facilities may be used in the performance of the work under this contract.

DOE reserves the right to make part of the above-mentioned land or facilities available to other Government agencies or other users on the basis that the responsibilities and undertakings of the Contractor will not be unreasonably interfered with. Before exercising its right to make any part of the land or facilities available to another agency or user, DOE will confer with the Contractor.

## CLAUSE H.2 - LONG-RANGE PLANNING, PROGRAM DEVELOPMENT AND BUDGETARY ADMINISTRATION

(a) Basic Considerations. Throughout the process of planning, and budget development and approval, the Parties recognize the desirability for close consultation, for advising each other of plans or developments on which subsequent action will be required, and for attempting to reach mutual understanding in advance of the time that action needs to be taken.

(b) Long Range Planning. It is the intent of the Parties to develop annually a Brookhaven Strategic Plan covering a five-year period. Development of the Brookhaven Strategic Plan is the strategic planning process by which the Parties, through mutual consultation, reach agreement on the general types and levels of activity which will be conducted at the Laboratory for the period covered by the plan. The Brookhaven Strategic Plan approved by DOE provides guidance to the Laboratory for long-range planning of programs, site and facility development, and for budget preparation. It also serves as a baseline for placement of work at the Laboratory.

(c) Work Authorization and Financing

(1) In accordance with the basic principles stated in paragraph (a) of this Clause, the Parties will utilize the procedures set forth in Part III, Attachment J.4, Appendix D, hereto attached and hereby made a part of this contract, for the development and presentation of work programs and budget estimates for the Laboratory and preliminary agreements thereon; such Appendix may be modified from time to time to the extent that the Parties so agree, in writing, without the execution of a formal supplement to this contract.

(2) DOE approval of the program proposals and budget estimates will be reflected in work authorizations and financial plans developed, issued and revised in accordance with the procedures agreed upon under subparagraph (c)(1) above.

CLAUSE H.3 – CONTRACTOR ASSURANCE SYSTEM

(a) The Contractor shall develop a contractor assurance system that is executed by the Contractor's Board of Directors (or equivalent corporate oversight entity) and implemented throughout the Contractor's organization. This system provides reasonable assurance that the objectives of the contractor management systems are being accomplished and that the systems and controls will be effective and efficient. The contractor assurance system, at a minimum, shall include the following key attributes:

(1) A comprehensive description of the assurance system with processes, key activities, and accountabilities clearly identified.
(2) A method for verifying/ensuring effective assurance system processes. Third party audits, peer reviews, independent assessments, and external certification (such as VPP and ISO 9001 or ISO 14001) may be used.
(3) Timely notification to the Contracting Officer of significant assurance system changes prior to the changes.
(4) Rigorous, risk-based, credible self-assessments, and feedback and improvement activities, including utilization of nationally recognized experts, and other independent reviews to assess and improve the Contractor's work process and to carry out independent risk and vulnerability studies.
(5) Identification and correction of negative performance/compliance trends before they become significant issues.
(6) Integration of the assurance system with other management systems including Integrated Safety Management.
(7) Metrics and targets to assess performance, including benchmarking of key functional areas with other DOE contractors, industry and research

institutions. Assure development of metrics and targets that result in efficient and cost effective performance.

(8) Continuous feedback and performance improvement.

(9) An implementation plan (if needed) that considers and mitigates risks.

(10) Timely and appropriate communication to the Contracting Officer, including electronic access, of assurance related information.

The initial contractor assurance system description shall be approved by the Contracting Officer.

(b) The Government may revise its level and/or mix of oversight of this contract when the Contracting Officer determines that the assurance system is or is not operating effectively**.**

CLAUSE H.4 - ADVANCE UNDERSTANDINGS REGARDING ADDITIONAL ITEMS OF ALLOWABLE AND UNALLOWABLE COSTS AND OTHER MATTERS

I. ITEMS OF ALLOWABLE COSTS:

(a) Subject to the approval or ratification, in writing, of the Contracting Officer, reasonable litigation and other legal expenses (including reasonable counsel fees and the premium for bail bond) if incurred in accordance with the clause of the contract entitled “Insurance--Litigation and Claims” and the DOE approved Contractor legal management procedures (including cost guidelines) as such procedures may be revised from time to time and if not otherwise made unallowable in this contract including FAR 31.205-47(f)(7):

(1) necessary to defend adequately any member of the Contractor's internal guard force against whom a civil or criminal action is brought, where such action is based upon lawful act or acts of the guard undertaken by him in the general course of his duties for the purpose of accomplishing and fulfilling the official duties of his employment; or

(2) necessary for the legal defense of employees who are sued for errors, omission or actions, taken within the scope of their employment. Payment of judgments, or settlement of claims against employees, when the judgments or claims arise from errors, omissions or actions, taken within the scope of their employment are also allowable.

DOE and the Contractor have further agreed to the following in connection with the interpretation and administration of the foregoing provision:

Any request for approval/ratification must include a determination by the Contractor that (i) the guard's action giving rise to the civil or criminal action reasonably appear to have been performed within the scope of his/her employment, and (ii) that it is in the best interests of the Laboratory to pay for the guard's litigation expenses. DOE and the Contractor further agree that in interpreting the term "lawful", due consideration shall be given to whether a member of the Contractor's internal guard force acted in good faith and reasonably believed such action to be in the general scope of his or her employment to accomplish official duties and, in addition, in criminal actions, had no reasonable cause to believe that his or her conduct was unlawful. In the event the Contractor is legally obligated to defend the guard, the termination of any civil action or proceeding by judgment or settlement shall not in itself create a presumption that any such guard did not act in good faith for a purpose which he or she reasonably believed to be within his or her scope of employment and official duties. Similarly, the termination of any criminal action or proceeding by conviction or upon a plea of nolo contendere, or its equivalent, shall create a rebuttable presumption that such guard did not have reasonable cause to believe that his or her conduct was lawful.

Finally, in connection with any federal criminal proceeding against a member of the Contractor's internal guard force, the Contractor recognizes that Contracting Officer approval of the allowability of litigation expenses will be further predicated on the Contracting Officer determining that such reimbursement is in the best interests of the United States.

(b) Rentals and leases of land, buildings, and equipment owned by third parties, allowances in lieu of rental, charges associated therewith and costs of alteration, remodeling and restorations where such items are used in the performance of the contract, except that such rentals and leases directly chargeable to the contract shall be subject to such approval by the Contracting Officer as set forth in Part III, Attachment J.7, Appendix G.

(c) Notwithstanding the provisions of FAR cost principle 31.205-44 (e), stipends and payments made to reimburse travel or other expenses of researchers and students who are not employed under this contract but are participating in research, educational or training activities under this contract to the extent such costs are incurred in connection with fellowship, international agreements, or other research, educational or training programs approved by the Contracting Officer.

(d) Notwithstanding the provisions of FAR cost principle 31.205-44 (e), payments to educational institutions for tuition and fees, or institutional allowances, in connection with fellowship or other research, educational or

training programs for researchers and students who are not employed under this contract.

(e) Expenditures by the Contractor to reimburse other employers for payments (including, but not limited to, salaries) to or for the benefit of their employees loaned to the Contractor for and engaged in the performance of the Contractor's undertaking hereunder.

(f) Subject to any other limitations on allowability contained in this contract, costs incurred and expenditures made by the Contractor's Board of Directors, its members, committees, panels and support personnel in connection with performance of work under this contract. The Contractor shall provide to the Contracting Officer, for an allowability determination, an annual accounting of these costs incurred and expenditures made.

(g) Pursuant to Clause I.18 - FAR 52.211-5 - Material Requirements (AUG 2000), the Contractor is authorized to obtain Government surplus property in accordance with its DOE approved Supply and Materiel Group Standard Operating Procedures manual and to obtain and use used, reconditioned, or remanufactured supplies when it determines it is in accordance with and benefits the work to be performed under the contract.

(h) Pursuant to Clause I.112 - DEAR 970.5208-1 - Printing (DEC 2000), the Contractor is authorized to certify, prior to the printing of individual jobs, that the use of more than one color of ink fulfills a specific functional need in accordance with the guidance provided in the Government Printing and Binding Regulations, Title 44 of the U.S. Code and DOE directives related thereto. This authorization is subject to the Contractor providing to the Contracting Officer, on an annual basis, a report on all multicolor printing activities supported with DOE funds.

(i) Pursuant to Clause I.142 - DEAR 970.5232-7 - Financial Management System (DEC 2000), the financial management system covered in Clause I.142 includes the Laboratory's current existing integrated accounting system which consists of the following subsystems: budget, payroll, labor cost distribution, accounts receivable, accounts payable, procurement, receiving, inventory, project costing, general ledger, and the financial aspects of the Asset Management System, as well as such other subsystems as may be agreed to by DOE and the Contractor. In accordance with the specified annual plan, only those subsystems and/or major enhancements and/or upgrades exceeding $500,000.00 require approval by DOE.

II. ITEMS OF UNALLOWABLE COSTS:

(a) Premium Pay for wearing radiation-measuring devices for Laboratory and all-tier cost-type subcontract employees.

(b) Salaries or other compensation of the Contractor's Board members, or that of members of subcommittees of the Board who are employees of the Contractor, Battelle Memorial Institute, the Research Foundation of State University of New York, State University of New York at Stony Brook and the six Core Universities.

(c) Home office expenses, whether direct or indirect, relating to activities of the Contractor, except as otherwise specifically agreed to elsewhere in this Contract or subsequently in writing by the Contracting Officer. Requests for Contracting Officer approval of home office expenses shall be submitted in writing and will be approved in accordance with DOE Acquisition Letter 2005-11, or any subsequent guidance.

CLAUSE H.5 - ADMINISTRATION OF SUBCONTRACTS

(a) The administration of all subcontracts entered into and/or managed by the Contractor, including responsibility for payment hereunder, shall remain with the Contractor unless assigned at the direction of DOE.

(b) The DOE reserves the right to direct the Contractor to assign to the DOE, or another contractor, any subcontract awarded under this contract.

(c) The DOE reserves the right to identify specific work activities in Section C "Description/Specifications" to be removed (de-scoped) from the contract in order to contract directly for the specific work activities. The Department will work with the Contractor to identify the areas of work that can be performed by small businesses in order to maximize direct federal contracts with small businesses. The contractor agrees to facilitate these actions. This facilitation will include identifying direct contracting opportunities valued at $5 million or above for small businesses for work presently performed under subcontracts, as well as work performed by contractor employees. The Contractor shall notify the DOE one-year in advance of the expiration of any of its subcontracts valued at $5 million or above, or if applicable, one-year prior to the exercise of an option and/or the option notification requirement, if any, contained in the subcontracts. The DOE will review this information and the requirements of the Contractor to determine the appropriateness for small business opportunities. This review may result in the DOE electing to enter in contracts directly with small businesses for these areas of work. The Contracting Officer will give notice to the Contractor not less than 120

calendar days prior to the date for exercising the option and/or the expiration of the subcontract and/or prior to entering into contract for work being performed by Contractor employees. Following award of these direct federal contracts, DOE may assign administration of these contracts to the Contractor. The Contractor agrees to accept assignments from the DOE for the administration of these contracts. The parameters of the Contractor's responsibilities for the small business contracts and/or changes, if any, to this contract will be incorporated via a modification to the contract. The Contractor will accept management and administration responsibilities, if so determined.

(d) To the extent that DOE removes (de-scopes) work from this contract, any such removed or withdrawn work shall be treated as a change in accordance with the clause of this contract entitled, “Changes”. A “material change” for the purpose of this clause is defined as cumulative changes during a fiscal year that result in a plus or minus 10% change to the Laboratory’s budget. To the extent that DOE assigns the administration of a contract to the Contractor, or removes (de-scopes) work, the Parties reserve the right to negotiate an equitable adjustment in the Contractor’s annual available performance fee. The negotiation of fee will be in accordance with the contract clause entitled, “Total Available Fee: Base Fee Amount and Performance Fee Amount”. The Parties will also negotiate appropriate adjustments to the Contractor’s Subcontracting Plan or any other applicable contract terms and conditions impacted by such withdrawal or addition of work scope to recognize the changes to the Contractor’s subcontracting base and goals.

CLAUSE H.6 - <u>CARE OF LABORATORY ANIMALS</u>

(a) Before undertaking performance of any contract involving the use of laboratory animals, the Contractor shall register with the Secretary of Agriculture of the United States in accordance with Section 6, Public Law 89-544, Laboratory Animal Welfare Act, August 24, 1966, as amended. The Contractor shall furnish evidence of such registration to the Contracting Officer.

(b) The Contractor shall acquire animals used in research and development programs from a dealer licensed by the Secretary of Agriculture, or from exempted sources in accordance with the Public Laws enumerated in paragraph (a) above.

(c) In the care of any animals used or intended for use in the performance of this contract, the Contractor shall comply with USDA regulations governing animal care and usage, as well as all other relevant local, State, and Federal regulations concerning animal care and usage. In addition, the Contractor will ensure that research will be conducted in a facility that either: (i) has a current National Institutes of Health (NIH) assurance number for animal care and usage, or (ii) is

currently accredited for animal care and usage by an appropriate organization such as the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) International, or (iii) has a DOE Assurance Plan Number.

CLAUSE H.7 - PRIVACY ACT RECORDS

In accordance with the Privacy Act of 1974, 5 U.S.C. 552a (Public Law 93-579) and implementing DOE Regulations (10 CFR 1008), the Contractor shall maintain the following "Systems of Records" on individuals in order to accomplish the United States Department of Energy functions:

(a) “Personnel Medical Records” (DOE-33) (Excepting Contractor Employees)

(b) "Personnel Radiation Exposure Records" (DOE-35) respecting Contractor employees, DOE employees, and visitors to the contract site.

(c) “Firearms Qualifications Records” (DOE-31) respecting laboratory guards authorized by DOE to carry firearms.

(d) “Employee and Visitor Access Control Records” (DOE-51).

(e) “Access Control Records of International Visits, Assignments, and Employment at DOE Facilities and Contractor Sites” (DOE-52).

(f) “Physical Fitness Test Records” (DOE-77)

The parenthetical Department of Energy number designations for each system of records refers to the official "System of Records" number published by the United States Department of Energy in the Federal Register pursuant to the Privacy Act.

If DOE requires the Contractor to design, develop, or maintain additional systems of Government-owned records on individuals to accomplish an agency function in accordance with the Privacy Act of 1974 and 10 CFR 1008, the Contracting Officer, or designee, shall so notify the Contractor, in writing, and such Privacy Act system shall be deemed added to the above list whether incorporated by formal contract modification or not. The Parties shall mutually agree to a schedule for implementation of the Privacy Act with respect to each such system.

CLAUSE H.8 - ADDITIONAL DEFINITIONS

(a) “CH” means the DOE Office of Science, Chicago Office.

(b) “Contractor” means “Brookhaven Science Associates, LLC”.

(c) The term “DOE” means the Department of Energy, “FERC” means the Federal Energy Regulatory Commission, and “NNSA” means the National Nuclear Security Administration.

(d) The term "DOE Directive" means DOE Policies, Orders, Notices, Manuals, Regulations, Technical Standards and related documents, and Guides, including for purposes of this contract those portions of DOE's Accounting and Procedures Handbook applicable to integrated Contractors, issued by DOE. The term does not include temporary written instructions by the Contracting Officer for the purpose of addressing short-term or urgent DOE concerns relating to health, safety, or the environment.

(e) “Head of Agency” means: (i) The Secretary; (ii) Deputy Secretary; (iii) Under Secretaries of the Department of Energy and (iv) the Chairman, Federal Energy Regulatory Commission.

(f) “Laboratory” means the Brookhaven National Laboratory (BNL) composed of Government-owned buildings and facilities together with the necessary utilities, now existing or hereafter to be acquired, constructed and equipped, most of which are or will be situated on a plot or plots of land (hereinafter referred to as the “Laboratory Site”) at Upton, Suffolk County, New York.

(g) The term “non-profit organization” means:

(1) a university or other institution of higher education,

(2) an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 as amended and exempt from taxation under section 501(a) and the Internal Revenue Code,

(3) any nonprofit scientific or educational organization qualified as a nonprofit by the laws of the State of its organization or incorporation, or

(4) a combination of qualifying entities organized for a nonprofit purpose (e.g., partnership, joint venture or limited liability company) each member of which meets the requirements of (1), (2), or (3) above.

(h) The term “Senior Procurement Executive” means for:

Department of Energy– Director, Office of Procurement and Assistance Management, (DOE);

National Nuclear Security Administration– Administrator for Nuclear Security, (NNSA);

Federal Energy Regulatory Commission – Chairman, FERC.

(i) The term "someone acting as the Laboratory Director" means the person appointed as Laboratory Director or a person specified, in writing, to have authority to act in the absence of the Laboratory Director; the Deputy Laboratory Director(s) acting in the absence of the Laboratory Director; or a person specified, in writing, to have authority to act in the absence of the Laboratory Director and Deputy Laboratory Director(s).

CLAUSE H.9 - SERVICE CONTRACT ACT OF 1965 (41 U.S.C. 351)

The Service Contract Act of 1965 is not applicable to this contract. However, in accordance with Clause I.148 – DEAR 970.5244-1 – CONTRACTOR PURCHASING SYSTEM, subcontracts awarded by the Contractor are subject to the Act to the same extent and under the same conditions as contracts awarded by DOE. The Contractor and the Contracting Officer shall develop a procedure whereby DOE will determine if the Service Contract Act is applicable to particular subcontracts. In cases determined to be covered by the Service Contract Act, the Contractor shall prepare SF-98 and 98A “Notice of Intention to Make a Service Contract” and forward it to the Contracting Officer or his designee to obtain a wage determination.

CLAUSE H.10 - WALSH-HEALEY PUBLIC CONTRACTS ACT

Except as otherwise may be approved, in writing, by the Contracting Officer, the Contractor agrees to insert the following provision in noncommercial Purchase Orders and subcontracts under this contract. "If this contract is for the manufacture or furnishing of materials, supplies, articles, or equipment in an amount which exceeds or may exceed $15,000.00 and is otherwise subject to the Walsh-Healey Public Contracts Act, as amended (41 U.S. Code 35-45), there are hereby incorporated by reference all representations and stipulations required by said Act and regulations issued thereunder by the Secretary of Labor, such representations and stipulations being subject to all applicable rulings and interpretations of the Secretary of Labor which are now or may hereafter be in effect."

CLAUSE H.11 - PROTECTION OF HUMAN SUBJECTS

Before undertaking the performance of any research involving the use of human subjects, the provisions of 10 CFR 745 and DOE Order 443.1, Protection of Human Subjects, must

be complied with. This requirement applies to research undertaken with DOE support, work for others, and collaborations with other institutions.

CLAUSE H.12 - SOURCE AND SPECIAL NUCLEAR MATERIAL

The Contractor shall comply with all applicable regulations and instructions of DOE relative to the control of and accounting for source and special nuclear material (as these terms are defined in applicable regulations). The Contractor shall make such reports and permit such inspections as DOE may require with reference to source and special nuclear materials. The Contractor shall take all reasonable steps and precautions to protect such materials against theft and misappropriations and to minimize all losses of such materials.

CLAUSE H. 13 - NO THIRD PARTY BENEFICIARIES

This Contract is for the exclusive benefit and convenience of the parties hereto. Nothing contained herein shall be construed as granting, vesting, creating or conferring any right of action or any other right or benefit upon past, present or future employees of the Contractor, or upon any other third party. This provision is not intended to limit or impair the rights which any person may have under applicable Federal statutes.

CLAUSE H.14 - STANDARDS OF CONTRACTOR PERFORMANCE EVALUATION

(a) Use of objective standards of performance, self assessment and performance evaluation:

(1) The Parties agree that the Contractor will utilize a comprehensive performance-based management approach for overall Laboratory management. The performance-based management approach will include the use of objective performance goals and indicators, agreed to in advance of each performance evaluation period, as standards against which the Contractor's overall performance of the scientific and technical mission obligations under this Contract will be assessed. The performance criteria will be limited in number and focus on results to drive improved performance and increased effective and efficient management of the Laboratory.

(2) The Parties agree to utilize the process described within Part III, Section J, Appendix B - “Performance Evaluation and Measurement Plan" (PEMP) to evaluate the performance of the Laboratory. The Parties further agree that the evaluation process described in Appendix B will be reviewed annually and modified, if necessary, by agreement of the Parties. If agreement of

the Parties cannot be reached, the Contracting Officer has the unilateral right to establish the evaluation process.

(3) The Parties agree that the Contractor will conduct an ongoing self-assessment process as the principal means of determining its compliance with the Contract Statement of Work and performance indicators identified within Part III, Section J, Appendix B. To assist the DOE in accomplishing the appropriate level of oversight, the Contractor shall work in partnership and cooperation with DOE and other external organization, as appropriate, in the self-assessment process. This work includes, but is not limited to, the development and execution of self-assessments and the utilization of the results for continuous improvement.

(4) The Contractor shall provide periodic updates, as requested by the DOE, on the performance against the Appendix B. The Contractor shall provide a formal status briefing at mid-year and year-end. Specific due dates and formats for the above-mentioned briefings shall be agreed to by the Laboratory Director and the DOE Site Office Manager.

(5) DOE, as a part of its responsibility for oversight, evaluation, and information exchange, shall provide an annual programmatic appraisal and other appraisals, and reviews of the Contractor's performance of authorized work in accordance with the terms and conditions of this Contract. The Office of Science, through the CH Office Manager and/or the Brookhaven Site Manager, has the lead responsibility for oversight of the programs and activities conducted by the Contractor.

(6) The Contracting Officer shall annually provide a written assessment of the Laboratory's performance to the Contractor, which shall be based upon the process described in Appendix B. The Parties acknowledge that the performance levels achieved against the specific performance objectives and measures shall be the primary, but not sole, criteria for determining the Contractor's final performance evaluation and rating. The Contractor's self-assessment results, to include results of any third party reviews which may have been conducted during the evaluation period, will be considered at all levels to assess and evaluate the Contractor's performance. The Contracting Officer may also consider other relevant information not specifically measured by the objectives and measures established within Appendix B that is deemed to have an impact (either positive or negative) on the Contractor's performance. Other relevant information that may be used by the Contracting Officer may include, but is not limited to, information gained from peer reviews, operational awareness, outside agency reviews (i.e., Office of Inspector General (OIG), Government Accountability Office (GAO), Defense Contract Audit Agency (DCAA), etc.)

conducted throughout the year, annual reviews (if needed), and DOE "for cause" reviews. With exception of "for cause" reviews, the DOE will conduct no more than one management and operations review per year. The on-site portion of such reviews will normally last no more than two weeks. Contractor success in meeting or exceeding performance expectations in a particular management or operations functional area may be rewarded with less frequent – or no – review of the functional area. Conversely, marginal performance or "for cause" situations may result in more frequent reviews.

(b) Standards of performance measure review:

(1) The Parties agree to review the PEMP elements (goals, objectives, performance indicators, and expected levels of performance) contained in Appendix B annually and to modify them upon the agreement of the Parties; provided, however, that if the Parties cannot reach agreement on all the goals, objectives, performance indicators, and expected levels of performance for the next period, the Contracting Officer shall have the unilateral right to establish reasonable new goals, objectives, performance indicators and expected levels of performance and/or to modify and/or delete existing goals, objectives, performance indicators, and expected levels of performance. It is expected that the goals, objectives, performance indicators, and expected levels of performance will be modified by the Contractor and the DOE as new areas of emphasis or priorities emerge which the Parties may agree warrant recognition in the performance-based integrated management approach.

(2) Failure to include an objective or performance indicator in the contract Appendix B does not eliminate the Contractor's obligation to comply with all applicable terms and conditions as set forth elsewhere within the contract.

(3) In the event the Contracting Officer decides to exercise the rights set forth in paragraphs (a)(6) or (b)(1) above, he/she will notify the Contractor, in writing, of the intended decision ten days prior to issuance.

(c) DOE Quality Assurance Surveillance Plan

DOE's Quality Assurance Surveillance Plan (QASP) for evaluating the Contractor's performance under the contract shall consist primarily of the PEMP as called for within the Part II, Section I (I.106 DEAR 970.5203-1). The QASP establishes the process DOE shall use to ensure that the Contractor has performed in accordance with the performance standards and expectations and acceptable quality levels for each task, describes how performance will be monitored and measured; describes

how the results will be evaluated; and states how the results will affect contract payment.

CLAUSE H.15 - CAP ON LIABILITY

(a) The Parties have agreed that the Contractor's liability, for certain obligations it has assumed under this contract, shall be limited as set forth in paragraph (b) below. These limitations or caps shall only apply to obligations the Contractor has assumed pursuant to the following clauses:

(1) The clause titled "Property", paragraph (f)(1)(i)(C);

(2) The clause titled "Insurance--Litigation and Claims", (h), with respect to prudent business judgment only; and

(3) The clause titled "Insurance--Litigation and Claims", (j)(2), except for punitive damages resulting from the willful misconduct or lack of good faith on the part of the Contractor's managerial personnel as defined in the clause titled, Property.

(b) The Contractor shall be liable each fiscal year for an amount not-to-exceed 1.25 times the maximum performance fee available for that fiscal year. The annual cap which will apply shall be based on the fiscal year in which the Contractor's act or failure to act was the proximate cause of the liability assumed by the Contractor. In the event the Contractor's act or failure to act overlaps more than one fiscal year, the limitation will be the annual limitation for the last fiscal year in which the Contractor's act or failure to act occurred. If the Contractor's cumulative obligations for a fiscal year equal the amount of the annual limitation of liability, the Contractor shall have no further responsibility for the costs of the liabilities it has assumed for that fiscal year pursuant to (a)(1) through (3) above.

CLAUSE H.16 - CLOSEOUT ASSISTANCE

The Contractor shall continue to provide assistance in closing out the Associated Universities, Inc. (AUI) contract for the management and operation of the Laboratory, including but not limited to the following items and services upon request and approval of the Contracting Officer:

(a) Office space on the site suitable to accommodate three people, and necessary Government-owned property including, but not limited to office furniture, computers, photocopiers, telecommunications including facsimile service, office supplies and similar items.

(b) Clerical and secretarial support to support close-out activities.

(c) Subject to any DOE restrictions, for purposes of all close-out activities including litigation, claims and administrative hearings arising under the AUI contract as of 12:01 a.m. on March 1, 1998 or thereafter, Contractor shall provide reasonable access to data, documents and records transferred in the Transfer Agreement between DOE, Contractor, and AUI effective February 28, 1998, that are necessary to close-out activities, and reasonable access to Laboratory employees. Access shall be on a non-interference basis and Contractor agrees to use its best efforts to accommodate any request of AUI made with the advance notice described in the Transfer Agreement.

(d) Subject to all security and safety laws, rules and regulations and internal DOE Orders or Directives applicable to the site, Contractor shall provide access to the site as is reasonable and necessary for close-out activities, including prosecution and defense of any litigation, claim, or hearings. Contractor shall immediately notify the Contracting Officer in the event requested access is to be denied, and shall comply with the final decision of the Contracting Officer respecting access.

## CLAUSE H.17 - NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND PRODUCTS - SENSE OF CONGRESS

It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made.

## CLAUSE H.18 - APPLICATION OF DOE CONTRACTOR REQUIREMENTS DOCUMENTS

(a) Performance. The Contractor will perform the work of this Contract in accordance with each of the Contractor Requirements Documents (CRDs) appended to this contract as “Appendix I,” until such time as the Contracting Officer approves the substitution of an alternative procedure, standard, system of oversight, or assessment mechanism resulting from the process described below.

(b) Laws and Regulations Excepted. The process described in this clause shall not affect the application of otherwise applicable laws and regulations of the United States, including regulations of the Department of Energy.

(c) Deviation Processes in Existing Orders. This clause does not preclude the use of deviation processes provided for in existing DOE directives.

(d) Proposal of Alternative. The Laboratory Director may, at any time during performance of this contract, propose an alternative procedure, standard, system of oversight, or assessment mechanism to the requirements in a listed CRD by submitting to the Contracting Officer a signed proposal describing the nature and scope of the alternative procedure, standard, system of oversight, or assessment mechanism (alternative), the anticipated benefits, including any cost benefits, to be realized by the Contractor in performance under the contract, and a schedule for implementation of the alternate. In addition, the Contractor shall include an assurance signed by the Laboratory Director that the revised alternative is an adequate and efficient means to meet the objectives underlying the CRD. Upon request, the Contractor shall promptly provide the Contracting Officer any additional information that will aid in evaluating the Contractor's proposal.

(e) Action of the Contracting Officer. The Contracting Officer shall within sixty (60) days:

(1) deny application of the proposed alternative;

(2) approve the proposed alternative, with conditions or revisions;

(3) approve the proposed alternative; or

(4) provide a date by which a decision will be made (not to exceed an additional 60 days).

(f) Implementation and Evaluation of Performance. Upon approval in accordance with (e)(2) or (e)(3) above, the Contractor shall implement the alternative. In the case of a conditional approval under (e)(2) above, the Contractor shall provide the Contracting Officer with an assurance statement, signed by the Laboratory Director, that the revised alternative is an adequate and efficient means to meet the objectives underlying the CRD. Additionally, the statement shall describe any changes to the schedule for implementation. The Contractor shall then implement the revised alternative. DOE will evaluate performance of the approved alternative from the date scheduled by the Contractor for implementation.

(g) Application of Additional or Modified CRDs. During performance of the contract, the Contracting Officer may notify the Contractor that he or she intends to unilaterally add CRDs not then listed in Appendix I or modifications to listed CRDs. Upon receipt of that notice, the Contractor, within thirty (30) calendar days, may, in accordance with paragraph (d) of this clause, propose an alternative procedure, standard, system of oversight, or assessment mechanism. The resolution of such a proposal shall be in accordance with the process set out in paragraphs (e) and (f) of this clause. If an alternative proposal is not submitted by the Contractor within the thirty (30) calendar day period, or, if made, is denied by the Contracting Officer under paragraph (e), the Contracting Officer may unilaterally add the CRD or modification to Appendix I. The

Contractor and the Contractor Officer shall identify and, if appropriate, agree to any changes to other contract terms and conditions, including cost and schedule, resulting from the addition of the CRD or modification.

(h) Deficiency and Remedial Action. If, during performance of this contract, the Contracting Officer determines that an alternative procedure, standard, system of oversight, or assessment mechanism adopted through the operation of this clause is not satisfactory, the Contracting Officer may, in his or her sole discretion, determine that corrective action is necessary and require the Contractor to prepare a corrective action plan for the Contracting Officer's approval. If the Contracting Officer is not satisfied with the corrective action taken, the Contracting Officer may direct corrective action to remedy the deficiency, including, if appropriate, the reinstatement of the CRD.

## CLAUSE H.19 - EXTERNAL REGULATION

The Parties commit to full cooperation with regard to complying with any statutory mandate regarding external regulation of Laboratory facilities, whether by the Nuclear Regulatory Commission, the Occupational Safety and Health Administration, and/or State and local entities with regulatory oversight authority, and including but not limited to the conduct of pilot programs simulating external regulation, and the application for materials, facilities, or other licenses by or on behalf of the DOE.

## CLAUSE H.20 - GUARANTEE OF PERFORMANCE

In view of the fact that the Contractor has been organized by Battelle Memorial Institute and The Research Foundation of State University of New York (BMI and RFSUNY) for the sole purpose of performing the work hereunder, and in view of the fact that BMI and RFSUNY are the sole members of the Contractor, this contract extension is subject to the guarantees of performance previously executed by both BMI and RFSUNY.

## CLAUSE H.21 – RESPONSIBLE CORPORATE OFFICIAL

The Government may contact, as necessary, the single responsible corporate official identified below, who is at a level above the Contractor separate entity performing the Contract, and who is accountable for the Contractor regarding Contractor performance issues:

| | |
|---|---|
| Name: | Dr. Ronald D. Townsend |
| Position: | Executive Vice President |
| Company/Organization: | Battelle Memorial Institute |
| Address: | 505 King Avenue |

Columbus, OH 43201
Phone: 614-424-5200
Facsimile: 614-458-5200
Email: townsendr@battelle.org

Should the responsible parent corporate official change during the period of the Contract, the Contractor shall promptly notify the Contracting Officer in writing of the change.

CLAUSE H.22 - EMPLOYEE COMPENSATION: PAY AND BENEFITS (REVISED SEP 2013)

(a) Total Compensation System

The Contractor shall develop, implement and maintain formal policies, practices and procedures to be used in the administration of its compensation system consistent with FAR 31.205-6 and DEAR 970.3102-05-6; “Compensation for Personal Services” (“Total Compensation System"). DOE-approved standards, if any, shall be applied to the Total Compensation System. The Contractor’s Total Compensation System shall be fully documented, consistently applied, and acceptable to the Contracting Officer. Periodic appraisals of contractor performance with respect to the Contractors’ Total Compensation System will be conducted.

(1) The description of the Contractor Employee Compensation Program should include the following components;

a. Philosophy and strategy for all pay delivery programs.
b. System for establishing a job worth hierarchy.
c. Method for relating internal job worth hierarchy to external market.
d. System that links individual and/or group performance to compensation decisions.
e. Method for planning and monitoring the expenditure of funds.
f. Method for ensuring compliance with applicable laws and regulations.
g. System for communicating the programs to employees.
h. System for internal controls and self-assessment.
i. System to ensure that reimbursement of compensation, including stipends, for employees who are on joint appointments with a parent or other organization shall be on a pro-rated basis.

(b) Reports and Information

The Contractor shall provide the Contracting Officer with the following reports and information with respect to pay and benefits provided under this Contract:

(1) An Annual Contractor Salary-Wage Increase Expenditure Report to include, at a minimum, breakouts for merit, promotion, variable pay, special adjustments, and structure movements for each pay structure showing actual against approved amounts.

(2) A list of the top five most highly compensated executives as defined in FAR 31.205-6(p)(2)(ii) and their total cash compensation at the time of Contract award, and at the time of any subsequent change to their total cash compensation. This should be the same information provided to the System for Award Management (SAM) per FAR 52.204-10.

(3) The Compensation and Benefits Report no later than March 1 of each year.

(c) Pay and Benefit Programs

The Contractor shall maintain pay and benefit programs for its Employees; provided, however, that employees scheduled to work fewer than 20 hours per week receive only those benefits required by law. Employees are eligible for benefits, subject to the terms, conditions, and limitations of each benefit program.

(1) Cash Compensation

(A) The Contractor shall submit the following to the Contracting Officer for a determination of cost allowability for reimbursement under the Contract:

(i) Any proposed major compensation program design changes prior to implementation.

(ii) An Annual Compensation Increase Plan (CIP). The Compensation Increase Plan (CIP) for a Contractor that has received Contracting Officer approval for having an Employee Compensation Program with the components identified under (a)(1) above should include the following components and data:

(1) Market analysis summary, including a comparison of average pay to market average pay.

(2) Merit Fund requests for each Employee Group (i.e., S&E, Administrative, Technical, Exempt/Non-Exempt)

(3) Aging factors used for escalating survey data

(4) Projection of escalation in the market

(5) Information to support proposed structure adjustments, if any.

(6) Analysis to support special adjustments or promotions that exceed the 1% Promotion/Adjustment fund authorized under Section III of Appendix A.

(7) Discussion of recruitment/retention issues (e.g., turnover and hiring) relevant to the proposed increase amounts

(8) A discussion of the impact of budget and business constraints on the CIP amount.

(9) Information to support a request for variable pay beyond that authorized under Section X of Appendix A.

(10)

(a) Reimbursed salary levels are used to establish the annual CIP fund.

(b) The proposed plan totals shall be expressed as a percentage of the payroll for the end of the previous plan year.

(c) All pay actions granted under the compensation increase plan are fully charged when they occur regardless of time of year in which the action transpires and whether the employee terminates before year end.

(d) Specific Employee or Payroll groups (e.g., exempt, nonexempt) for which CIP amounts are intended shall be defined by mutual agreement between the contractor and the Contracting Officer.

(e) The Contracting Officer may adjust the CIP amount after approval based on major changes in factors that significantly affect the plan amount (for example, in the event of a major reduction in force or significant ramp-up).

(f) The Contractor may make minor shifts of merit funds between employment categories (e.g., Scientist/Engineer, Admin, Exempt, Non-Exempt) after approval of the CIP in order to meet the compensation requirements of its organization, subject to the following guidelines:

- Minor shift is defined as up to 10% of the approved merit funds from one employment category to another (e.g, 10% of Admin merit funds shifted to Technician employment category)
- Total merit increase expenditures will be limited to the total merit fund approved.
- Contractors will notify the Contracting Officer that funds have been shifted.

(iii) Individual compensation actions for the top contractor official (e.g., laboratory director/plant manager or equivalent) and key personnel not included in the CIP. For those key personnel included in the CIP, DOE will approve salaries upon the initial contract award and when key personnel are replaced during the life of the contract. DOE will have access to all individual salary reimbursements. This access is provided for transparency; DOE will not approve individual salary actions (except as previously indicated).

(B) The Contracting Officer's approval of individual compensation actions will be required only for the top contractor official (e.g., laboratory director/plant manager or equivalent) and key personnel as indicated in (c)(1)(A)(iii) above. The base salary reimbursement level for the top contractor official establishes the maximum allowable salary reimbursement under the contract. Unusual circumstances may require a deviation for an individual on a case-by-case basis. Any such deviations must be approved by the Contracting Officer.

(C) Severance Pay is not payable to an employee under this Contract if the employee:

(i) Voluntarily separates, resigns or retires from employment, (unless associated with a workforce restructuring action in accordance with Section XII of Appendix A)

(ii) Is offered employment with a successor/replacement contractor,

(iii) Is offered employment with a parent or affiliated company, or

(iv) Is discharged for cause.

(D) Service Credit for purposes of determining severance pay does not include any period of prior service for which severance pay has been previously paid through a DOE cost-reimbursement contract.

(d) Pension and Other Benefit Programs

(1) No presumption of allowability will exist when the Contractor implements a new benefit plan or makes changes to existing benefit plans for Employees or until the Contracting Officer makes a determination of cost allowability for reimbursement for new or changed benefit plans.

(2) Cost reimbursement for Employee pension and other benefit programs sponsored by the Contractor will be based on the Contracting Officer's approval of Contractor actions pursuant to an approved "Employee Benefits Value Study" and an "Employee Benefits Cost Survey Comparison" as described below.

(3) Unless otherwise stated, or as directed by the Contracting Officer, the Contractor shall submit the studies required in paragraphs (A) and (B) below. The studies shall be used by the Contractor in calculating the cost of benefits under existing benefit plans. An Employee Benefits Value (Ben-Val) Study Method using no less than 15 comparator organizations and an Employee Benefits Cost Survey comparison Method shall be used in this evaluation to establish an appropriate comparison method. In addition, the Contractor shall submit updated studies to the Contracting Officer for approval prior to the adoption of any change to a pension or other benefit plan.

(A) The Ben-Val, every two years for each benefit tier (e.g., group of employees receiving a benefit package based on date of hire), which is an actuarial study of the relative value (RV) of the benefits programs offered by the Contractor to Employees measured against the RV of benefit programs offered by comparator companies approved by the Contracting Officer. To the extent that the value studies do not address post retirement benefits other than pensions, the Contractor shall provide a separate cost and plan design data comparison for the post retirement benefits other than pensions using external benchmarks derived from nationally recognized and Contracting Officer approved survey sources and,

(B) An Employee Benefits Cost Study Comparison, annually for each benefit tier that analyzes the Contractor's employee benefits cost for Employees on a per capita basis per full time equivalent employee and as a percent of payroll and compares it with the cost reported by the U.S. Department of Labor's Bureau of Labor

Statistics or other Contracting Officer approved broad based national survey.

(4) When the net benefit value exceeds the comparator group by more than five percent, the Contractor shall submit a corrective action plan to the Contracting Officer for approval, unless waived in writing by the Contracting Officer.

(5) When the average total benefit per capita cost or total benefit cost as a percent of payroll exceeds the comparator group by more than five percent, the Contractor shall submit an analysis of the specific plan costs that are above the per capita cost range or total benefit cost as a percent of payroll and a corrective action plan to achieve conformance with a Contracting Officer directed per capita cost range or total benefit cost as a percent of payroll, unless waived in writing by the Contracting Officer.

(6) Within two years of Contracting Officer approval of the Contractor's corrective action plan, the Contractor shall align employee benefit programs with the benefit value and per capita cost range or percent of payroll as approved by the Contracting Officer.

(7) The Contractor may not terminate any benefit plan during the term of the Contract without the prior approval of the Contracting Officer in writing.

(8) Cost reimbursement for post-retirement benefits other than pensions (PRBs) is contingent on DOE approved service eligibility requirements for PRB that shall be based on a minimum period of continuous employment service not less than 5 years under a DOE cost reimbursement contract(s) immediately prior to retirement. Unless required by Federal or State law, advance funding of PRBs is not allowable.

(9) Each contractor sponsoring a Defined Benefit pension plan and/or postretirement benefit plan will participate in the annual plan management process which includes written responses to a questionnaire regarding plan management, providing forecasted estimates of future reimbursements in connection with the plan and participating in a conference call to discuss the contractor submission.

(10) Each contractor will respond to quarterly data calls issued through ibenefits, or its successor system.

(e) Establishment and Maintenance of Pension Plans for which DOE Reimburses Costs

(1) Employees working for the Contractor shall only accrue credit for service under this Contract after the date of Contract award.

(2) Except for Commingled Plans in existence as of the effective date of the contract, any pension plan maintained by the Contractor for which DOE reimburses costs, shall be maintained as a separate pension plan distinct from any other pension plan that provides credit for service not performed under a DOE cost-reimbursement contract. When deemed appropriate by the Contracting Officer, Commingled Plans shall be converted to separate plans at the time of new contract award or the extension of a contract.

(f) Basic Requirements

The Contractor shall adhere to the requirements set forth below in the establishment and administration of pension plans that are reimbursed by DOE pursuant to cost reimbursement contracts for management and operation of DOE facilities and pursuant to other cost reimbursement facilities contracts. Pension Plans include Defined Benefit and Defined Contribution plans.

(1) The Contractor shall become a sponsor of the existing pension and other benefit plans (or comparable successor plans), including other post-retirement benefit (PRB) plans, as applicable, with responsibility for management and administration of the plans. The Contractor shall be responsible for maintaining the qualified status of those plans consistent with the requirements of ERISA and the Internal Revenue Code (IRC). The Contractor shall carry over the length of service credit and leave balances accrued as of the date of the Contractor's assumption of Contract performance.

(2) DOE approval is required prior to implementing any change to a pension plan covering prime cost reimbursement contracts for management and operation of DOE facilities and other contracts when designated. Changes shall be in accordance with and pursuant to the terms and conditions of the contract.

(3) Each contractor pension plan shall be subjected to a limited-scope audit annually that satisfies the requirements of ERISA section 103, except that every third year the contractor must conduct a full-scope audit satisfying ERISA section 103. Alternatively, the contractor may conduct

a full-scope audit satisfying ERISA section 103 annually. In all cases, the Contractor must submit the audit results to the contracting officer. In years in which a limited scope audit is conducted, the contractor must provide the contracting officer with a copy of the qualified trustee or custodian's certification regarding the investment information that provides the basis for the plan sponsor to satisfy reporting requirements under ERISA section 104.

(4) The Contractor shall comply with the requirements of ERISA if applicable to the pension plan and any other applicable laws.

(g) Reporting Requirements for Designated Contracts

The following reports shall be submitted to DOE as soon as possible after the last day of the plan year by the contractor responsible for each designated pension plan funded by DOE but no later than the dates specified below:

(1) Actuarial Valuation Reports. The annual actuarial valuation report for each DOE-reimbursed pension plan and when a pension plan is commingled, the contractor shall submit separate reports for DOE's portion and the plan total by the due date for filing IRS Form 5500.

(2) Forms 5500. Copies of IRS Forms 5500 with Schedules for each DOE-funded pension plan, no later than that submitted to the IRS.

(3) Forms 5300. Copies of all forms in the 5300 series submitted to the IRS that document the establishment, amendment, termination, spin-off, or merger of a plan submitted to the IRS.

(h) Changes to Pension Plans

At least sixty (60) days prior to the adoption of any changes to a pension plan, the Contractor shall submit the information required below, as applicable, to the Contracting Officer for approval or disapproval and a determination as to whether the costs are deemed allowable pursuant to FAR 31.205-6, as supplemented by DEAR 970.3102-05-6.

(1) For proposed changes to pension plans and pension plan funding, the Contractor shall provide the following to the Contracting Officer:

(A) a copy of the current plan document (as conformed to show all prior plan amendments), with the proposed new amendment indicated in redline/strikeout;

(B) except in circumstances where the Contracting Officer indicates that it is unnecessary, a legal explanation of the proposed changes from the counsel used by the plan for purposes of compliance with all legal requirements applicable to private sector defined benefit pension plans;
(C) the Summary Plan Description; and,
(D) any such additional information as requested by the Contracting Officer.

(2) Contractors shall submit new benefit plans and changes to plan design or funding methodology with justification to the Contracting Officer for approval. The justification must:

(A) demonstrate the effect of the plan changes on the contract net benefit value or per capita benefit costs,
(B) provide the dollar estimate of savings or costs, and
(C) provide the basis of determining the estimated savings or cost.

(i) Terminating Plans

(1) DOE contractors shall not terminate any pension plan (Commingled or site specific) without requesting Departmental approval at least 60 days prior to the scheduled date of plan termination.

(j) Special Programs

Contractors must advise DOE and receive prior approval for each early-out program, window benefit, disability program, plan-loan feature, employee contribution refund, asset reversion, or incidental benefit.

(k) Definitions

Commingled Plans. Cover employees from the contractor's private operations and its DOE contract work.

Current Liability. The sum of all plan liabilities to employees and their beneficiaries. Current liability includes only benefits accrued to the date of valuation. This liability is commonly expressed as a present value.

Defined Benefit Pension Plan. Provides a specific benefit at retirement that is determined pursuant to the formula in the pension plan document.

Defined Contribution Pension Plan. Provides benefits to each participant based on the amount held in the participant’s account. Funds in the

account may be comprised of employer contributions, employee contributions, investment returns on behalf of that plan participant and/or other amounts credited to the participant's account.

Pension Fund. The portfolio of investments and cash provided by employer and employee contributions and investment returns. A pension fund exists to defray pension plan benefit outlays and (at the option of the plan sponsor) the administrative expenses of the plan.

Separate Plan. Must satisfy IRC Sec. 414(l) definition of a single plan, designate assets for the exclusive benefit of employees under DOE contract, exist under a separate plan document (having its own DOL plan number) that is distinct from corporate plan documents and identify the contractor as the plan sponsor.

## CLAUSE H.23 - POST CONTRACT RESPONSIBILITIES FOR PENSION AND OTHER BENEFIT PLANS

(a) If this Contract expires or terminates and DOE has awarded a contract under which the new contractor becomes a sponsor and assumes responsibility for management and administration of the pension or other benefit plans covering active or retired contractor employees with respect to service at BNL (collectively, the "Plans"), the Contractor shall cooperate and transfer to the new contractor its responsibility for sponsorship, management and administration of the Plans consistent with direction from the Contracting Officer. If a Commingled plan is involved, the contractor shall:

(1) spin off the DOE portion of any Commingled Plan used to cover employees working at the DOE facility into a separate plan. The new plan will normally provide benefits similar to those provided by the commingled plan and shall carry with it the DOE assets on an accrual basis market value, including DOE assets that have accrued in excess of DOE liabilities.

(2) bargain in good faith with DOE or the successor contractor to determine the assumptions and methods for establishing the liabilities involved in a spinoff. DOE and the contractor(s) shall establish an effective date of spinoff. On or before the same day as the contractor notifies the IRS of the spinoff or plan termination, all plan assets assigned to a spun-off or terminating plan shall be placed in a low-risk liability matching portfolio until the successor trustee, or an insurance company, is able to assume stewardship of those assets.

(b) If this Contract expires or terminates and DOE has not awarded a contract to a new contractor under which the new contractor becomes a sponsor and assumes responsibility for management and administration of the Plans, or if the Contracting Officer determines that the scope of work under the Contract has been completed (any one such event may be deemed by the Contracting Officer to be "Contract Completion" for purposes of this clause), whichever is earlier, and notwithstanding any other obligations and requirements concerning expiration or termination under any other clause of this Contract, the following actions shall occur regarding the Contractor's obligations regarding the Plans at the time of Contract Completion:

(1) Subject to subparagraph (2) below, and notwithstanding any legal obligations independent of the Contract the Contractor may have regarding responsibilities for sponsorship, management, and administration of the Plans, the Contractor shall remain the sponsor of the Plans, in accordance with applicable legal requirements.

(2) The parties shall exercise their best efforts to reach agreement on the Contractor's responsibilities for sponsorship, management and administration of the Plans prior to or at the time of Contract Completion. However, if the parties have not reached agreement on the Contractor's responsibilities for sponsorship, management and administration of the Plans prior to or at the time of Contract Completion, unless and until such agreement is reached, the Contractor shall comply with written direction from the Contracting Officer regarding the Contractor's responsibilities for continued provision of pension and welfare benefits under the Plans, including but not limited to continued sponsorship of the Plans, in accordance with applicable legal requirements. To the extent that the Contractor incurs costs in implementing direction from the Contracting Officer, the Contractor's costs will be reimbursed pursuant to applicable Contract provisions.

## CLAUSE H.24 - CONTRACTOR ACCEPTANCE OF NOTICES OF VIOLATIONS OR ALLEGED VIOLATIONS, FINES, AND PENALTIES

(a) The Contractor shall accept, in its own name, service of notices of violations or alleged violations (NOVs/NOAVs) issued by Federal or State regulators to the Contractor resulting from the Contractor's performance of work under this contract, without regard to liability. The allowability of the costs associated with fines and penalties shall be subject to the other provisions of this contract.

(b) The Contractor shall notify DOE promptly when it receives service from the regulators of NOVs/NOAVs and fines and penalties.

CLAUSE H.25 - ALLOCATION OF RESPONSIBILITIES FOR CONTRACTOR ENVIRONMENTAL COMPLIANCE ACTIVITIES

(a) The Parties commit to full cooperation with regard to acquiring any necessary permits or licenses required by environmental, safety and health (ES&H) laws, codes, ordinances, and regulations of the United States, states or territories, municipalities or other political subdivisions, and which are applicable to the performance of work under this contract. It is recognized that certain ES&H permits will be obtained jointly as co-permittees, and other permits will be obtained by either party as the sole permittee. The Contractor, unless otherwise directed by the Contracting Officer, shall procure all necessary non-ES&H permits or licenses.

(b) This clause allocates the responsibilities of DOE and the Contractor, referred to collectively as the "Parties", for implementing the environmental requirements at facilities within the scope of the contract. In this Clause, the term "environmental requirements" means requirements imposed by applicable Federal, State, and local environmental laws and regulations, including, without limitation, statutes, ordinances, regulations, court orders, consent decrees, administrative orders, or compliance agreements, including the Interagency Agreement (Administrative Docket No.: II-CERCLA-FFA-00202, Spring 1992), consent orders, permits, and licenses.

(c) (i) Liability and responsibility for civil fines or penalties arising from or related to violations of environmental requirements shall be borne by the party causing the violation irrespective of the fact that the cognizant regulatory authority may assess any such fine or penalty upon either party or both Parties without regard to the allocation of responsibility or liability under this contract. This contractual allocation of liability for any such fine or penalty is effective regardless of which party signs permit applications, manifests, reports, or other required documents, is a permittee, or is the named subject of an enforcement action or assessment of a fine or penalty. The allowability of the costs associated with fines and penalties assessed against the Contractor shall be subject to the other provisions of this contract.

(ii) In the event that the Contractor is deemed to be the primary party causing the violation, and the costs of fines and penalties proposed by the regulatory agency to be assessed against the Government (or the Government and Contractor jointly) are determined by the Government to be presumptively unallowable if allocated against the Contractor, then the Contractor shall be afforded the opportunity to participate in negotiations to settle or mitigate the penalties with the regulatory authority. If the Contractor is the sole party of the enforcement action, the Contractor shall

take the lead role in the negotiations and the Government shall participate and have final authority to approve or reject any settlement involving costs charged to the contract.

(d) DOE agrees that if bonds, insurance, or administrative fees are required as a condition for permits obtained by the Contractor under this contract, and the Contractor has been directed by the Contracting Officer to obtain such permits after the Contractor has notified the Contracting Officer of the costs of complying with such conditions, such costs shall be allowable. In the event such costs are determined by DOE to be excessive or unreasonable, DOE shall provide the regulatory agency with the acceptable form of financial responsibility. Under no circumstances shall the Contractor be required to provide any corporate resources or corporate guarantees to satisfy such regulatory requirements.

CLAUSE H.26 - WORKERS' COMPENSATION INSURANCE

(a) Contractors, other than those whose workers' compensation coverage is provided through a state funded arrangement or a corporate benefits program, shall submit to the Contracting Officer for approval all new compensation policies and all initial proposals for self-insurance (contractors shall provide copies to the Contracting Officer of all renewal policies for workers compensation).

(b) Workers compensation loss income benefit payments, when supplemented by other programs (such as salary continuation, short-term disability) are to be administered so that total benefit payments from all sources shall not exceed 100 percent of the employee's net pay.

(c) Contractors approve all workers compensation settlement claims up to $100,000. Settlement claims above the $100,000 require Contracting Officer approval.

(d) The Contractor shall obtain approval from the CO before making any significant change to its workers compensation coverage and shall furnish reports as may be required from time to time by the CO.

CLAUSE H.27 - LABOR RELATIONS

(a) The Contractor shall respect the right of employees to organize and to form, join, or assist labor organizations, to bargain collectively through their chosen labor representatives, to engage in other concerted activities for the purpose

of collective bargaining or other mutual aid or protection, and to refrain from any or all of these activities.

(b) The Contractor shall meet with the Contracting Officer or designee(s) for the purpose of reviewing the Contractor's bargaining objectives prior to negotiations of any collective bargaining agreement or revision thereto and shall consult with and obtain the approval of the Contracting Officer regarding appropriate economic bargaining parameters, including those for pension and medical benefit costs, prior to the Contractor entering into the collective bargaining process. During the collective bargaining process, the Contractor shall notify the Contracting Officer before submitting or agreeing to any collective bargaining proposal which can be calculated to affect allowable costs under this Contract or which could involve other items of special interest to the Government. During the collective bargaining process, the Contractor shall obtain the approval of the Contracting Officer before proposing or agreeing to changes in any pension or other benefit plans.

(c) The Contractor will seek to maintain harmonious bargaining relationships that reflect a judicious expenditure of public funds, equitable resolution of disputes and effective and efficient bargaining relationships consistent with the requirements of FAR, Subpart 22.1 and DEAR, Subpart 970.2201 and all applicable Federal and State Labor Relations laws.

(d) The Contractor will notify the Contracting Officer or designee in a timely fashion of all labor relations issues and matters of local interest including organizing initiatives, unfair labor practice, work stoppages, picketing, labor arbitrations, and settlement agreements and will furnish such additional information as may be required from time to time by the Contracting Officer.

## CLAUSE H.28 – NON-FEDERAL AGREEMENTS FOR COMMERCIALIZING TECHNOLOGY (PILOT)

This Clause implements a PILOT program for a new technology transfer mechanism, Agreements for Commercialization of Technology (ACT). In accordance with the requirements specified in this Clause, the Contractor may conduct privately-sponsored research at the Contractor's risk for third parties. In performing ACT work, the Contractor may use staff and other resources associated with this Contract for the purposes of conducting research and furthering the technology transfer mission of the Department, on the condition that such use does not interfere with Contractor's activities conducted as authorized by other parts of this Contract. The resources that may be used include Government-owned or leased facilities, equipment, or other property that is either in Contractor's custody or available to the Contractor under this Contract (unless specifically excluded by the Contracting Officer). For Contractor's activities conducted under

authority of this Clause, the Contractor shall provide full-cost recovery, assume indemnification and liability as provided in Paragraph 9, below, and may assume other risks normally borne by private parties sponsoring research at the Laboratory. In exchange for accepting such risks, or for other private consideration provided by the Contractor, the Contractor is authorized to negotiate separate agreements (ACT agreements) with the sponsoring third parties. Under ACT agreements, the Contractor may charge those parties additional compensation beyond the direct costs of the work at the Laboratory. Any statement of work involving Federal funds or falling within the scope of a Federally-funded contract or award (other than this Contract) shall not be eligible for an ACT transaction.

DOE and the Contractor recognize that implementation of ACT under this Clause is a PILOT program authorized by the Department and that during the PILOT either party may suggest changes to the program based on the experiences gained. Furthermore, the Contractor recognizes that the Department may decide to end the PILOT at any time and that termination of the PILOT by the Department will be in accordance with Paragraph 12, below.

1. *Authority to Perform work under this Clause*. Pursuant to the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.) and other applicable authorities, the Contractor may perform work for non-federal entities, in accordance with the requirements of this Clause.

2. *Contractor's Implementation*. The Contractor must draft, implement, and maintain formal policies, practices, and procedures in accordance with this Clause, which must be approved by the Contracting Officer, and such approval shall not be unreasonably withheld.

3. *Conditions for Participation in ACT.* The Contractor:

    a. Must not perform ACT activities that would place it in direct competition with the private sector;

    b. May only conduct work under this Clause if the work does not interfere with or adversely affect projects and programs the Contractor conducts on behalf of the Government under this Contract, and complies with FFRDC requirements applicable to the Facility. If the Government determines that an activity conducted under this Clause interferes with the Department's work under the Contract, or that termination/stay/suspension of work under an ACT agreement is in the best interest of the Government, the Contractor must stop the interfering ACT work immediately to the extent necessary to resolve the interference. At any time, the Contracting Officer may require the use of specified Government-owned or leased property and facilities for the exclusive use of the Facility's mission by providing a written notice

excluding said property from the Contractor's activities under this Clause. Any cost incurred as a result of Contracting Officer decisions identified in this subparagraph shall be borne by the Contractor. The Contracting Officer shall provide to the Contractor in writing its decision, identifying the issues and reasons for the decisions. The Contractor shall be provided with a reasonable opportunity to address and resolve the issues identified by the Contracting Officer;

c. Except as otherwise excluded in this Clause, must perform all ACT activities in accordance with the standards, policies, and procedures that apply to performance under this Contract, including but not limited to environmental, safety and health, security, safeguards and classification procedures, and human and animal research regulations;

d. Contractor must utilize its standard Laboratory subcontracting procedures for any work subcontracted by the Laboratory under the Contract. Otherwise, the Contractor may subcontract ACT work scope that is not performed under the Contract using commercially reasonable subcontracting practices and terms. Costs for performing such subcontracting activities outside the scope of the Contract are not reimbursable under the Contract;

e. Must make available to DOE a summary of project information for each active ACT project, consisting of: total estimated costs; project title and description; project point of contact; and, estimated start and completion dates;

f. Is responsible for addressing the following items in ACT agreements as appropriate, as they are in non-federal WFO agreements: disposition of property acquired under the agreement, export control, notice of intellectual property infringement, and a statement that the Government and/or Contractor shall have the right to perform similar services in the Statement of Work for other Parties as otherwise authorized by this Contract subject to applicable data restrictions;

g. Must include a standard legal disclaimer notice on all publications generated under ACT activities. Each DOE contractor has its own pre-approved publications statement, and this should be used; and

h. Must insert the following disclaimer in each agreement under ACT, which must be conspicuous (e.g. bold type, all capital letters, or large font) in all Agreements under ACT so as to meet the standards of due notice.

**DISCLAIMER**

THIS AGREEMENT IS SOLELY BETWEEN BROOKHAVEN SCIENCE ASSOCIATES, LLC ACTING IN A PRIVATE CAPACITY AND [THE OTHER IDENTIFIED PARTY(IES)]. THE UNITED STATES GOVERNMENT IS **NOT** A PARTY TO THIS AGREEMENT, THIS AGREEMENT DOES NOT CREATE ANY OBLIGATIONS OR LIABILITY ON BEHALF OF THE GOVERNMENT AND THE GOVERNMENT MAKES NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITIONS OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS AGREEMENT, OR THE OWNERSHIP, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR RESULTING PRODUCT; THAT THE GOODS, SERVICES, MATERIALS, PRODUCTS, PROCESSES, INFORMATION, OR DATA TO BE FURNISHED HEREUNDER WILL ACCOMPLISH INTENDED RESULTS OR ARE SAFE FOR ANY PURPOSE INCLUDING THE INTENDED PURPOSE; OR THAT ANY OF THE ABOVE WILL NOT INTERFERE WITH PRIVATELY OWNED RIGHTS OF OTHERS. THE GOVERNMENT SHALL NOT BE LIABLE FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ATTRIBUTED TO SUCH RESEARCH OR RESULTING PRODUCT, INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DELIVERED UNDER THIS AGREEMENT. THIS DISCLAIMER DOES NOT AFFECT ANY RIGHTS THE GOVERNMENT MAY HAVE AGAINST THIRD PARTIES ARISING FROM WORK CONDUCTED IN CONNECTION WITH THIS AGREEMENT.

*4. Contracting Authority.*

a. Subject to DOE approval as described in this Paragraph, the Contractor is hereby authorized to negotiate terms and conditions between the Contractor and third parties when entering into ACT agreements. The Contractor will have no authority to bind the Government in any way with such terms and conditions. The Government will have no obligation to the Contractor due to such terms and conditions.

b. The Contractor shall submit an ACT proposal package (Package) to the Contracting Officer for approval prior to beginning work under an ACT Agreement.

i. A complete Package will include at a minimum: the identity of the parties to the ACT Agreement; the principal place of performance; any foreign ownership or control of the ACT Agreement parties; a

Statement of Work; an estimate of costs incurred under the Contract; an anticipated schedule; identification of key Government equipment and facilities that will be used under the ACT Agreement; a list of expected deliverables; identification of the IP Lead and proposed selection of IP rights, as defined in DOE Class Waiver W(C)-2011-013; a signed certification by the private party(ies) that the Contractor offered the option to use CRADA and WFO alternatives (see Paragraph 7a) sufficiently that the private parties are aware of the relative costs and other differences between the ACT agreement and the CRADA and WFO alternatives; source of funds, including a statement that no Federal funds, including pass-through funds received as a subcontractor or partner, are being utilized to fund the agreement; applicable ES&H and NEPA documentation; a statement of consideration, summarizing the risk and/or consideration offered the private participants in exchange for charging beyond full cost recovery or for other compensation provided by the participants; and when multiple third parties are parties to the ACT Agreement, or otherwise requested by the Contracting Officer, an IP Management Plan that sets forth the proposed disposition of IP rights, and income and royalty sharing, among the parties to an ACT agreement.

ii. If the Contractor, Contractor's parent, member, subsidiary, or other entity in which the Contractor, Contractor's parent, member or subsidiary has an equity interest, is a party to the ACT Agreement, the Contractor shall include as necessary a project-specific addendum to the Master OCI Plan in the Package to address special circumstances not fully anticipated in the prior approved Master OCI Plan (see Paragraph 7).

iii. If the ACT Agreement includes a foreign entity as a party or the statement of work includes the use of human subjects, animal subjects, classified or sensitive subject matter or describes a work scope involving high risks or hazards including environmental issues, the Contractor shall include additional information as necessary or as requested by the Contracting Officer.

c. The Contracting Officer shall use reasonable best efforts to review each complete Package submitted by the Contractor under subparagraph b. of this Paragraph within ten (10) business days of receiving the Package and provide the Contractor with approval or non-approval of the Package. The review of the complete Package by the Contracting Officer shall include a determination that the proposed work: (1) is consistent with or complementary to DOE missions and the missions of the Facility; (2) will not adversely impact programs assigned to the Facility; (3) will not place the

Facility in direct competition with the domestic private sector; and (4) will not create a detrimental future burden on DOE resources.

d. Except as conditionally allowed under subparagraph i. below, the Contracting Officer must approve the Package before the Contractor may begin work under the proposed ACT Agreement. If the Contracting Officer rejects the Package then the Contracting Officer must provide said rejection to the Contractor in writing including the reasons for the rejection. Upon receipt of the Contracting Officer's written rejection, the Contractor agrees to not further pursue the work described in the package or incur additional costs under the Contract for the work described in the Package.

   i. The Contractor may request a preliminary determination that the proposed scope of work is consistent with the Facility mission and the Contracting Officer will use his/her best efforts to provide such a determination within three (3) business days. Upon such a determination from the Contracting Officer the Contractor may begin work under the ACT Agreement at the Contractor's risk pending final approval of the complete Package. The Contractor must submit a complete Package, as identified in subparagraph 4b above, within (10) business days of the preliminary determination. All costs associated with the performance of work under a preliminary determination are the responsibility of the Contractor, as no Federal funds will be used to fund any work conducted under this Clause.

   ii. If the Contractor, Contractor's parent, member, subsidiary, or other entity in which the Contractor, Contractor's parent, member or subsidiary has an equity interest is a party sponsoring work in connection with the ACT agreement, work may not commence until approval of the complete Package by the Contracting Officer

5. *Advance Payment for ACT Projects.* The Contractor shall be responsible for providing adequate advance payment for ACT work conducted under this Clause consistent with procedures defined in the Department's Financial Management Handbook. The Contractor shall be solely responsible for collecting payments from third parties for any work conducted under this Clause and such collections shall be independent of providing advance payment. For such payments and for any costs, obligations, or liabilities arising due to the Contractor's work under this Clause, the Contractor is entirely at risk and the Government shall have no risk.

6. *Costs.* All direct costs associated with Contractor's work conducted under this Clause shall be directly charged to separate and identifiable accounts in accordance with the requirements of the Department's Financial Management Handbook. An allocable portion of indirect costs normally applied to equivalent

work under this Contract shall also be applied to work conducted under this Clause in accordance with the requirements of the Financial Management Handbook. As required by the Financial Management Handbook, changes to the Handbook will be incorporated into this Clause by a unilateral administrative modification to the contract.

a. Work conducted under this Clause shall be excluded from Contract award fee calculations and such fee shall not be allocable to work conducted under this Clause.

b. No Federal funds will be used to fund work conducted under this Clause.

7. *Organizational Conflict of Interest.* Contractor shall conduct work under this Clause in a manner that minimizes the appearance of conflicts of interest and avoids or neutralizes actual conflicts of interest with Contractor's functions under this Contract. Accordingly, Contractor shall develop a Master Organizational Conflict of Interest Mitigation Plan (OCI Plan). The Master OCI Plan should address OCI issues that arise as a result of the Contractor taking a financial interest in ACT projects, especially in those cases where the Contractor retains rights in ACT IP. Such Master OCI Plan shall be provided to the Contracting Officer for review and approval as soon as practicable after execution of the Contract modification incorporating this Clause into the Contact. In addition to those elements expressly stated in the Master OCI Plan, the Department may condition any ACT transaction on such other mitigating conditions it determines are appropriate. The Master OCI Plan shall, at a minimum, include elements that address the following:

*a. Full Disclosure*. Before work can begin under an ACT transaction, all parties to ACT agreements must sign a DOE-approved certification that they have been fully informed about the availability of WFO agreements and CRADAs in addition to ACT. The certification at a minimum shall briefly describe WFO agreements, CRADAs and ACT, and will include the relative disposition of IP rights and the costs (including any additional compensation to the Contractor under ACT) under each agreement for the scope of work being proposed for the Laboratory.

*b. Priority of Work*. The Contractor shall not give work under ACT any special attention or priority over other work at the Laboratory. Work under ACT shall be approved by the Contracting Officer and assigned the same priority relative to other work at the Laboratory that it would normally have if performed under a non-Federal WFO agreement. The Contracting Officer has discretion to determine the agency's priority of work, considering the Contractor's input.

c. *Participation by Contractor-related Entity*: Where the Contractor, Contractor's parent, member, subsidiary, or other entity in which the Contractor, Contractor's parent, member or subsidiary has an equity interest, is a party to the ACT Agreement, the Contractor shall include as necessary an addendum to the Master OCI Plan to address special circumstances not fully anticipated in the Master OCI Plan.

d. *Right of Inquiry for ACT IP Designation.* DOE Patent Counsel may inquire into Contractor's designation of any invention or data as arising under an ACT transaction. Contractor is responsible for curing any defect identified in such inquiry, and if Contractor cannot adequately justify the designation or cure the defect, then the parties to the ACT agreement may receive modified rights in the IP to the degree necessary to resolve the issues identified by the inquiry.

8. *Intellectual Property.* Disposition of intellectual property (IP) arising from work conducted under this Clause shall be governed by Class Waiver W(C)-2011-013 (ACT Class Waiver) which is incorporated herein by reference.

   a. All Contractor ACT inventions shall be reported to DOE pursuant to the requirements of the DEAR 970.5227-10 clause of this Contract.

   b. In reporting ACT inventions, the Contractor shall identify the ACT agreement under which the invention was made and specify the rights reserved by the Government pursuant to the ACT Class Waiver.

   c. All technical data identified by the ACT client as ACT Protected Information shall also be marked to identify the ACT agreement under which the data was generated.

   d. The Contractor shall ensure that all rights and obligations concerning ACT IP, including the appropriate IP provisions authorized in the ACT Class Waiver, are clearly provided in ACT agreements, and that all parties granted any rights in ACT IP are informed of the terms of the waived rights, including the rights reserved by the Government.

   e. Where the Contractor receives ownership or license rights to ACT IP, the Contractor may elect to commercialize the ACT IP consistent with the Technology Transfer Mission clause of this Contract.

   f. As an alternative to subparagraph e., the Contractor may elect to retain private ownership of the ACT IP and commercialize the IP using its private funds, where no costs for developing, patenting, and marketing will be allowable under this Contract. The Contractor will share royalties collected on ACT IP with

inventors in accordance with paragraph (h) of the Technology Transfer Mission clause of this Contract.

g. Where terms and conditions governing Data and Subject Inventions under this Contract are inconsistent with the terms of the ACT Class Waiver, the ACT Class Waiver will control. Except as provided in this paragraph 8, licensing of ACT Subject Inventions the Contractor retains in its private capacity will not be subject to the Technology Transfer Mission clause of this Contract.

9. *Contractor Liability and Indemnification.*

a. General Indemnity.

(i) The Contractor agrees to indemnify and hold harmless the Government, the Department, and persons acting on their behalf from all liability, including costs and expenses incurred, to any person, including the ACT Participants, for injury to or death of persons or other living things or injury to or destruction of property arising out of the performance of an ACT transaction by the Government, the Department, Contractor, or persons acting on their behalf, or arising out of the use of the services performed, materials supplied, or information given hereunder by any person including the Contractor, and not directly resulting from the fault or negligence of the Government, the Department, or persons (other than the Contractor) acting on their behalf.

(ii) Subject to Contracting Officer approval, the General Indemnity set forth in (i) above may be modified or waived where: (1) ACT Participants are not providing material or equipment to the Contractor to be used in the performance of the Statement of Work under the ACT transaction; and (2) ACT Participants are not sending their employees to the Facility as part of the Statement of Work; and (3) the specific activities performed under the ACT transaction are normally performed by the DOE Contractor at the Facility.

(iii) Notwithstanding the provisions in a (i) and a (ii) above, the Contractor shall indemnify and hold harmless the Government, the Department, and persons acting on their behalf for loss, damage, or destruction of Government property resulting from the fault or negligence of the Contractor. Such indemnification shall be subject to a liability limit of $2,000,000 (two million dollars) per year, or such greater liability limit approved by the cognizant DOE/NNSA Program for the Facility. Above the applicable liability limit, Contractor's responsibility to the

Government for such loss, damage or destruction shall be as set forth in the “Property” clause of this Contract.

b. Intellectual Property Indemnity. The Contractor shall indemnify the Government, its agents, and employees against liability, including costs, for infringement of any United States patent, copyright, or other intellectual property arising out of any acts required or directed to be performed under the Statement of Work under an ACT transaction to the extent such acts are not already performed at the Facility. Such indemnity shall not apply to a claimed infringement that is settled without the consent of the Contractor unless required by a court of competent jurisdiction.

c. Product Liability Indemnity.

(i) Except for any liability resulting from any negligent acts or omissions of the Government, the Contractor agrees to indemnify the Government for all damages, costs, and expenses, including attorney's fees, arising from personal injury or property damage occurring as a result of the making, using, or selling of a product, process, or service by or on behalf of the ACT Participants or the Contractor, their assignees, or licensees, which was derived from the work performed under ACT transactions. In respect to this clause, neither the Government nor the Contractor shall be considered assignees or licensees as a result of reserved Government rights in ACT IP. The indemnity set forth in this paragraph shall apply only if the Contractor shall have been informed as soon and as completely as practical by the Government of the action alleging such claim and shall have been given an opportunity, to the maximum extent afforded by applicable laws, rules, or regulations, to participate in and control its defense, and the Government shall have provided all reasonably available information and reasonable assistance requested by the Contractor. No settlement for which the Contractor would be responsible shall be made without the Contractor's consent, unless required by final decree of a court of competent jurisdiction.

(ii) Where Contractor assigns the responsibility for indemnifying the Government under subsection c (i) above to other ACT Participants, DOE agrees to seek such indemnification from the Contractor only to the extent not satisfied after reasonable efforts to obtain indemnification from those other ACT Participants.

d. Claims and liabilities resulting from Contractor’s performance of work under an ACT transaction authorized pursuant to this Clause shall not be subject to the Contract clause entitled "Insurance - Litigation and Claims." In no event shall the Contractor be reimbursed under the Contract for liabilities (and expenses

incidental to such liabilities, including litigation costs, counsel fees, and judgment and settlements) incurred as a result of third party claims related to the Contractor's performance under this clause.

e. Contractor shall not include any guarantee or requirement that will obligate the Government to pay or incur any costs or create any liability on behalf of the Government in any ACT agreement or commitment the Contractor executes under authority of this Clause. The Contractor agrees if the Contractor does include such a guarantee or requirement, it will have no effect on the Government, that is, the Contractor will be responsible for any costs or liability due to such a guarantee or requirement.

10. *ACT Records.* All records associated with Contractor's activities conducted under authority of this Clause shall be treated as Contractor-owned records under the provisions of the Access to and Ownership of Records clause of this Contract.

11. *Reports and Abstracts*. The Contractor shall produce the following deliverables for each ACT Agreement:

a. An initial abstract suitable for public release at the time the ACT transaction is approved by DOE;

b. A non-proprietary final report, upon completion or termination of the Agreement, to include a list of subject inventions; and

c. Where pursuant to the ACT Class Waiver, the Government reserves the right to use generated data after the particular project expires, computer software in source and executable object code format as defined within the statement of work or elsewhere within the Agreement.

12. *Termination of ACT Authority.* The PILOT Program implemented by this Clause will terminate three years from the date of the Contract modification adding this Clause to the Contract, unless renewed by the Contracting Officer. The Government may provide the Contractor with written notice to terminate Contractor’s authority to conduct work under this Clause at any time. If the Contractor’s authority to conduct work under this Clause has expired or been terminated, the Contractor may be permitted, subject to any other provisions of this Clause, to complete any work that was DOE approved work at the time Contractor’s authority to conduct work under this Clause was terminated by the Government.

13. *Successor Contractor.*

a. To minimize the potential for negative Government programmatic impact and to facilitate seamless transition of work to a successor contractor of the Facility, ACT Agreement(s) executed under this Clause and any contractual instruments associated therewith may be novated to the successor contractor with the mutual consent of the Contractor, the successor contractor, and the parties to the affected ACT Agreement(s). If the ACT Agreement(s) cannot be novated, then the Contractor as a private sponsor shall be permitted to enter into a Non-Federal Work for Others agreement with the successor contractor that will enable completion of the statement of work. Such agreements shall be entered into pursuant to DOE WFO policies. DOE shall make good faith efforts to incorporate the terms of the applicable ACT Agreement.

b. The Contractor may retain private ownership of any individual piece of ACT IP that it obtained during the term of the Contract if the Contractor demonstrates:

   i. the ACT IP was successfully commercialized or deployed in the commercial marketplace using private funds; or

   ii. the Contractor expended at least $20,000 (USD) of private funds for patenting, marketing, licensing, or maturing the ACT IP.

c. If the Contractor has not satisfied the criteria of Subparagraph b. to this Paragraph, then the Contractor and Contracting Officer, with input from the DOE Patent Counsel providing oversight to the Facility shall, prior to expiration or termination of the Contract, enter into negotiations to determine an equitable distribution of rights in the affected ACT IP. Such negotiations shall consider the equities of the parties with respect to each piece of intellectual property including, at a minimum, the private expenditures made by the Contractor for patenting, marketing, licensing, and maturing the ACT IP up to the date of Contract expiration or termination; which party is best positioned to appropriately commercialize the ACT IP; and any other equities that may apply under the circumstances.

14. *Minimum Reporting Requirements for ACT Activities.* During the ACT PILOT, the Contractor shall maintain records of its activities related to ACT in a manner and to the extent satisfactory to DOE and specifically including, but not limited to the number of ACT agreements, the amount of funds reimbursed to DOE for work under ACT, the number of private sector entities engaged through ACT that had not previously engaged the Laboratory and the number that had not previously engaged any DOE/NNSA laboratory, the amount of funds reimbursed to DOE by newly engaged entities, the number of parties and types of entities engaged in each individual ACT agreement, and the number of invention disclosures, licenses and start-ups arising from ACT. The Contractor shall obtain from each entity engaged in ACT the entity's reason(s) for selecting ACT for laboratory

engagement. Also during the PILOT, the Contractor shall report the above-identified data semiannually to DOE and in such a format which will serve to adequately inform DOE of the Contractor's activities under ACT while protecting any data not subject to disclosure under this Contract. Such records shall be made available in accordance with the clauses of this Contract pertaining to inspection, audit and examination of records.

## CLAUSE H.29 - ADDITIONAL LABOR REQUIREMENTS

The Contractor shall conduct payroll and job-site audits and conduct investigations of complaints as authorized by DOE on all Davis Bacon activity, including any subcontracts, as may be necessary to determine compliance with the Davis-Bacon Act. Where violations are found, the Laboratory shall report them to DOE Contracting Officer. The Contracting Officer may require that the Contractor assist in the determination of the amount of restitution and withholding of funds from a subcontractor so that sufficient funds are withheld to provide restitution for back wages due for workers inappropriately classified and paid, fringe benefits owed, overtime payments due, and liquidated damages assessed.

The Contractor shall notify the Contracting Officer of any complaints and significant labor standards violations whether caused by the Contractor or subcontractors. The Laboratory shall assist DOE and or/the Department of Labor in the investigation of any alleged violations or disputes involving labor standards. The Contractor shall furnish a Davis-Bacon Semi-Annual Enforcement Report to DOE by April 21 and October 21 each year.

## CLAUSE H.30- DOE MENTOR-PROTÉGÉ PROGRAM

The Department of Energy has established a Mentor-Protégé Program to encourage its prime contractors to assist small businesses, firms certified under section 8(a) of the Small Business Act by SBA, other small disadvantaged businesses, women-owned small businesses, Historically Black Colleges and Universities and Minority Institutions, other minority institutions of higher learning and small business concerns owned and controlled by service disabled veterans in enhancing their business abilities. Consistent with the provisions set forth in DEAR 919.70, the Contractor shall Mentor at least one active Protégé company at all times during the performance of this contract. Mentor and Protégé firms will develop and submit “lessons learned” evaluations to DOE at the conclusion of the contract.

## CLAUSE H.31 - OTHER PATENT RELATED MATTERS

(a) Transfer of Patent Rights to a Successor Contractor

As consideration for the Contractor's commitment to expend private monies in its privately-funded technology transfer (PFTT) effort under this Contract, including expenses related to patenting, marketing, licensing and developing Subject Inventions, the Parties agree that at the termination or expiration of this Contract, the following terms and conditions shall apply to Subject Inventions that were elected to be pursued under the Contractor's privately-funded technology transfer program, and to the licenses and royalties generated therefrom:

(1) In the event Contractor has in place an executed license, assignment or other commercialization agreement to a Subject Invention (hereinafter "agreement") at the time it receives notice from DOE that the Department expects to terminate or allow this Contract to expire, the distribution of gross income from royalties, equity, or any other consideration received or to be received under such agreement shall remain as prior to such notice of Contract termination or expiration and shall continue for the duration of such agreement. Administration of agreements related to such Subject Inventions shall remain with the Contractor. If the Contractor has not substantially complied with each of the commitments under this Contract relating to such Subject Inventions at the time of such notice, upon request, title to such Subject Inventions shall be transferred to the Successor Contractor, or such other entity designated by the Government, at no cost to the Government.

(2) In the event Contractor has not executed an agreement (as defined in paragraph (1) above) to a Subject Invention, upon request, title to such Subject Invention shall be transferred to the Successor Contractor, or to such other entity designated by the Government, unless Contractor can demonstrate that it has expended at least thirty-five thousand dollars ($35,000) of private monies in its privately-funded technology transfer program toward commercialization of such Subject Invention, including patenting costs, and the Contractor has fulfilled all of the commitments under the intellectual property provisions of this Contract relating to such Subject Inventions. In the event Contractor retains title to a Subject Invention under this paragraph, the distribution of royalties, fees, equity or other consideration from an agreement shall be as set forth in paragraph (d) below.

(3) In the event Contractor retains title to Subject Inventions under paragraphs (1) or (2) above, and executes an agreement (as defined in paragraph (1) above) to such Subject Inventions after the termination or expiration of this Contract, the distribution of royalties, fees, equity or other consideration from such agreement shall be as set forth in paragraph (d) below.

(4) The Contractor and the Government shall enter into negotiations prior to such termination or expiration with respect to retention of the title to Subject Inventions. Such negotiations shall consider the equities of the Parties with respect to each Subject Invention and shall take into consideration the presence of private investment, DOE's need for continued operation of the Facility, potential commercial use, assumption of patent related liabilities, effective technology transfer, and the need to market the technology.

(5) For any Subject Invention to which the Contractor maintains title or administration of an agreement under paragraphs (a)(1)-(2) above, the Contractor agrees that, to the extent it is able to do so in view of prior licenses or assignments, it will negotiate in good faith to enable the Successor Contractor's technology transfer partners to practice such subject invention under any CRADAs, Work For Others agreements, licenses or other appropriate agreements, in order to fulfill the missions and programs of the Facility, including the technology transfer mission. It is the intention of the Contractor to enable the Successor Contractor to continue operation of the Facility and fulfill the missions of the Laboratory. In any event, the Successor Contractor retains the nonexclusive royalty-free right to practice the Subject Invention on behalf of the U.S. Government.

(6) The provisions of paragraphs (a)(1), (2), (3), (4), and (5) above survive expiration or termination of the Contract.

(b) Costs

(1) Except as otherwise specified in the clause of this Contract entitled, "Technology Transfer Mission," as allowable costs for conducting activities pursuant to provisions of that clause, no costs are allowable as direct or indirect costs for the preparation, filing, or prosecution of patent applications or the payment of maintenance fees or licensing and marketing costs after the Contractor elects to pursue commercialization of a Subject Invention under its privately-funded technology transfer program pursuant to paragraph (g) below.

(2) If an extension of time for election of a Subject Invention for privately-funded technology transfer is approved in accordance with paragraph (g) below, Contractor shall reimburse the Laboratory and the Department of Energy for costs in an amount equal to their costs incurred with respect to such Subject Invention during the time period of the extension as reasonable reimbursement for such costs under the circumstances. Such allowable costs specifically include, among other things, all patent costs which are incurred under the Contract for all Subject Inventions elected to

be treated under privately-funded technology transfer, regardless of when such costs are incurred.

(c) Liability of the Government

(1) All costs, including litigation costs, associated with and attributed to Contractor's privately-funded technology transfer program are unallowable regardless of the stage of technology development or background intellectual property existing at the time the Subject Invention is chosen for management with the privately-funded technology transfer program, and notwithstanding the inclusion of publicly funded intellectual property in the Contractor's privately-funded technology transfer program activities.

(2) The Contractor shall not include in any license agreement or assignment with respect to any Subject Invention under this clause any guarantee or requirement that would obligate the Government to pay any costs or create any liability on behalf of the Government.

(3) The Contractor shall include in all licensing agreements or any assignment of title with respect to any Subject Invention under this clause the following clauses unless otherwise approved or directed by the Contracting Officer following consultation with DOE Patent Counsel:

(i) "This agreement is entered into by Brookhaven Science Associates, LLC (BSA) in its private capacity. It is understood and agreed that the U.S. Government is not a party to this agreement and in no manner whatsoever shall be liable for nor assume any responsibility or obligation for any claim, cost or damages arising out of or resulting from the agreement or the subject matter licensed/assigned."

(ii) "Nothing in this Agreement shall be deemed to be a representation or warranty by BSA or the U.S. Government of the validity of the patents or the accuracy, safety, or usefulness for any purpose, of any TECHNICAL INFORMATION, techniques, or practices at any time made available by BSA. Neither the U.S. Government nor BSA nor any member company of BSA shall have any liability whatsoever to LICENSEE or any other person for or on account of any injury, loss, or damage of any kind or nature sustained by, or any damage assessed or asserted against, or any other liability incurred by or imposed upon LICENSEE or any other person, arising out of or in connection with or resulting from:

(A) The production, use, or sale of any apparatus or product, or the practice of the INVENTIONS;

(B) The use of any TECHNICAL INFORMATION, techniques, or practices disclosed by BSA; or

(C) Any advertising or other promotion activities with respect to any of the foregoing, and LICENSEE shall hold the U.S. Government, BSA, and any member company of BSA harmless in the event the U.S. Government, BSA, or any member company of BSA is held liable.

BSA represents that it has the right to grant all of the rights granted herein, except as to such rights as the Government of the United States of America may have or may assert."

(d) Privately-Funded Technology Transfer - Distribution of Gross Income

In the event the Contractor engages in a privately-funded technology transfer program under the clause of this Contract entitled "Patent Rights - Management and Operating Contracts, Nonprofit Organization or Small Business Firm Contractor" such that private funds are utilized for technology transfer after the Contractor elects to pursue privately-funded commercialization of the Subject Invention or private funds are utilized for technology transfer of copyrighted material where DOE has approved assertion of copyright by the Contractor and has approved the pursuing of commercialization under the privately funded technology transfer program, gross income from such privately-funded technology transfer program shall be distributed as follows:

(1) Basic Distribution

Forty percent (40%) of gross income shall be returned and used at the Facility for scientific research, development and education consistent with the research and development objectives of the Facility. The remainder of such gross income may be used as the Contractor deems appropriate consistent with 35 USC 200 *et seq*. The amount of gross income to be returned and used at the Facility shall be calculated on an annual basis consistent with the Contractor's accepted accounting practices.

(2) Adjustment of Distribution

In the event the annual gross income under the Contractor's privately-funded technology transfer program is in excess of three million dollars ($3 million) during any one year, the percentage of gross income to be returned and used at the Facility for that year shall be as follows:

| | |
|---|---|
| In excess of $3 million, up to $5 million | 40% of up to $3 million of gross income; plus 35% of gross income in excess of $3 million, up to $5 million |
| In excess of $5 million, up to $7 million | 40% of up to $3 million of gross income; plus 35% of gross income in excess of $3 million, up to $5 million; plus 30% of gross income in excess of $5 million, up to $7 million |
| In excess of $7 million | 40% of up to $3 million of gross income; plus 35% of gross income in excess of $3 million, up to $5 million; plus 30% of gross income in excess of $5 million, up to $7 million; plus 25% of gross income in excess of $7 million |

(3) The foregoing distribution shall also apply to equity interests received from third parties pursuant to paragraph (e).

(4) If this distribution of income structure is determined by the Parties to be detrimental to attracting investors and growing the laboratory's technology commercialization program, the parties agree to negotiate a new structure more favorable to the investment community at the time such determination is made.

(e) Equity Plan

It is the intent of the Government and the Contractor that the Contractor shall, in its discretion, take reasonable and prudent actions from both a commercial and stewardship of the Facility's technology transfer perspective related to the ownership of equity received from third parties under this Contract. The Contractor shall submit to the Contracting Officer a plan which shall set forth principles for the contractor's acquisition, retention and disposition of equity received from third parties as consideration for licenses or assignments granted to such third party. Such plan shall consider, at a minimum,

(1) With respect to PFTT, the manner in which the Contractor shall acquire such equity in a third party and a description of how the Contractor shall apportion capital contributions to such third party between the related value of Contractor contributions and the value of contributions representing a license under a Subject Invention;

(2) in the case of the Contractor's publicly-funded technology transfer program, how the Contractor shall recoup licensing, marketing and development costs (up-front or close out);

(3) the manner in which the Contractor shall hold such equity, given that the Government has an undivided interest in that portion of such equity representing the value of contributions resulting from a license to such Subject Invention;

(4) the manner in which the Contractor shall dispose of such equity, giving due consideration to the potential for a conflict of interest between the interests of the Government and the Contractor, and

(5) the manner in which Contractor's inventors are compensated.

(f) The Contractor shall indicate whether a Subject Invention will be pursued under its government-funded technology transfer program or its privately-funded technology transfer program within nine months after the Subject Invention is reported to the Contractor, unless an extension is otherwise agreed to in writing by the DOE Patent Counsel. Subject to the Contracting Officer approving the implementing procedures contemplated by paragraph (i), only Subject Inventions reported to the contractor on or after the effective date of the contract modification that incorporates this clause into Prime Contract No. DE-AC02-98CH10886 will be eligible for commercialization pursuant to the privately-funded technology transfer program, except as otherwise approved in writing on a case-by-case basis by DOE Patent Counsel.

(g) In its privately-funded technology transfer program, the Contractor shall be bound by the U.S. Competitiveness and Fairness of Opportunity as set forth herein.

(h) Contractor's privately-funded technology transfer program shall be conducted so as to avoid interference with or adverse effects on Contractor's performance of other activities authorized by the Contract, including its government-funded technology transfer program which shall have the right of first refusal for the exclusive inclusion of Subject Inventions in the government-funded technology transfer program.

(i) (1) The Contractor shall establish procedures implementing its privately-funded technology transfer program including the Contractor's criteria for selecting technologies for the privately-funded technology transfer program. Such implementing procedures shall be provided to the Contracting Office for review and approval within ninety (90) days after execution of the contract modification authorizing privately-funded technology transfer. The Contracting Officer shall have ninety (90) days thereafter to approve or

require specific changes to such procedures. The Contractor shall not implement its privately-funded technology transfer program until such approval is granted, and

(2) In the case of the Contractor's privately-funded technology transfer program, the Contractor shall certify that all licensing, marketing and development costs incurred after the Contractor elects to treat a subject invention as PFTT have been and will be paid solely from the Contractor's privately-funded technology transfer program.

(j) To the extent the Department determines that the Laboratory's mission or function is being negatively impacted, DOE retains the right to require the Contractor's privately-funded technology transfer program to be administered solely by a non-laboratory employee(s) who shall not utilize any laboratory facilities without the written approval of the Contracting Officer which may be revoked by DOE at any time, with or without cause, at no cost to the Government.

CLAUSE H.32 – Lobbying Restriction (Consolidated and Further Continuing Appropriations Act, 2013)

The Contractor agrees that none of the funds obligated on this award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. § 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

CLAUSE H.33 - INTELLECTUAL AND SCIENTIFIC FREEDOM

(a) The Parties recognize the importance of fostering an atmosphere at the Laboratory conducive to scientific inquiry and the development of new knowledge and creative and innovative ideas related to national interests.

(b) The Parties further recognize that the free exchange of ideas among scientists and engineers at the Laboratory and colleagues at universities, colleges, and other laboratories or scientific facilities is vital to the success of scientific, engineering, and technical work performed by Laboratory personnel.

(c) The Parties also recognize that protecting proprietary and national security interest, information and assets is a paramount concern and duty of the Laboratory and its personnel.

(d) In order to further the goals of the Laboratory and the national interest, as well as protect proprietary information and national security, it is agreed by the Parties that the scientific and engineering personnel at the Laboratory shall be accorded the rights of publication or other dissemination of research, and participation in open public debate and in scientific, educational, or professional meetings and conferences, subject to limitations included in technology transfer agreements, work for other agreements, and such other limitations as may be required by the terms of this contract. Nothing in this clause is intended to interfere with the obligations of the Parties, including all Laboratory personnel, to protect proprietary, classified, Privacy Act, or other sensitive information as provided for or required by law, regulation, Department of Energy Directive or Order, or elsewhere in this contract.

CLAUSE H.34 – Conference Spending Consolidated and Further Continuing Appropriations Act, 2013 for Management and Operating Contracts (May, 2013)

The Contractor agrees that:

(a) No cost associated with conference activities shall be allowable under this contract unless the conference is directly and programmatically related to the purpose of the contract and the specific work authorization/order/task directing the conference activities.

(b) The Contractor shall follow the most current guidance issued by DOE concerning reporting of conference related activities and spending. The Contractor shall request, obtain approval (if $100,000 or greater), and report all conference activities through the Conference Management Reporting and Approval Tool on the DOE iPortal at https://iportal.doe.gov.

(c) While a conference may be approved by DOE based on estimated cost and attendance to ensure federal funds are used for purposes that are appropriate, cost effective, and important to the core mission, only the Contracting Officer has authority to determine if the costs incurred by the Contractor are allowable, allocable, and reasonable.

(d) The Contractor and its employees, its sponsors, hosts and attendees shall aggressively seek to limit costs associated with a conference. Conference expenditures shall be kept to the minimum necessary to carry out the Department's mission and consistent with applicable portions of the Federal Travel Regulation, and 48 CFR Chapter 1, the Federal Acquisition Regulation.

(e) The Contractor shall ensure its conference attendees conduct themselves with the highest level of professionalism and ethical behavior consistent with that expected of DOE employees.

(f) The Contracting Officer will ensure conference activities are included in the Contractor's annual audit plan.

CLAUSE H.35 – INFORMATION TECHNOLOGY ACQUISITIONS

All information technology acquisitions shall include the appropriate information technology security policies and requirements, including use of common security configurations available from the National Institute of Standards and Technology's website at http://checklists.nist.gov commensurate with the mission of the contract and conducive to the research and development efforts of the laboratory. This requirement shall be included in all subcontracts which are for information technology acquisitions; and the Laboratory CIO shall annually certify to the DOE Site Office Contracting Officer that this requirement is being incorporated into information technology acquisitions."

CLAUSE H.36 - WORK AUTHORIZATION

(a) Work programs shall be developed by the Contractor and approved by DOE in accordance with applicable DOE directives, and shall constitute work to be performed under this Contract during the pertinent periods involved. Such work programs may include program and project performance objectives and milestones. The Contractor shall consult with DOE, as necessary, during the process of developing work programs. Subject to the other provisions of this contract, changes in the agreed work program, not constituting major changes, may be made by the Contractor when it appears to the Contractor, to be in the best interest of the scientific and technical objectives of the agreed work program to do so. It is understood that the nature of the research and development work under this Contract is of a specialized character not readily reducible to production schedules. In view of these circumstances, it is agreed that the research and development work is performed on a best effort basis.

(b) Due to the critical character of the work from the standpoint of national significance, it is understood by the Parties hereto that very close collaboration will be required between the Contractor and DOE with respect to direction, emphasis, trends and adequacy of the total program.

(c) (1) The annual work program and budget are principal devices used by DOE in program development, integration, execution, and cost estimating. To make the work program and budget most effective in assuring comprehensive coverage of DOE missions, it is the responsibility of DOE to

keep the operators of DOE's laboratories continually advised of DOE's overall program goals, scientific and technological problems, and its current long range objectives. In light of such information, the Contractor will propose possible new objectives and present preliminary work programs in the area of its competence which, from its point of view, will either strengthen the overall DOE program or provide additional support in areas which, in the Contractor's judgment, are being inadequately exploited, or initiate new areas of investigation which appear of potential importance.

(2) It is the responsibility of DOE to formulate overall program budgets, taking into consideration the proposals submitted by the Contractor, consistent with funds appropriated by the Congress and all its other program needs.

(3) The Contractor shall prepare a final work program and budget consistent with DOE's overall program budget. Upon DOE approval, it is the Contractor's responsibility to conduct its work program within limits established by these approvals unless and until they are modified by DOE.

(d) In accordance with the basic considerations stated in paragraph (c) above, the Contractor and DOE will utilize the Program Budget procedures on a Government fiscal year basis for the establishment of the Laboratory Program Budget. Procedures for the presentation of work programs and cost estimates shall be jointly developed. In order to meet the requirements of Government budgetary practice, the Parties agree:

(1) As early as possible in each calendar year, DOE shall supply the Contractor with the dollar amounts for the Laboratory contained in the President's Budget, with Program assumptions and guidance which the Contractor will be expected to consider in the development of its program and budget, and with all changes to existing budget and accounting policies and procedures to be used in the current budget preparation.

(2) Prior to April 1 (or such other date as may be agreed upon) the Contractor shall submit to DOE for approval a comprehensive work program for the next two fiscal years, together with a description of the current work program, and the Contractor shall submit a budget estimate for the next two fiscal years, together with a revised budget estimate for the current fiscal year.

(3) As soon as possible after October 1 of each year, DOE shall issue Work Authorizations and an Approved Funding Program to the Contractor for the current fiscal year.

(e) (1) DOE approved work programs, program performance expectations and

milestones as appropriate, and budget estimates shall be reflected in Work Authorizations/Annual Program Letters/Activity Data Sheets/Program Baseline Summaries and Approved Funding Programs. These documents will be issued to the Contractor as soon as possible after funds become available. If, in preparing Work Authorizations/Annual Program Letters/Activity Data Sheets/Program Baseline Summaries and Approved Funding Programs, it is determined that changes are needed in the work program and budget estimates submitted by the Contractor, DOE and the Contractor shall agree upon the changes in the work before final issuance of these documents, provided, however, that nothing herein shall preclude DOE from directing a change in the work pursuant to the clause of the Contract entitled “Changes”.

(2) The Work Authorizations/Annual Program Letters, and with respect to any work that may be funded by the Office of Environmental Management, Program Baseline Summaries and Approved Funding Programs, specify the funds available for work under the Contract for the fiscal year and, in addition, may establish limitations on costs to be incurred for individual portions of the work. The Contractor shall comply with such limitations and shall promptly notify the Contracting Officer, in writing, whenever it becomes apparent that there is likely to be an overrun with respect to any specific limitation in the Work Authorization/Annual Program Letters, and with respect to any work that may be funded by the Office of Environmental Management, Program Baseline Summaries, and Approved Funding Programs. Funds made available for work under the contract, and set forth in Approved Funding Programs or other funding documents, shall not be reduced except by written agreement of the Parties.

(3) Additional programs and projects to be conducted at the Laboratory within the scope of the Contract may be established by agreement between the DOE and the Contractor.

(f) A Contract modification shall be issued to the Contractor on or before September 30 of each year (or such other date as may be agreed upon) to provide additional funds, and further Contract modifications may be issued or entered into from time to time to provide appropriate modifications in the total amount of funds made available under the Contract. DOE agrees to use its best efforts to provide stable funding in support of the Contract work and it is DOE's intention that there shall be so provided at all times sufficient funds to support the work program at the level authorized by DOE.

(g) During the course of the work, DOE shall review the work program and its costs based upon information submitted by the Contractor and may, after consultation with the Contractor, revise the Work Authorizations and Approved Funding

Programs established by DOE under paragraph (e) above. The Contractor shall make any necessary revisions to the documents cited in this clause consistent with DOE direction.

(h) It is the intent of the Contractor and DOE to agree from time to time upon long-term work programs covering certain portions of the work to be performed under this contract.

(i) The Contractor shall maintain current cost information adequate to reflect the cost of performing the work under this Contract at all times while the work is in progress, and shall prepare and furnish to the Government such written estimates of cost and information in support thereof as the Contracting Officer may request.

CLAUSE H.37 - SPECIAL PROVISIONS RELATING TO WORK FUNDED UNDER AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (APR 2009) (POLICY FLASH 2009-33)

Preamble:

Work performed under this contract will be funded, in whole or in part, with funds appropriated by the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (Recovery Act or Act). The Recovery Act's purposes are to stimulate the economy and to create and retain jobs. The Act gives preference to activities that can be started and completed expeditiously, including a goal of using at least 50 percent of the funds made available by it for activities that can be initiated not later than June 17, 2009.

Contractors should begin planning activities for their first tier subcontractors, including obtaining a DUNS number (or updating the existing DUNS record), and registering with the Central Contractor Registration (CCR).

Be advised that Recovery Act funds can be used in conjunction with other funding as necessary to complete projects, but tracking and reporting must be separate to meet the reporting requirements of the Recovery Act and related Guidance. For projects funded by sources other than the Recovery Act, Contractors should plan to keep separate records for Recovery Act funds and to ensure those records comply with the requirements of the Act.

The Government has not fully developed the implementing instructions of the Recovery Act, particularly concerning the how and where for the new reporting requirements. The Contractor will be provided these details as they become available. The Contractor must comply with all requirements of the Act. If the contractor believes there is any inconsistency between ARRA requirements and current contract requirements, the issues will be referred to the Contracting Officer for reconciliation.

Be advised that special provisions may apply to projects funded by the Act relating to:

- Reporting, tracking and segregation of incurred costs;
- Reporting on job creation and preservation;
- Publication of information on the Internet;
- Protecting whistleblowers; and
- Requiring prompt referral of evidence of a false claim to the Inspector General.

Definitions:

For purposes of this clause, "Covered Funds" means funds expended or obligated from appropriations under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5. Covered Funds will have special accounting codes and will be identified as Recovery Act funds in the contract and/or modification using Recovery Act funds. Covered Funds must be reimbursed by September 30, 2015.

Non-Federal employer means any employer with respect to Covered Funds – the contractor or subcontractor, as the case may be, if the contractor or subcontractor is an employer; and any professional membership organization, certification of other professional body, any agent or licensee of the Federal government, or any person acting directly or indirectly in the interest of an employer receiving Covered Funds; or with respect to Covered Funds received by a State or local government, the State or local government receiving the funds and any contractor or subcontractor receiving the funds and any contractor or subcontractor of the State or local government; and does not mean any department, agency, or other entity of the federal government.

A. Flow Down Provision

This clause must be included in every first-tier subcontract.

B. Segregation and Payment of Costs

Contractor must segregate the obligations and expenditures related to funding under the Recovery Act. Financial and accounting systems should be revised as necessary to segregate, track and maintain these funds apart and separate from other revenue streams. No part of the funds from the Recovery Act shall be commingled with any other funds or used for a purpose other than that of making payments for costs allowable for Recovery Act projects. Where Recovery Act funds are authorized to be used in conjunction with other funding to complete projects, tracking and reporting must be separate from the original funding source to meet the reporting requirements of the Recovery Act and OMB Guidance.

Invoices must clearly indicate the portion of the requested payment that is for work funded by the Recovery Act.

Note: For contractors currently using drawdown on a letter of credit, the current procedure remains in effect and is used for Recovery Act activity in lieu of invoicing.

C. Prohibition on Use of Funds

None of the funds provided under this agreement derived from the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, may be for any casino or other gambling establishment, aquarium, zoo, golf course, or swimming pool.

D. Wage Rates

All laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code. With respect to the labor standards specified in this section, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan numbered 14 of 1950 (64 Stat. 1267, 5 U.S.C. App.) and section 3145 of title 40 United States Code. See http://www.dol.gov/whd/contracts/dbra.htm.

E. Publication

Information about this agreement will be published on the Internet and linked to the website www.recovery.gov, maintained by the Accountability and Transparency Board (the Board). The Board may exclude posting contractual or other information on the website on a case-by-case basis when necessary to protect national security or to protect information that is not subject to disclosure under sections 552 and 552a of title 5, United States Code.

F. Registration requirements

Contractor shall ensure that all first-tier subcontractors have a DUNS number and are registered in the Central Contractor Registration (CCR) no later than the date the first report is due under FAR 52.204-11 American Recovery and Reinvestment Act – Reporting Requirements.

G. Utilization of Small Business

Contractor shall to the maximum extent practicable give a preference to small business in the award of subcontracts for projects funded by Recovery Act dollars.

CLAUSE H.38 – ADDITION AND ALTERATIONS TO IMPLEMENT EXECUTIVE ORDER 13423, STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY, AND TRANSPORTATION MANAGEMENT AND ITS IMPLEMENTING INSTRUCTIONS (DOE A.L. 2008-05)

This contract involves contractor operation of Government-owned facilities and/or vehicles and the provisions of Executive Order 13423 are applicable to the Contractor to the same extent they would be applicable if the Government were operating the facilities or vehicles. Information on the requirements of the Executive Order and its Implementing Instructions may be found at: http://www.whitehouse.gov/omb/assets/procurement_green/eo13423_instructions.pdf. This requirement includes the Electronics Stewardship requirements of Implementing Instruction XII. When acquiring desktop or laptop computers and computer monitors, the Contractor shall acquire Electronic Product Environmental Assessment Tool registered products conforming to IEEE 1680-2006 Standard and ranked at least bronze, provided such products are life cycle cost efficient and meet applicable performance requirements. Information on EPEAT-registered computer products is available at www.epeat.net.

CLAUSE H.39 – RESERVED

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## CLAUSE H.40 –DEFINITION OF UNUSUALLY HAZARDOUS OR NUCLEAR RISK FOR FAR CLAUSE 52.250-1, ALTERNATE I INDEMNIFICATION UNDER PUBLIC LAW No. 85-804

a. The term “a risk defined in this contract as unusually hazardous or nuclear” as used in FAR Clause 52.250-1, Alternate I means the risk of legal liability to third parties (including legal costs as defined in paragraph jj. of section 11 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. section 2014jj., notwithstanding the fact that the claim or suit may not arise under section 170 of said Act) arising from actions or inactions in the course of the following work performed by the Contractor under the contract:

1) Providing assistance to DOE’s Materials Protection Control and Accounting (MPC&A) program including cooperative work outside the United States on the design and implementation of MPC&A systems for facilities processing, handling, and storing nuclear materials, and the transportation of nuclear materials; provision of U.S. manufactured equipment, and procurement of equipment for installation in facilities in order to implement the above systems; and training in the design, use and assessment of MPC&A systems. Providing nuclear MPC&A technical support to DOE in its participation in joint safeguards work under the Agreement Between the U.S. Department of Defense and the Russian Ministry for Atomic Energy Concerning Control, Accounting, and Physical Protection of Nuclear Materials, dated September 2, 1993, and any extension thereof.

2) Participation in tasks or activities by the Contractor or its subcontractors on or after March 11, 2011 that is directed or authorized by the U.S. Department of Energy or the U.S. Department of Energy National Nuclear Security Administration as an element of activities taken in response to the Japanese earthquake and tsunami, including efforts to address and assess damage to nuclear power plants and potential radioactive releases from these plants now and in the future.

3) Other activities relating to nonproliferation, emergency response, anti-terrorism activities, or critical national security activities that involve the use, detection, identification, assessment, control, containment, dismantlement, characterization, packaging, transportation, movement, storage or disposal of nuclear, radiological, chemical, biological, or explosive materials, facilities or devices, provided such activities are specifically requested or approved, in writing, by the President of the United States, the Secretary of Energy, the Deputy Secretary of Energy, or an Under Secretary, and further provided that the request or approval specifically identifies the particular requested or approved activity and makes the indemnity provided by this clause applicable to that particular activity because it involves extraordinary risks.

b. The unusually hazardous or nuclear risks described above are indemnified only to the extent that they are not covered by the Price-Anderson Act, section 170d. of the Atomic Energy Act of 1954, as amended, (42 U.S.C. section 2210d.) or where the indemnification provided by the Price-Anderson Act is limited by the restriction on public liability imposed by section 170e. of the Atomic Energy Act of 1954, as amended, (42 U.S.C. section 2210e.) to an amount which is not sufficient to provide complete indemnification for the legal liability to which the contractor is exposed.

## CLAUSE H.41 – GREEN PURCHASING -- PERSONAL COMPUTERS

Pursuant to Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, the Department of Energy is committed to managing its facilities in a manner that will promote the natural environment and protect the health and well being of its Federal employees and contractor service providers. Any personal computer equipment (i.e., desktops, laptops, or monitors) purchased hereunder shall be energy efficient such that it compliant with EnergyStar or FEMP standards as set forth at 48 CFR 52.223-15. Likewise, when purchasing personal computer equipment hereunder, the Contractor shall ensure that the equipment is rated at least silver pursuant to IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products as set forth at 48 CFR 52.223-16 Alternate I.

## CLAUSE H.42 – GREEN PURCHASING UNDER DOE SERVICE CONTRACTS

Pursuant to Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, the Department of Energy is committed to managing its facilities in a manner that will promote the natural environment and protect the health and well being of Federal employees and contractor service providers. In the performance of work under this contract, the Contractor shall exert its best efforts to provide its services in a manner that will promote the natural environment and protect the health and well being of Federal employees, contract service providers and visitors using the facility. Green purchasing or environmentally preferable contracting includes the initiatives described below:

- Alternative Fuels and Vehicles are described at: http://www.afdc.energy.gov/afdc/
- Biobased Products are described at http://www.biopreferred.gov/
- Energy efficient products are described at http://energystar.gov/products for Energy Star products and at http://www.eere.energy.gov/femp/procurement for FEMP designated products
- Environmentally Preferable Computers are described at http://www.epeat.net
- Non-Ozone Depleting Products are described at

http://www.epa.gov/Ozone/snap/index.html
- Recycled Products are described at http://epa.gov/cpg
- Water efficient products are described at http://epa.gov/watersense/

To the extent that the services provided by the Contractor require the provision of any of the above types of products, the environmentally preferable type of product is to be furnished unless that type of product is not available competitively within a reasonable time, at a reasonable price, is not life cycle cost efficient in the case of energy consuming products, or does not meet reasonable performance standards. The clauses at FAR 52.223-2, Affirmative Procurement of Biobased Products under Service and Construction Contracts, 52.223-15, Energy Efficiency in Energy Consuming Products, and 52.223-17 Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts, in Section I require the use of products that have biobased content, are energy efficient, or have recycled content.

## CLAUSE H.43 - USE OF LABORATORY EMPLOYEES TO PERFORM DAVIS-BACON ACT WORK

The Laboratory is authorized to develop and implement a one-year pilot program that utilizes Laboratory employees to perform small amounts of Davis-Bacon Act work. The program will be limited in size and scope. Individual projects will not exceed $50,000 each and the maximum amount authorized during the 12-month pilot period cannot exceed $1,000,000 total. The program is to be limited to a 12-month period following the date of program implementation. The individual projects under this pilot are envisioned to be small quick response actions. The Laboratory will provide notification to the Contracting Officer upon commencement of the program. The Laboratory will provide a mid-term and a final report to the Contracting Officer. Modifications to this program including extensions beyond the 12-month pilot will require Contracting Officer approval.

# PART II

## SECTION I

## CONTRACT CLAUSES

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| I.21 | FAR 52.215-13 | SUBCONTRACTOR CERTIFIED COST OR PRICING DATA--MODIFICATIONS (OCT 2010) |
| I.21A | FAR 52.215-14 | INTEGRITY OF UNIT PRICES (OCT 2010) |
| I.22 | FAR 52.215-23 | LIMITATIONS ON PASS-THROUGH CHARGES (OCT 2009) |
| I.23 | FAR 52.209-10 | PROHIBITION ON CONTRACTING WITH INVERTED DOMESTIC CORPORATIONS (MAY 2012) |
| I.24 | FAR 52.219-8 | UTILIZATION OF SMALL BUSINESS CONCERNS (MAY 2014) |

| CLAUSE NO. | FAR/DEAR REFERENCE | TITLE OF CLAUSE |
|---|---|---|
| I.25 | FAR 52.219-9 | SMALL BUSINESS SUBCONTRACTING PLAN (JUL 2013) |
| I.26 | FAR 52.219-16 | LIQUIDATED DAMAGES - SUB- CONTRACTING PLAN (JAN 1999) |
| I.27 | FAR 52.219-25 | SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM-DISADVANTAGED STATUS AND REPORTING (JUL 2013) |
| I.28 | FAR 52.219-28 | POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (JUL 2013) |
| I.29 | FAR 52.222-1 | NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997) |
| I.30 | FAR 52.222-3 | CONVICT LABOR (JUN 2003) |
| I.31 | FAR 52.222-4 | CONTRACT WORK HOURS AND SAFETY STANDARDS- OVERTIME COMPENSATION (MAY 2014) |
| I.32 | FAR 52.222-11 | SUBCONTRACTS (LABOR STANDARDS) (MAY 2014) |
| I.33 | FAR 52.222-21 | PROHIBITION OF SEGREGATED FACILITIES (FEB 1999) |
| I.34 | FAR 52.222-26 | EQUAL OPPORTUNITY (MAR 2007) |
| I.35 | FAR 52.222-29 | NOTIFICATION OF VISA DENIAL (JUN 2003) |
| I.36 | FAR 52.222-35 | EQUAL OPPORTUNITY FOR VETERANS (JUL 2014) |
| I.37 | FAR 52.222-36 | EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES (JUL 2014) |
| I.38 | FAR 52.222-37 | EMPLOYMENT REPORTS ON VETERANS (JUL 2014) |
| I.39 | FAR 52.222-40 | NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT (DEC 2010) |

| CLAUSE NO. | FAR/DEAR REFERENCE | TITLE OF CLAUSE |
|---|---|---|
| I.40 | FAR 52.222-50 | COMBATING TRAFFICKING IN PERSONS (FEB 2009) |
| | FAR 52.222-54 | EMPLOYMENT ELIGIBILITY VERIFICATION (JAN 2009) See I.150 |
| I.41 | FAR 52.223-2 | AFFIRMATIVE PROCUREMENT OF BIOBASED PRODUCTS UNDER SERVICE AND CONSTRUCTION CONTRACTS (SEP 2013) |
| I.42 | FAR 52.223-3 | HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997) (ALT I JUL 1995) |
| I.43 | FAR 52.223-5 | POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (MAY 2011) (ALTERNATE I) |
| I.44 | FAR 52.223-10 | WASTE REDUCTION PROGRAM (MAY 2011); |
| I.45 | FAR 52.223-11 | OZONE-DEPLETING SUBSTANCES (MAY 2001) |
| I.46 | FAR 52.223-12 | REFRIGERATION EQUIPMENT AND AIR CONDITIONERS (MAY 1995) |
| I.47 | FAR 52.215-15 | PENSION ADJUSTMENTS AND ASSET REVERSIONS (OCT 2010) |
| I.48 | FAR 52.223-15 | ENERGY EFFICIENCY IN ENERGY CONSUMING PRODUCTS (DEC 2007) |
| I.49 | FAR 52.223-16 | ACQUISITION OF EPEAT® -REGISTERED PERSONAL COMPUTER PRODUCTS (JUN 2014) |
| I.50 | FAR 52.223-17 | AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS (MAY 2008) |
| I.51 | FAR 52.224-1 | PRIVACY ACT NOTIFICATION (APR 1984) |
| I.52 | FAR 52.224-2 | PRIVACY ACT (APR 1984) |

| CLAUSE NO. | FAR/DEAR REFERENCE | TITLE OF CLAUSE |
|---|---|---|
| I.53 | FAR 52.225-1 | BUY AMERICAN -- SUPPLIES (MAY 2014) |
| I.54 | FAR 52.225-8 | DUTY-FREE ENTRY (OCT 2010) |
| I.55 | FAR 52.225-9 | BUY AMERICAN -- CONSTRUCTION MATERIALS (MAY 2014) |
| I.56 | FAR 52.225-13 | RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUN 2008) |
| I.57 | FAR 52.225-21 | REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS – BUY AMERICAN STATUTE– CONSTRUCTION MATERIALS (MAY 2014) |
| I.58 | FAR 52.226-1 | UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (JUN 2000) |
| I.59 | FAR 52.204-13 | SYSTEM FOR AWARD MANAGEMENT MAINTENANCE (JUL 2013) |
| I.60 | FAR 52.227-10 | FILING OF PATENT APPLICATIONS – CLASSIFIED SUBJECT MATTER (DEC 2007) |
| I.61 | FAR 52.229-8 | TAXES -- FOREIGN COST-REIMBURSEMENT CONTRACTS (MAR 1990) |
| I.62 | FAR 52.230-2 | FAR 52.230–2 COST ACCOUNTING STANDARDS (MAY 2014) |
| I.63 | FAR 52.230-6 | ADMINISTRATION OF COST ACCOUNTING STANDARDS (JUN 2010) |
| I.64 | FAR 52.232-17 | INTEREST (MAY 2014) |
| I.65 | FAR 52.232-24 | PROHIBITION OF ASSIGNMENT OF CLAIMS (MAY 2014) |
| I.66 | FAR 52.233-1 | DISPUTES (MAY 2014) (ALTERNATE I) |
| I.67 | FAR 52.233-3 | PROTEST AFTER AWARD (AUG 1996) (ALTERNATE I) (JUNE 1985) |

| CLAUSE NO. | FAR/DEAR REFERENCE | TITLE OF CLAUSE |
|---|---|---|
| I.68 | FAR 52.233-4 | APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004) |
| I.69 | FAR 52.236-8 | OTHER CONTRACTS (APR 1984) |
| I.70 | FAR 52.237-3 | CONTINUITY OF SERVICES (JAN 1991) |
| I.71 | FAR 52.242-1 | NOTICE OF INTENT TO DISALLOW COSTS (APR 1984) |
| I.72 | FAR 52.242-13 | BANKRUPTCY (JUL 1995) |
| | FAR 52.242-15 | STOP WORK ORDER (AUG 1989) ALTERNATE I (APR 1984) SEE F.2 |
| I.73 | FAR 52.244-5 | COMPETITION IN SUBCONTRACTING (DEC 1996) |
| I.74 | FAR 52.244-6 | SUBCONTRACTS FOR COMMERCIAL ITEMS (JUL 2014) |
| I.75 | FAR 52.247-1 | COMMERCIAL BILL OF LADING NOTATIONS (FEB 2006) |
| I.76 | FAR 52.247-63 | PREFERENCE FOR U.S. FLAG AIR CARRIERS (JUN 2003) |
| I.77 | FAR 52.247-64 | PREFERENCE FOR PRIVATELY OWNED U.S.-FLAG COMMERCIAL VESSELS (FEB 2006) |
| I.78 | FAR 52.247-67 | SUBMISSION OF TRANSPORTATION DOCUMENTS FOR AUDIT (FEB 2006) |
| I.79 | FAR 52.249-6 | TERMINATION (COST-REIMBURSEMENT) (MAY 2004); MODIFIED BY DEAR 970.4905-1 |
| I.80 | FAR 52.249-14 | EXCUSABLE DELAYS (APR 1984) |
| I.81 | FAR 52.250-1 | INDEMNIFICATION UNDER PUBLIC LAW 85-804 (APR 1984) ALTERNATE I (APR 1984) |
| I.82 | FAR 52.251-1 | GOVERNMENT SUPPLY SOURCES (APR 2012) (DEVIATION) |

| CLAUSE NO. | FAR/DEAR REFERENCE | TITLE OF CLAUSE |
|---|---|---|
| I.83 | FAR 52.251-2 | INTERAGENCY FLEET MANAGEMENT SYSTEM VEHICLES AND RELATED SERVICES (JAN 1991) |
| I.84 | FAR 52.252-6 | AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984) |
| I.85 | FAR 52.253-1 | COMPUTER GENERATED FORMS (JAN 1991) |
| I.86 | DEAR 952.203-70 | WHISTLEBLOWER PROTECTION FOR CONTRACTOR EMPLOYEES (DEC 2000) |
| I.87 | DEAR 952.204-2 | SECURITY (OCT 2013) (CLASS DEVIATION PER POLICY FLASH 2014-09; NOV 2013) |
| I.88 | DEAR 952.204-70 | CLASSIFICATION/DECLASSIFICATION (SEPT 1997) |
| I.89 | DEAR 952.204-73 | FACILITY CLEARANCE (MAR 2011) |
| I.90 | DEAR 952.204-75 | PUBLIC AFFAIRS (DEC 2000) |
| I.91 | DEAR 952.204-77 | COMPUTER SECURITY (AUG 2006) |
| I.92 | DEAR 952.208-7 | TAGGING OF LEASED VEHICLES (APR 1984) |
| I.93 | DEAR 952.209-72 | ORGANIZATIONAL CONFLICTS OF INTEREST (AUG 2009) (ALTERNATE I) |
| I.94 | DEAR 952.211-71 | PRIORITIES AND ALLOCATIONS (ATOMIC ENERGY) (APR 2008) |
| I.95 | DEAR 952.215-70 | KEY PERSONNEL (DEC 2000) |
| I.96 | DEAR 952.217-70 | ACQUISITION OF REAL PROPERTY (MAR 2011) |
| I.97 | DEAR 952.223-75 | PRESERVATION OF INDIVIDUAL OCCUPATIONAL RADIATION EXPOSURE RECORDS (APR 1984) |
| I.98 | DEAR 952.223-78 | SUSTAINABLE ACQUISITION PROGRAM (OCT 2010) |
| I.99 | | RESERVED |
| I.100 | DEAR 952.226-74 | DISPLACED EMPLOYEE HIRING PREFERENCE (JUN 1997) |

| CLAUSE NO. | FAR/DEAR REFERENCE | TITLE OF CLAUSE |
|---|---|---|
| I.101 | DEAR 952.235-71 | RESEARCH MISCONDUCT (JUL 2005) |
| I.102 | DEAR 952.242-70 | TECHNICAL DIRECTION (DEC 2000) |
| I.103 | DEAR 952.247-70 | FOREIGN TRAVEL (JUN 2010) |
| I.104 | DEAR 952.250-70 | NUCLEAR HAZARDS INDEMNITY AGREEMENT (OCT 2005) (AL-2005-15) |
| I.105 | DEAR 952.251-70 | CONTRACTOR EMPLOYEE TRAVEL DISCOUNTS (AUG 2009) |
| I.106 | DEAR 970.5203-1 | MANAGEMENT CONTROLS (JUN 2007) (DEVIATION) |
| I.107 | DEAR 970.5203-2 | PERFORMANCE IMPROVEMENT AND COLLABORATION (MAY 2006) |
| I.108 | DEAR 970.5203-3 | CONTRACTOR'S ORGANIZATION (DEC 2000) (DEVIATION) |
| I.109 | DEAR 970.5204-1 | COUNTERINTELLIGENCE (DEC 2010) |
| I.110 | DEAR 970.5204-2 | LAWS, REGULATIONS, AND DOE DIRECTIVES (DEC 2000) (DEVIATION) |
| I.111 | DEAR 970.5204-3 | ACCESS TO AND OWNERSHIP OF RECORDS (JUL 2005) |
| I.112 | DEAR 970.5208-1 | PRINTING (DEC 2000) |
| I.113 | DEAR 970.5211-1 | WORK AUTHORIZATION (MAY 2007) |
| I.114 | DEAR 970.5215-1 | TOTAL AVAILABLE FEE: BASE FEE AMOUNT AND PERFORMANCE FEE AMOUNT (DEC 2000) (ALTERNATES II AND IV) (DEC 2000) |
| I.115 | DEAR 970.5215-3 | CONDITIONAL PAYMENT OF FEE, PROFIT, AND OTHER INCENTIVES – FACILITY MANAGEMENT CONTRACTS (AUG 2009) |
| I.116 | DEAR 970.5217-1 | WORK FOR OTHERS PROGRAM (NON-DOE FUNDED WORK) (JAN 2005) |

| CLAUSE NO. | FAR/DEAR REFERENCE | TITLE OF CLAUSE |
|---|---|---|
| I.117 | DEAR 970.5222-1 | COLLECTIVE BARGAINING AGREEMENTS - MANAGEMENT AND OPERATING CONTRACTS (DEC 2000) |
| I.118 | DEAR 970.5222-2 | OVERTIME MANAGEMENT (DEC 2000) |
| I.119 | DEAR 970.5223-1 | INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO WORK PLANNING AND EXECUTION (DEC 2000) |
| I.120 | | RESERVED |
| I.121 | DEAR 970.5223-4 | WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (DEC 2010) |
| I.122 | | RESERVED |
| I.123 | DEAR 970.5226-1 | DIVERSITY PLAN (DEC 2000) |
| I.124 | DEAR 970.5226-2 | WORKFORCE RESTRUCTURING UNDER SECTION 3161 OF THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 1993 (DEC 2000) |
| I.125 | DEAR 970.5226-3 | COMMUNITY COMMITMENT (DEC 2000) |
| I.126 | DEAR 970.5227-2 | RIGHTS IN DATA - TECHNOLOGY TRANSFER (DEVIATION JULY 2006 – AL 2006-10) |
| I.127 | DEAR 970.5227-3 | TECHNOLOGY TRANSFER MISSION (DEVIATION JULY 2006 – AL 2006-10; ALTERNATE I) |
| I.128 | DEAR 970.5227-4 | AUTHORIZATION AND CONSENT (AUG 2002) |
| I.129 | DEAR 970.5227-5 | NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 2002) |
| I.130 | DEAR 970.5227-6 | PATENT INDEMNITY - SUBCONTRACTS (DEC 2000) |

| CLAUSE NO. | FAR/DEAR REFERENCE | TITLE OF CLAUSE |
|---|---|---|
| I.131 | DEAR 970.5227-8 | REFUND OF ROYALTIES (AUG 2002) |
| I.132 | DEAR 970.5227-10 | PATENT RIGHTS - MANAGEMENT AND OPERATING CONTRACTS, NONPROFIT ORGANIZATION OR SMALL BUSINESS FIRM CONTRACTOR (AUG 2002) |
| I.133 | DEAR 970.5228-1 | INSURANCE--LITIGATION AND CLAIMS (JUL 2013) |
| I.134 | DEAR 970.5229-1 | STATE AND LOCAL TAXES (DEC 2000) |
| I.135 | DEAR 970.5231-4 | PREEXISTING CONDITIONS (DEC 2000) (DEVIATION) |
| I.136 | DEAR 970.5232-1 | REDUCTION OR SUSPENSION OF ADVANCE, PARTIAL, OR PROGRESS PAYMENTS (DEC 2000) |
| I.137 | DEAR 970.5232-2 | PAYMENTS AND ADVANCES (DEC 2000) (ALTERNATES II AND III) (DEC 2000) (DEVIATION) |
| I.138 | DEAR 970.5232-3 | ACCOUNTS, RECORDS, AND INSPECTION (DEC 2010) |
| I.139 | DEAR 970.5232-4 | OBLIGATION OF FUNDS (DEC 2000) |
| I.140 | DEAR 970.5232-5 | LIABILITY WITH RESPECT TO COST ACCOUNTING STANDARDS (DEC 2000) |
| I.141 | DEAR 970.5232-6 | WORK FOR OTHERS FUNDING AUTHORIZATION (DEC 2000) |
| I.142 | DEAR 970.5232-7 | FINANCIAL MANAGEMENT SYSTEM (DEC 2000) |
| I.143 | DEAR 970.5232-8 | INTEGRATED ACCOUNTING (DEC 2000) |
| I.144 | DEAR 970.5235-1 | FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER SPONSORING AGREEMENT (DEC 2010) |

| CLAUSE NO. | FAR/DEAR REFERENCE | TITLE OF CLAUSE |
|---|---|---|
| I.145 | DEAR 970.5236-1 | GOVERNMENT FACILITY SUBCONTRACT APPROVAL (DEC 2000) (DEVIATION) |
| I.146 | DEAR 970.5242-1 | PENALTIES FOR UNALLOWABLE COSTS (AUG 2009) |
| I.147 | DEAR 970.5243-1 | CHANGES (DEC 2000) |
| I.148 | DEAR 970.5244-1 | CONTRACTOR PURCHASING SYSTEM (AUG 2009) (DEVIATION AUG 2011 - *POLICY FLASH 2011-98)* (DEVIATION JUN 2013 – *AL 2013-10)* |
| I.149 | DEAR 970.5245-1 | PROPERTY (JAN 2013) (ALTERNATE I) |
| I.150 | FAR 52.222-54 | EMPLOYMENT ELIGIBILITY VERIFICATION (AUG 2013) |
| I.151 | FAR 52.204-10 | REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS (JUL 2013) |
| I.152 | FAR 52.209-9 | UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS (JUL 2013) |
| I.153 | FAR 52.223-18 | ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (AUG 2011) |
| I.154 | DEAR 970.5223-6 | STRENGTHENING FEDERAL ENVIRONMENT, ENERGY, AND TRANSPORTATION MANAGEMENT (OCT 2010) |
| I.155 | DEAR 970.5223-7 | SUSTAINABLE ACQUISITION PROGRAM (OCT 2010) |
| I.156 | FAR 52.223-19 | COMPLIANCE WITH ENVIRONMENTAL MANAGEMENT SYSTEMS (MAY 2011) |
| I.157 | FAR 52.232-39 | UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS (JUN 2013) |
| I.158 | FAR 52.232-40 | PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS (DEC 2013) |

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|---|---|---|
| I.160 | FAR 52.203-17 | CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (APR 2014) |
| I.161 | FAR 52.223-13 | ACQUISITION OF EPEAT® -REGISTERED IMAGING EQUIPMENT (JUN 2014) |
| I.162 | FAR 52.223-14 | ACQUISITION OF EPEAT® -REGISTERED TELEVISIONS (JUN 2014) |
| I.163 | FAR 52.237-11 | ACCEPTING AND DISPENSING OF $1 COIN (SEP 2008) |

# Contract Clauses

## CLAUSE I.1 - FAR 52.202-1 DEFINITIONS (NOV 2013)

When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR 2.101 in effect at the time the solicitation was issued, unless--

(a) The solicitation, or amended solicitation, provides a different definition;

(b) The contracting parties agree to a different definition;

(c) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning; or

(d) The word or term is defined in FAR Part 31, for use in the cost principles and procedures.

## CLAUSE I.2 - FAR 52.203-3 GRATUITIES (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative:

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled --

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than three (3) nor more than ten (10) times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

**CLAUSE I.3 - FAR 52.203-5 Covenant Against Contingent Fees (MAY 2014)**

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) “Bona fide agency,” as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

“Bona fide employee,” as used in this clause, means a person, employed by a Contractor and subject to the contractor’s supervision and control as to time, place, and manner of performance, who neither exerts or proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

“Contingent fee,” as used in this clause, means any commission , percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

“Improper influence,” as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

## CLAUSE I.4 - FAR 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (SEPT 2006)

(a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this Clause, including this paragraph (c), in all subcontracts under this contract which exceed the simplified acquisition threshold.

## CLAUSE I.5 -- FAR 52.203-7 Anti-Kickback Procedures (MAY 2014)

(a) *Definitions.*

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) 41 U.S.C. chapter 87, Kickbacks, prohibits any person from –

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)

(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Attorney General.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold from sums owed a subcontractor under the prime contract the amount of the kickback. The Contracting Officer may order that monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, The Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including paragraph (c)(5) but excepting paragraph (c)(1), in all subcontracts under this contract which exceed $150,000.

**CLAUSE I.6 - FAR 52.203-8 Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (MAY 2014)**

(a) If the Government receives information that a contractor or a person has violated 41 U.S.C. 2102-2104, Restrictions on Obtaining and Disclosing Certain Information, the Government may –

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which --

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct violates 41 U.S.C. 2102 for the purpose of either –

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct punishable under 41 U.S.C. 2105(a).

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

**CLAUSE I.7 - FAR 52.203-10 Price or Fee Adjustment for Illegal or Improper Activity (MAY 2014)**

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of 41 U.S.C. 2102 or 2103, as implemented in section 3.104 of the Federal Acquisition Regulation.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be –

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or “fee floor” specified in the contract;

(3) For cost-plus-award-fee contracts –

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may –

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the statute by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

## CLAUSE I.8 - FAR 52.203-12 – LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (OCT 2010)

(a) *Definitions.* As used in this clause—

"Agency" means executive agency as defined in Federal Acquisition Regulation (FAR) 2.101.

"Covered Federal action" means any of the following Federal actions:

(1) Awarding any Federal contract.

(2) Making any Federal grant.

(3) Making any Federal loan.

(4) Entering into any cooperative agreement.

(5) Extending, continuing, renewing, amending, or modifying any Federal contract, grant, loan, or cooperative agreement.

“Indian tribe” and “tribal organization” have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C.450B) and include Alaskan Natives.

“Influencing or attempting to influence” means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

“Local government” means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

“Officer or employee of an agency” includes the following individuals who are employed by an agency:

(1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.

(2) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code.

(3) A special Government employee, as defined in section 202, Title 18, United States Code.

(4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

"Person" means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

"Reasonable compensation" means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment" means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient" includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

"Regularly employed" means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State" means a State of the United States, the District of Columbia, or an outlying area of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(a) *Prohibition.* 31 U.S.C. 1352 prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal actions. In accordance with 31 U.S.C. 1352 the Contractor shall not use appropriated funds

to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the award of this contractor the extension, continuation, renewal, amendment, or modification of this contract.

(1) The term appropriated funds does not include profit or fee from a covered Federal action.

(2) To the extent the Contractor can demonstrate that the Contractor has sufficient monies, other than Federal appropriated funds, the Government will assume that theses other monies were spent for any influencing activities that would be unallowable if paid for with Federal appropriated funds.

(b) *Exceptions.* The prohibition in paragraph (b) of this clause does not apply under the following conditions:

(1) Agency and legislative liaison by Contractor employees.

(i) Payment of reasonable compensation made to an officer or employee of the Contractor if the payment is for agency and legislative liaison activities not directly related to this contract. For purposes of this paragraph, providing any information specifically requested by an agency or Congress is permitted at any time.

(ii) Participating with an agency in discussions that are not related to a specific solicitation for any covered Federal action, but that concern—

(A) The qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities; or

(B) The application or adaptation of the person's products or services for an agency's use.

(iii) Providing prior to formal solicitation of any covered Federal action any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(iv) Participating in technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(v) Making capability presentations prior to formal solicitation of any covered Federal action by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(2) Professional and technical services.

(i) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(ii) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(iii) As used in this paragraph (c)(2), “professional and technical services” are limited to advice and analysis directly applying any professional or technical discipline (for examples, see FAR 3.803(a)(2)(iii)).

(iv) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(3) Only those communications and services expressly authorized by paragraphs (c)(1) and (2) of this clause are permitted.

(c) Disclosure.

(1) If the Contractor did not submit OMB Standard Form LLL, Disclosure of Lobbying Activities, with its offer, but registrants under the Lobbying

Disclosure Act of 1995 have subsequently made a lobbying contact on behalf of the Contractor with respect to this contract, the Contractor shall complete and submit OMB Standard Form LLL to provide the name of the lobbying registrants, including the individuals performing the services.

(2) If the Contractor did submit OMB Standard Form LLL disclosure pursuant to paragraph (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, and a change occurs that affects Block 10 of the OMB Standard Form LLL (name and address of lobbying registrant or individuals performing services), the Contractor shall, at the end of the calendar quarter in which the change occurs, submit to the Contracting Officer within 30 days an updated disclosure using OMB Standard Form LLL.

(d) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (b) of this clause or who fails to file or amend the disclosure to be filed or amended by paragraph (d) of this clause shall be subject to civil penalties as provided for by 31 U.S.C.1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(e) *Cost allowability*. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(f) *Subcontracts*.

(1) The Contractor shall obtain a declaration, including the certification and disclosure in paragraphs (c) and (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, from each person requesting or receiving a subcontract exceeding $150,000 under this contract. The Contractor or subcontractor that awards the subcontract shall retain the declaration.

(2) A copy of each subcontractor disclosure form (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall, at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor, submit to the Contracting Officer within 30 days a copy of all disclosures. Each

subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(3) The Contractor shall include the substance of this clause, including this paragraph (g), in any subcontract exceeding $150,000.

## CLAUSE I.9 - FAR 52.203-13 – CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT (APR 2010)

(a) *Definitions.* As used in this clause—

"Agent" means any individual, including a director, an officer, an employee, or an independent Contractor, authorized to act on behalf of the organization.

"Full cooperation"—

(1) Means disclosure to the Government of the information sufficient for law enforcement to identify the nature and extent of the offense and the individuals responsible for the conduct. It includes providing timely and complete response to Government auditors' and investigators' request for documents and access to employees with information;

(2) Does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not require—

(i) A Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine; or

(ii) Any officer, director, owner, or employee of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; and

(3) Does not restrict a Contractor from—

(i) Conducting an internal investigation; or

(ii) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

"Principal" means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (*e.g.*, general manager; plant manager; head of a division or business segment; and similar positions).

"Subcontract" means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

"Subcontractor" means any supplier, distributor, vendor, or firm that furnished supplies or services to or for a prime contractor or another subcontractor.

"United States," means the 50 States, the District of Columbia, and outlying areas.

(b) *Code of business ethics and conduct.*

(1) Within 30 days after contract award, unless the Contracting Officer establishes a longer time period, the Contractor shall—

(i) Have a written code of business ethics and conduct; and

(ii) Make a copy of the code available to each employee engaged in performance of the contract.

(2) The Contractor shall—

(i) Exercise due diligence to prevent and detect criminal conduct; and

(ii) Otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.

(3) (i) The Contractor shall timely disclose, in writing, to the agency Office of the Inspector General (OIG), with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of this contract or any subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed—

(A) A violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 of the United States Code; or

(B) A violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(ii) The Government, to the extent permitted by law and regulation, will safeguard and treat information obtained pursuant to the Contractor's disclosure as confidential where the information has been marked "confidential" or "proprietary" by the company. To the extent permitted by law and regulation, such information will not be

released by the Government to the public pursuant to a Freedom of Information Act request, 5 U.S.C. Section 552, without prior notification to the Contractor. The Government may transfer documents provided by the Contractor to any department or agency within the Executive Branch if the information relates to matters within the organization's jurisdiction.

(iii) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the Contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract.

(c) Business ethics awareness and compliance program and internal control system. This paragraph (c) does not apply if the Contractor has represented itself as a small business concern pursuant to the award of this contract or if this contract is for the acquisition of a commercial item as defined at FAR 2.101. The Contractor shall establish the following within 90 days after contract award, unless the Contracting Officer establishes a longer time period:

(1) An ongoing business ethics awareness and compliance program.

(i) This program shall include reasonable steps to communicate periodically and in a practical manner the Contractor's standards and procedures and other aspects of the Contractor's business ethics awareness and compliance program and internal control system, by conducting effective training programs and otherwise disseminating information appropriate to an individual's respective roles and responsibilities.

(ii) The training conducted under this program shall be provided to the Contractor's principals and employees, and as appropriate, the Contractor's agents and subcontractors.

(2) An internal control system.

(i) The Contractor's internal control system shall—

(A) Establish standards and procedures to facilitate timely discovery of improper conduct in connection with Government contracts; and

(B) Ensure corrective measures are promptly instituted and carried out.

(ii) At a minimum, the Contractor's internal control system shall provide for the following:

(A) Assignment of responsibility at a sufficiently high level and adequate resources to ensure effectiveness of the business ethics awareness and compliance program and internal control system.

(B) Reasonable efforts not to include an individual as a principal, whom due diligence would have exposed as having engaged in conduct that is in conflict with the Contractor's code of business ethics and conduct.

(C) Periodic reviews of company business practices, procedures, policies, and internal controls for compliance with the Contractor's code of business ethics and conduct and the special requirements of Government contracting, including—

(1) Monitoring and auditing to detect criminal conduct;

(2) Periodic evaluation of the effectiveness of the business ethics awareness and compliance program and internal control system, especially if criminal conduct has been detected; and

(3) Periodic assessment of the risk of criminal conduct, with appropriate steps to design, implement, or modify the business ethics awareness and compliance program and the internal control system as necessary to reduce the risk of criminal conduct identified through this process.

(D) An internal reporting mechanism, such as a hotline, which allows for anonymity or confidentiality, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(E) Disciplinary action for improper conduct or for failing to take reasonable steps to prevent or detect improper conduct.

(F) Timely disclosure, in writing, to the agency OIG, with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of any Government contract performed by the Contractor or a subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed a

violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 U.S.C. or a violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(1) If a violation relates to more than one Government contract, the Contractor may make the disclosure to the agency OIG and Contracting Officer responsible for the largest dollar value contract impacted by the violation.

(2) If violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract, and the respective agencies' contracting officers.

(3) The disclosure requirement for an individual contract continues until at least 3 years after final payment on the contract.

(4) The Government will safeguard such disclosures in accordance with paragraph (b)(3)(ii) of this clause.

(G) Full cooperation with any Government agencies responsible for audits, investigations, or corrective actions.

(d) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts that have a value in excess of $5,000,000 and a performance period of more than 120 days.

(2) In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

## CLAUSE I.10 - FAR 52.203-14 – DISPLAY OF HOTLINE POSTER(S) (DEC 2007)

(a) *Definition*.

"United States," as used in this clause, means the 50 States, the District of Columbia, and outlying areas.

(b) Display *of fraud hotline poster(s)*. Except as provided in paragraph (c)—

(1) During contract performance in the United States, the Contractor shall prominently display in common work areas within business segments performing work under this contract and at contract work sites—

(i) Any agency fraud hotline poster or Department of Homeland Security (DHS) fraud hotline poster identified in paragraph (b)(3) of this clause; and

(ii) Any DHS fraud hotline poster subsequently identified by the Contracting Officer.

(2) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the poster(s) at the website.

(3) Any required posters may be obtained as follows:

Obtain Poster(s) from:

(i) U.S. Department of Energy Office of Inspector General

(ii) http://www.ig.energy.gov/hotline.htm

(c) If the Contractor has implemented a business ethics and conduct awareness program, including a reporting mechanism, such as a hotline poster, then the Contractor need not display any agency fraud hotline posters as required in paragraph (b) of this clause, other than any required DHS posters.

(d) *Subcontracts*. The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts that exceed $5,000,000, except when the subcontract—

(1) Is for the acquisition of a commercial item; or

(2) Is performed entirely outside the United States.

**The following clause is only applicable to projects funded by the Recovery Act:**

**CLAUSE I.11 - FAR 52.203-15 - WHISTLEBLOWER PROTECTIONS UNDER THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (JUN 2010)**

(a) The Contractor shall post notice of employees rights and remedies for whistleblower protections provided under section 1553 of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5) (Recovery Act).

(b) The Contractor shall include the substance of this clause, including this paragraph (b), in all subcontracts that are funded in whole or in part with Recovery Act funds.

**CLAUSE I.12 - FAR 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER (MAY 2011)**

(a) *Definitions*. As used in this clause—

"Postconsumer fiber" means—

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

(b) The Contractor is required to submit paper documents, such as offers, letters, or reports that are printed or copied double-sided on paper containing at least 30 percent postconsumer fiber, whenever practicable, when not using electronic commerce methods to submit information or data to the Government.

**CLAUSE I.13 - <u>RESERVED</u>**

**CLAUSE I.14 - <u>FAR 52.204-9 – PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (JAN 2011)</u>**

(a) The Contractor shall comply with agency personal identity verification procedures identified in the contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24 and Federal Information Processing Standards Publication (FIPS PUB) Number 201.

(b) The Contractor shall account for all forms of Government-provided identification issued to the Contractor employees in connection with performance under this contract. The Contractor shall return such identification to the issuing agency at the earliest of any of the following, unless otherwise determined by the Government:

(1) When no longer needed for contract performance.

(2) Upon completion of the Contractor employee's employment.

(3) Upon contract completion or termination.

(c) The Contracting Officer may delay final payment under a contract if the Contractor fails to comply with these requirements.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts when the subcontractor's employees are required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system. It shall be the responsibility of the prime Contractor to return such identification to the issuing agency in accordance with the terms set forth in paragraph (b) of this section, unless otherwise approved in writing by the Contracting Officer.

## CLAUSE I.15 RESERVED

## CLAUSE I.16 - FAR 52.208-8 REQUIRED SOURCES FOR HELIUM AND HELIUM USAGE DATA (APR 2014)

(a) Definitions.

"Bureau of Land Management," as used in this clause, means the Department of the Interior, Bureau of Land Management, Amarillo Field Office, Helium Operations, located at 801 South Fillmore Street, Suite 500, Amarillo, TX 79101-3545.

"Federal helium supplier" means a private helium vendor that has an in-kind crude helium sales contract with the Bureau of Land Management (BLM) and that is on the BLM Amarillo Field Office's Authorized List of Federal Helium Suppliers available via the Internet at http://www.blm.gov/nm/st/en/fo/Amarillo_Field_Office.html.

"Major helium requirement" means an estimated refined helium requirement greater than 200,000 standard cubic feet (scf) (measured at 14.7 pounds per square inch absolute pressure and 70 degrees Fahrenheit temperature) of gaseous helium or 7510 liters of liquid helium delivered to a helium use location per year.

(b) Requirements --

(1) Contractors must purchase major helium requirements from Federal helium suppliers, to the extent that supplies are available.

(2) The Contractor shall provide to the Contracting Officer the following data within 10 days after the Contractor or subcontractor receives a delivery of helium from a Federal helium supplier –

(i) The name of the supplier;

(ii) The amount of helium purchased;

(iii) The delivery date(s); and

(iv) The location where the helium was used.

(c) *Subcontracts* --The Contractor shall insert this clause, including this paragraph (c), in any subcontract or order that involves a major helium requirement.

**CLAUSE I.17 - <u>FAR 52.209-6 – PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (Aug 2013)</u>**

(a) Definition. "Commercially available off-the-shelf (COTS) item," as used in this clause-

(1) Means any item of supply (including construction material) that is—

(i) A commercial item (as defined in paragraph (1) of the definition in FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

(b) The Government suspends or debars Contractors to protect the Government's interests. Other than a subcontract for a commercially available off-the-shelf item, the Contractor shall not enter into any subcontract in excess of $30,000 with a Contractor that is debarred, suspended, or proposed for debarment by any executive agency unless there is a compelling reason to do so.

(c) The Contractor shall require each proposed subcontractor whose subcontract will exceed $30,000, other than a subcontractor providing a commercially available off-the-shelf item, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principals, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(d) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party (other than a subcontractor providing a commercially available off-the-shelf item) that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the System for Award Management (SAM) Exclusions). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being listed with an exclusion in SAM.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its being listed with an exclusion in SAM.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(e) Subcontracts. Unless this is a contract for the acquisition of commercial items, the Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for the identification of the parties), in each subcontract that—

(1) Exceed $30,000 in value; and

(2) Is not a subcontract for commercially available off-the-shelf items.

## CLAUSE I.18 - FAR 52.211-5 MATERIAL REQUIREMENTS (AUG 2000)

(a) Definitions.

As used in this clause --

"New" means composed of previously unused components, whether manufactured from virgin material, recovered material in the form of raw material, or materials and by-products generated from, and reused within, an original manufacturing process; provided that the supplies meet contract requirements, including but not limited to, performance, reliability, and life expectancy.

"Reconditioned" means restored to the original normal operating condition by readjustments and material replacement.

"Recovered material" means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

"Remanufactured" means factory rebuilt to original specifications.

"Virgin material" means --

(1) Previously unused raw material, including previously unused copper, aluminum, lead, zinc, iron, other metal or metal ore; or

(2) Any undeveloped resource that is, or with new technology will become, a source of raw materials.

(b) Unless this contract otherwise requires virgin material or supplies composed of or manufactured from virgin material, the Contractor shall provide supplies that are new, reconditioned, or remanufactured, as defined in this clause.

(c) A proposal to provide unused former Government surplus property shall include a complete description of the material, the quantity, the name of the Government agency from which acquired, and the date of acquisition.

(d) A proposal to provide used, reconditioned, or remanufactured supplies shall include a detailed description of such supplies and shall be submitted to the Contracting Officer for approval.

(e) Used, reconditioned, or remanufactured supplies, or unused former Government surplus property, may be used in contract performance if the Contractor has proposed the use of such supplies, and the Contracting Officer has authorized their use.

## CLAUSE I.19 - FAR 52.215-8 ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT (OCT 1997)

Any inconsistency in this solicitation or contract shall be resolved by giving precedence in the following order:

(a) The Schedule (excluding the specifications).

(b) Representations and other instructions.

(c) Contract clauses.

(d) Other documents, exhibits, and attachments.

(e) The specifications.

**CLAUSE I.20 - FAR 52.215-12 – SUBCONTRACTOR CERTIFIED COST OR PRICING DATA (OCT 2010)**

(a) Before awarding any subcontract expected to exceed the threshold for submission of certified cost or pricing data at FAR 15.403-4, on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data at FAR 15.403-4, the Contractor shall require the subcontractor to submit certified cost or pricing data (actually or by specific identification in writing), in accordance with FAR 15.408, Table 15-2 (to include any information reasonably required to explain the subcontractor's estimating process such as the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data, and the nature and amount of any contingencies included in the price), unless an exception under FAR 15.403-1 applies.

(b) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (a) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(c) In each subcontract that exceeds the threshold for submission of certified cost or pricing data at FAR 15.403-4, when entered into, the Contractor shall insert either—

(1) The substance of this clause, including this paragraph (c), if paragraph (a) of this clause requires submission of certified cost or pricing data for the subcontract; or

(2) The substance of the clause at FAR 52.215-13, Subcontractor Certified Cost or Pricing Data—Modifications.

## CLAUSE I.21 - FAR 52.215-13 – SUBCONTRACTOR CERTIFIED COST OR PRICING DATA—MODIFICATIONS (OCT 2010)

(a) The requirements of paragraphs (b) and (c) of this clause shall—

(1) Become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data at FAR 15.403-4; and

(2) Be limited to such modifications.

(b) Before awarding any subcontract expected to exceed the threshold for submission of certified cost or pricing data at FAR 15.403-4, on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data at FAR 15.403-4, the Contractor shall require the subcontractor to submit certified cost or pricing data (actually or by specific identification in writing), in accordance with FAR 15.408, Table 15-2 (to include any information reasonably required to explain the subcontractor's estimating process such as the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data, and the nature and amount of any contingencies included in the price), unless an exception under FAR 15.403-1 applies.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (b) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that exceeds the threshold for submission of certified cost or pricing data at FAR 15.403-4 on the date of agreement on price or the date of award, whichever is later.

## CLAUSE I.21A - FAR 52.215-14 – INTEGRITY OF UNIT PRICES (OCT 2010)

(a) Any proposal submitted for the negotiation of prices for items of supplies shall distribute costs within contracts on a basis that ensures that unit prices are in proportion to the items' base cost (*e.g.,* manufacturing or acquisition costs). Any method of distributing costs to line items that distorts unit prices shall not be used. For example, distributing costs equally among line items is not acceptable except when there is little or no variation in base cost. Nothing in this paragraph requires

submission of certified cost or pricing data not otherwise required by law or regulation.

(b) When requested by the Contracting Officer, the Offeror/Contractor shall also identify those supplies that it will not manufacture or to which it will not contribute significant value.

(c) The Contractor shall insert the substance of this clause, less paragraph (b), in all subcontracts for other than: acquisitions at or below the simplified acquisition threshold in FAR Part 2; construction or architect-engineer services under FAR Part 36; utility services under FAR Part 41; services where supplies are not required; commercial items; and petroleum products.

## CLAUSE I.22 - FAR 52.215-23 – LIMITATIONS ON PASS-THROUGH CHARGES (OCT 2009)

(a) Definitions. As used in this clause—

"Added value" means that the Contractor performs subcontract management functions that the Contracting Officer determines are a benefit to the Government (e.g., processing orders of parts or services, maintaining inventory, reducing delivery lead times, managing multiple sources for contract requirements, coordinating deliveries, performing quality assurance functions).

"Excessive pass-through charge," with respect to a Contractor or subcontractor that adds no or negligible value to a contract or subcontract, means a charge to the Government by the Contractor or subcontractor that is for indirect costs or profit/fee on work performed by a subcontractor (other than charges for the costs of managing subcontracts and any applicable indirect costs and associated profit/fee based on such costs).

"No or negligible value" means the Contractor or subcontractor cannot demonstrate to the Contracting Officer that its effort added value to the contract or subcontract in accomplishing the work performed under the contract (including task or delivery orders).

"Subcontract" means any contract, as defined in FAR 2.101, entered into by a subcontractor to furnish supplies or services for performance of the contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

"Subcontractor," as defined in FAR 44.101, means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

(b) General. The Government will not pay excessive pass-through charges. The Contracting Officer shall determine if excessive pass-through charges exist.

(c) Reporting. Required reporting of performance of work by the Contractor or a subcontractor. The Contractor shall notify the Contracting Officer in writing if—

(1) The Contractor changes the amount of subcontract effort after award such that it exceeds 70 percent of the total cost of work to be performed under the contract, task order, or delivery order. The notification shall identify the revised cost of the subcontract effort and shall include verification that the Contractor will provide added value; or

(2) Any subcontractor changes the amount of lower-tier subcontractor effort after award such that it exceeds 70 percent of the total cost of the work to be performed under its subcontract. The notification shall identify the revised cost of the subcontract effort and shall include verification that the subcontractor will provide added value as related to the work to be performed by the lower-tier subcontractor(s).

(d) Recovery of excessive pass-through charges. If the Contracting Officer determines that excessive pass-through charges exist;

(1) For other than fixed-price contracts, the excessive pass-through charges are unallowable in accordance with the provisions in FAR subpart 31.2; and
(2) For applicable DoD fixed-price contracts, as identified in 15.408(n)(2)(i)(B), the Government shall be entitled to a price reduction for the amount of excessive pass-through charges included in the contract price.

(e) Access to records.

(1) The Contracting Officer, or authorized representative, shall have the right to examine and audit all the Contractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the Contractor proposed, billed, or claimed excessive pass-through charges.

(2) For those subcontracts to which paragraph (f) of this clause applies, the Contracting Officer, or authorized representative, shall have the right to examine and audit all the subcontractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the subcontractor proposed, billed, or claimed excessive pass-through charges.

(f) Flowdown. The Contractor shall insert the substance of this clause, including this paragraph (f), in all cost-reimbursement subcontracts under this contract that

exceed the simplified acquisition threshold, except if the contract is with DoD, then insert in all cost-reimbursement subcontracts and fixed-price subcontracts, except those identified in 15.408(n)(2)(i)(B)(2), that exceed the threshold for obtaining cost or pricing data in accordance with FAR 15.403-4.

## CLAUSE I.23 - FAR 52.209-10 PROHIBITION ON CONTRACTING WITH INVERTED DOMESTIC CORPORATIONS (MAY 2012)

(a) *Definitions.* As used in this clause--

"Inverted domestic corporation" means a foreign incorporated entity which is treated as an inverted domestic corporation under 6 U.S.C. 395(b), *i.e.*, a corporation that used to be incorporated in the United States, or used to be a partnership in the United States, but now is incorporated in a foreign country, or is a subsidiary whose parent corporation is incorporated in a foreign country, that meets the criteria specified in 6 U.S.C. 395(b), applied in accordance with the rules and definitions of 6 U.S.C. 395(c). An inverted domestic corporation as herein defined does not meet the definition of an inverted domestic corporation as defined by the Internal Revenue Code at 26 U.S.C. 7874."

""Subsidiary" means an entity in which more than 50 percent of the entity is owned—

(1) Directly by a parent corporation; or

(2) Through another subsidiary of a parent corporation.

(b) If the contractor reorganizes as an inverted domestic corporation or becomes a subsidiary of an inverted domestic corporation at any time during the period of performance of this contract, the Government may be prohibited from paying for Contractor activities performed after the date when it becomes an inverted domestic corporation or subsidiary. The Government may seek any available remedies in the event the Contractor fails to perform in accordance with the terms and conditions of the contract as a result of Government action under this clause.

(c) Exceptions to this prohibition are located at 9.108-2.

## CLAUSE I.24 - FAR 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (MAY 2014)

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts awarded by any Federal agency, including contracts and subcontracts for subsystems,

assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

(c) *Definitions.* As used in this contract--

"HUBZone small business concern" means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

“Service-disabled veteran-owned small business concern”—

(1) Means a small business concern—

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

"Small disadvantaged business concern” means a small business concern that represents, as part of its offer, that--

(1)

(i) It has received certification as a small disadvantaged business concern consistent with 13 CFR 124, Subpart B;

(ii) No material change in disadvantaged ownership and control has occurred since its certification;

(iii) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed $750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(iv) It is identified, on the date of its representation, as a certified small disadvantaged business in the Dynamic Small Business Search database maintained by the Small Business Administration, or

(2) It represents in writing that it qualifies as a small disadvantaged business (SDB) for any Federal subcontracting program, and believes in good faith that it is owned and controlled by one or more socially and economically disadvantaged individuals and meets the SDB eligibility criteria of 13 CFR 124.1002.

“Veteran-owned small business concern” means a small business concern—

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern--

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women**.**

(d)

(1) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a small disadvantaged business concern, or a women-owned small business concern.

(2) The Contractor shall confirm that a subcontractor representing itself as a HUBZone small business concern is certified by SBA as a HUBZone small business concern by accessing the System for Award Management database or by contacting the SBA. Options for contacting the SBA include—

(i) HUBZone small business database search application Web page at http://dsbs.sba.gov/dsbs/search/dsp_searchhubzone.cfm; or http://www.sba.gov/hubzone;

(ii) In writing to the Director/HUB, U.S. Small Business Administration, 409 3rd Street, SW., Washington DC 20416; or

(iii) The SBA HUBZone Help Desk at hubzone@sba.gov .

## CLAUSE I.25 - FAR 52.219-9 – SMALL BUSINESS SUBCONTRACTING PLAN (JUL 2013)

(a) This clause does not apply to small business concerns.

(b) *Definitions*. As used in this clause—

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

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

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

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

"Indian tribe" means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims

Settlement Act (43 U.S.C.A. 1601 *et seq*.), that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs in accordance with 25 U.S.C. 1452(c). This definition also includes Indian-owned economic enterprises that meet the requirements of 25 U.S.C. 1452(e).

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

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

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

(c) The offeror, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan, where applicable, that separately addresses subcontracting with small business concerns, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business concerns, small disadvantaged business, and with women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate the subcontracting plan shall make the offeror ineligible for award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs. In accordance with 43 U.S.C. 1626:

(i) Subcontracts awarded to an ANC or Indian tribe shall be counted towards the subcontracting goals for small business and small disadvantages business (SDB) concerns, regardless of the size or Small Business Administration certification status of the ANC or Indian tribe.

(ii) Where one or more subcontractors are in the subcontract tier between the prime contractor and the ANC or Indian tribe, the ANC or Indian tribe shall designate the appropriate contractor(s) to count the subcontract towards its small business and small disadvantaged business subcontracting goals.

(A) In most cases, the appropriate Contractor is the Contractor that awarded the subcontract to the ANC or Indian tribe.

(B) If the ANC or Indian tribe designates more than one Contractor to count the subcontract toward its goals, the ANC or Indian tribe shall designate only a portion of the total subcontract award to each Contractor. The sum of the amounts designated to various Contractors cannot exceed the total value of the subcontract.

(C) The ANC or Indian tribe shall give a copy of the written designation to the Contracting Officer, the prime Contractor, and the subcontractors in between the prime Contractor and the ANC or Indian tribe within 30 days of the date of the subcontract award.

(D) If the Contracting Officer does not receive a copy of the ANC's or the Indian tribe's written designation within 30 days of the subcontract award, the Contractor that awarded the subcontract to the ANC or Indian tribe will be considered the designated Contractor.

(2) A statement of—

(i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;

(ii) Total dollars planned to be subcontracted to small business concerns (including ANC and Indian tribes);

(iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;

(iv) Total dollars planned to be subcontracted to service-disabled veteran-owned small business;

(v) Total dollars planned to be subcontracted to HUBZone small business concerns;

(vi) Total dollars planned to be subcontracted to small disadvantaged business concerns (including ANCs and Indian tribes); and

(vii) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to --

(i) Small business concerns,

(ii) Veteran-owned small business concerns;

(iii) Service-disabled veteran-owned small business concerns;

(iv) HUBZone small business concerns;

(v) Small disadvantaged business concerns, and

(vi) Women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.

(5) A description of the method used to identify potential sources for solicitation purposes (*e.g.*, existing company source lists, the System for Award Management (SAM), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in SAM as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of SAM as its source list does not relieve a firm of its responsibilities (*e.g.*, outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.

(6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with --

(i) Small business concerns (including ANC and Indian tribes);

(ii) Veteran-owned small business concerns;

(iii) Service-disabled veteran-owned small business concerns;

(iv) HUBZone small business concerns;

(v) Small disadvantaged business concerns (including ANC and Indian tribes); and

(vi) Women-owned small business concerns.

(7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of $650,000 ($1.5 million for construction of any public facility with further subcontracting possibilities) to adopt a plan similar to the plan that complies with the requirements of this clause.

(10) Assurances that the offeror will --

(i) Cooperate in any studies or surveys as may be required;

(ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;

(iii) Submit the Individual Subcontracting Report (ISR) and/or the Summary Subcontract Report (SSR), in accordance with the paragraph (l) of this clause using the Electronic Subcontracting Reporting System (eSRS) at http://www.esrs.gov . The reports shall provide information on subcontract awards to small business concerns (including ANCs and Indian tribes that are not small businesses), veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns (including ANCs and Indian tribes that have not been certified by the Small Business Administration as small

disadvantaged businesses), women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with this clause, or as provided in agency regulations;

(iv) Ensure that its subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using eSRS;

(v) Provide its prime contract number, its DUNS number, and the e-mail address of the offeror's official responsible for acknowledging receipt of or rejecting the ISRs, to all first-tier subcontractors with subcontracting plans so they can enter this information into the eSRS when submitting their ISRs; and

(vi) Require that each subcontractor with a subcontracting plan provide the prime contract number, its own DUNS number, and the e-mail address of the subcontractor's official responsible for acknowledging receipt of or rejecting the ISRs, to its subcontractors with subcontracting plans.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated):

(i) Source lists (*e.g.*, SAM), guides, and other data that identify small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than $150,000, indicating --

(A) Whether small business concerns were solicited and if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether service-disabled veteran-owned small business concerns were solicited and, if not, why not;

(D) Whether HUBZone small business concerns were solicited and, if not, why not;

(E) Whether small disadvantaged business concerns were solicited and if not, why not;

(F) Whether women-owned small business concerns were solicited and if not, why not; and

(G) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact --

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through--

(A) Workshops, seminars, training, etc., and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business,

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

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all “make-or-buy” decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Confirm that a subcontractor representing itself as a HUBZone small business concern is identified as a certified HUBZone small business concern by accessing the SAM database or by contacting SBA.

(5) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owned small business, HUBZone small, small disadvantaged or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor’s subcontracting plan.

(6) For all competitive subcontracts over the simplified acquisition threshold in which a small business concern received a small business preference, upon determination of the successful subcontract offeror, the Contractor must inform each unsuccessful small business subcontract offeror in writing of the name and location of the apparent successful offeror prior to award of the contract.

(f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided --

(1) The master plan has been approved;

(2) The offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer; and

(3) Goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Once the Contractor's commercial plan has been approved, the Government will not require another subcontracting plan from the same Contractor while the plan remains in effect, as long as the product or service being provided by the Contractor continues to meet the definition of a commercial item. A contractor with a commercial plan shall comply with the reporting requirements stated in paragraph (d)(10) of this clause by submitting one SSR in eSRS for all contracts covered by its commercial plan. This report shall be acknowledged or rejected in eSRS by the Contracting Officer who approved the plan. This report shall be submitted within 30 days after the end of the Government's fiscal year.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) A contract may have no more than one plan. When a modification meets the criteria in 19.702 for a plan, or an option is exercised, the goals associated with the modification or option shall be added to those in the existing subcontract plan.

(j) Subcontracting plans are not required from subcontractors when the prime contract contains the clause at 52.212-5, Contract Terms and Conditions Required to Implement Statutes or Executive Orders—Commercial Items, or when the subcontractor provides a commercial item subject to the clause at 52.244-6, Subcontracts for Commercial Items, under a prime contract.

(k) The failure of the Contractor or subcontractor to comply in good faith with—

(1) The clause of this contract entitled "Utilization Of Small Business Concerns;" or

(2) An approved plan required by this clause, shall be a material breach of the contract.

(l) The Contractor shall submit ISRs and SSRs using the web-based eSRS at http://www.esrs.gov. Purchases from a corporation, company, or subdivision that is an affiliate of the prime Contractor or subcontractor are not included in these reports. Subcontract award data reported by prime Contractors and subcontractors shall be limited to awards made to their immediate next-tier subcontractors. Credit cannot be taken for awards made to lower tier subcontractors unless the Contractor or subcontractor has been designated to receive a small business or small disadvantaged business credit from an ANC or Indian tribe. Only subcontracts involving performance in the United States or its outlying areas should be included in these reports with the exception of subcontracts under a contract awarded by the State Department or any other

agency that has statutory or regulatory authority to require subcontracting plans for subcontracts performed outside the United States and its outlying areas.

(1) *ISR*. This report is not required for commercial plans. The report is required for each contract containing an individual subcontract plan.

(i) The report shall be submitted semi-annually during contract performance for the periods ending March 31 and September 30. A report is also required for each contract within 30 days of contract completion. Reports are due 30 days after the close of each reporting period, unless otherwise directed by the Contracting Officer. Reports are required when due, regardless of whether there has been any subcontracting activity since the inception of the contract or the previous reporting period.

(ii) When a subcontracting plan contains separate goals for the basic contract and each option, as prescribed by FAR 19.704(c), the dollar goal inserted on this report shall be the sum of the base period through the current option; for example, for a report submitted after the second option is exercised, the dollar goal would be the sum of the goals for the basic contract, the first option, and the second option.

(iii) The authority to acknowledge receipt or reject the ISR resides—

(A) In the case of the prime Contractor, with the Contracting Officer; and

(B) In the case of a subcontract with a subcontracting plan, with the entity that awarded the subcontract.

(2) *SSR*.

(i) Reports submitted under individual contract plans—

(A) This report encompasses all subcontracting under prime contracts and subcontracts with the awarding agency, regardless of the dollar value of the subcontracts.

(B) The report may be submitted on a corporate, company or subdivision (*e.g.* plant or division operating as a separate profit center) basis, unless otherwise directed by the agency.

(C) If a prime Contractor and/or subcontractor is performing work for more than one executive agency, a separate report shall be submitted to each executive agency covering only that agency's contracts, provided at least one of that agency's contracts is over $650,000 (over $1.5 million for construction of a public facility) and contains a subcontracting plan. For DoD, a

consolidated report shall be submitted for all contracts awarded by military departments/agencies and/or subcontracts awarded by DoD prime Contractors. However, for construction and related maintenance and repair, a separate report shall be submitted for each DoD component.

(D) For DoD and NASA, the report shall be submitted semi-annually for the six months ending March 31 and the twelve months ending September 30. For civilian agencies, except NASA, it shall be submitted annually for the twelve month period ending September 30. Reports are due 30 days after the close of each reporting period.

(E) Subcontract awards that are related to work for more than one executive agency shall be appropriately allocated.

(F) The authority to acknowledge or reject SSRs in eSRS, including SSRs submitted by subcontractors with subcontracting plans, resides with the Government agency awarding the prime contracts unless stated otherwise in the contract.

(ii) Reports submitted under a commercial plan—

(A) The report shall include all subcontract awards under the commercial plan in effect during the Government's fiscal year.

(B) The report shall be submitted annually, within thirty days after the end of the Government's fiscal year.

(C) If a Contractor has a commercial plan and is performing work for more than one executive agency, the Contractor shall specify the percentage of dollars attributable to each agency from which contracts for commercial items were received.

(D) The authority to acknowledge or reject SSRs for commercial plans resides with the Contracting Officer who approved the commercial plan.

(iii) All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a Year-End Supplementary Report for Small Disadvantaged Businesses. The report shall include subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. If the data are not available when the year-end SSR is submitted, the prime Contractor and/or subcontractor shall submit the Year-End Supplementary Report for Small Disadvantaged Businesses within 90 days of submitting the year-end SSR. For a commercial plan, the Contractor may obtain from each of its

subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

**CLAUSE I.26 - FAR 52.219-16 LIQUIDATED DAMAGES - SUBCONTRACTING PLAN (JAN 1999)**

(a) "Failure to make a good faith effort to comply with the subcontracting plan," as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars attributable to Government contracts covered by the commercial plan. If, at contract completion, or in the case of a commercial plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a good faith effort to comply with its subcontracting plan, established in accordance with the clause in this contract entitled, “Small Business Subcontracting Plan", the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made and to discuss the matter. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.

(d) With respect to commercial plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial plan.

(e) The Contractor shall have the right of appeal, under the clause in this contract entitled, Disputes, from any final decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

## CLAUSE I.27 - FAR 52.219-25 – SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM—DISADVANTAGED STATUS AND REPORTING (JUL 2013)

(a) *Disadvantaged status for joint venture partners, team members, and subcontractors.* This clause addresses disadvantaged status for joint venture partners, teaming arrangement members, and subcontractors and is applicable if this contract contains small disadvantaged business (SDB) participation targets. The Contractor shall obtain representations of small disadvantaged status from joint venture partners, teaming arrangement members, and subcontractors (see exception in paragraph (b) of this section) through use of a provision substantially the same as paragraph (b)(1)(i) of the provision at FAR 52.219-22, Small Disadvantaged Business Status. The Contractor shall confirm that a joint venture partner, team member, or subcontractor representing itself as a small disadvantaged business concern is a small disadvantaged business concern certified by the Small Business Administration by using the System for Award Management or by contacting the SBA's Office of Small Disadvantaged Business Certification and Eligibility.

(b) For subcontractors that are not certified as a small disadvantaged business by the Small Business Administration, the Contractor shall accept the subcontractor's written self-representation as a small disadvantaged business, unless the Contractor has reason to question the self-representation.

(c) Reporting requirement. If this contract contains SDB participation targets, the Contractor shall report on the participation of SDB concerns at contract completion, or as otherwise provided in this contract. Reporting may be on Optional Form 312, Small Disadvantaged Business Participation Report, in the Contractor's own format providing the same information, or accomplished through using the Electronic Subcontracting Reporting System's Small Disadvantaged Business Participation Report. This report is required for each contract containing SDB participation targets. If this contract contains an individual Small Business Subcontracting Plan, reports shall be submitted with the final Individual Subcontract Report at the completion of the contract.

## CLAUSE I.28 - FAR 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (JUL 2013)

(a) *Definitions*. As used in this clause--

*Long-term contract* means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

*Small business concern* means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (c) of this clause. Such a concern is "not dominant in its field of operation" when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

(b) If the Contractor represented that it was a small business concern prior to award of this contract, the Contractor shall rerepresent its size status according to paragraph (e) of this clause or, if applicable, paragraph (g) of this clause, upon the occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts—

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and

(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) The Contractor shall rerepresent its size status in accordance with the size standard in effect at the time of this rerepresentation that corresponds to the North American Industry Classification System (NAICS) code assigned to this contract. The small business size standard corresponding to this NAICS code can be found at http://www.sba.gov/content/table-small-business-size-standards .

(d) The small business size standard for a Contractor providing a product which it does not manufacture itself, for a contract other than a construction or service contract, is 500 employees.

(e) Except as provided in paragraph (g) of this clause, the Contractor shall make the representation required by paragraph (b) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause that the data have been validated or updated, and provide the date of the validation or update.

(f) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (e) or (g) of this clause.

(g) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:

> The Contractor represents that it [ ] is, [ ] is not a small business concern under NAICS Code _____ assigned to contract number _____.[*Contractor to sign and date and insert authorized signer's name and title*].

**CLAUSE I.29 - <u>FAR 52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)</u>**

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

**CLAUSE I.30 - <u>FAR 52.222-3 CONVICT LABOR (JUN 2003)</u>**

(a) Except as provided in paragraph (b) of this clause, the Contractor shall not employ in the performance of this contract any person undergoing a sentence of imprisonment imposed by any court of a State, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands.

(b) The Contractor is not prohibited from employing persons –

(1) On parole or probation to work at paid employment during the term of their sentence;

(2) Who have been pardoned or who have served their terms; or

(3) Confined for violation of the laws of any of the States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if –

(i) The worker is paid or is in an approved work training program on a voluntary basis;

(ii) Representatives of local union central bodies or similar labor union organizations have been consulted;

(iii) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services;

(iv) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and

(v) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

## CLAUSE I.31 - FAR 52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT -- OVERTIME COMPENSATION (MAY 2014)

(a) *Overtime requirements.* No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) *Violation; liability for unpaid wages; liquidated damages.* The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate of $10 per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages

required by the Contract Work Hours and Safety Standards statute (found at 40 U.S.C. chapter 37).

(c) *Withholding for unpaid wages and liquidated damages.* The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards statute.

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Construction Wage Rate Requirements statute.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) Subcontracts. The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts that may require or involve the employment of laborers and mechanics and require subcontractors to include these provisions in any such lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier contractor with the provisions set forth in paragraphs (a) through (d) of this clause.

**CLAUSE I.32 - FAR 52.222-11 SUBCONTRACTS (LABOR STANDARDS) (MAY 2014)**

(a) *Definition.* "Construction, alteration or repair," as used in this clause, means all types of work done by laborers and mechanics employed by the construction Contractor or construction subcontractor on a particular building or work at the site thereof, including without limitation –

(1) Altering, remodeling, installation (if appropriate) on the site of the work of items fabricated off-site;

(2) Painting and decorating;

(3) Manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work;

(4) Transportation of materials and supplies between the site of the work within the meaning of paragraphs (a)(1)(i) and (ii) of the "site of the work" as defined in the FAR clause at 52.222-6, Construction Wage Rate Requirements of this contract, and a facility which is dedicated to the construction of the building or work and is deemed part of the site of the work within the meaning of paragraph (2) of the "site of the work" definition; and

(5) Transportation of portions of the building or work between a secondary site where a significant portion of the building or work is constructed, which is part of the "site of the work" definition in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Construction Wage Rate Requirements, and the physical place or places where the building or work will remain (paragraph (a)(1)(i) of the FAR clause at 52.222-6, in the "site of the work" definition).

(b) The Contractor shall insert in any subcontracts for construction, alterations and repairs within the United States the clauses entitled –

(1) Construction Wage Rate Requirements;

(2) Contract Work Hours and Safety Standards – Overtime Compensation (if the clause is included in this contract);

(3) Apprentices and Trainees;

(4) Payrolls and Basic Records;

(5) Compliance with Copeland Act Requirements;

(6) Withholding of Funds;

(7) Subcontracts (Labor Standards);

(8) Contract Termination – Debarment;

(9) Disputes Concerning Labor Standards;

(10) Compliance with Construction Wage Rate Requirements and Related Regulations; and

(11) Certification of Eligibility.

(c) The prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor performing construction within the United States with all the contract clauses cited in paragraph (b).

(d)

(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Standard Form (SF) 1413, Statement and Acknowledgement, for each subcontract for construction within the United States, including the subcontractor's signed and dated acknowledgement that the clauses set forth in paragraph (b) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

(e) The Contractor shall insert the substance of this clause, including this paragraph (e) in all subcontracts for construction within the United States.

## CLAUSE I.33 - FAR 52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

(a) *Segregated facilities,* as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

## CLAUSE I.34 - FAR 52.222-26 EQUAL OPPORTUNITY (MAR 2007)

(a) *Definition*. "United States," as used in this clause, means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) (1) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of $10,000, the Contractor shall comply with this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(2) If the Contractor is a religious corporation, association, educational institution, or society, the requirements of this clause do not apply with respect to the employment of individuals of a particular religion to perform work connected with the carrying on of the Contractor's activities (41 CFR 60-1.5).

(c)

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to -

(i) Employment;

(ii) Upgrading;

(iii) Demotion;

(iv) Transfer;

(v) Recruitment or recruitment advertising;

(vi) Layoff or termination;

(vii) Rates of pay or other forms of compensation; and

(viii) Selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the Contracting Officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance, provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any

direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(d) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

**CLAUSE I.35 - FAR 52.222-29 NOTIFICATION OF VISA DENIAL (JUN 2003)**

It is a violation of Executive Order 11246 for a Contractor to refuse to employ any applicant or not to assign any person hired in the United States, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, or Wake Island, on the basis that the individual's race, color, religion, sex, or national origin is not compatible with the policies of the country where or for whom the work will be performed (41 CFR 60-1.10). The Contractor shall notify the U.S. Department of State, Assistant Secretary, Bureau of Political-Military Affairs (PM), 2201 C Street NW., Room 6212, Washington, DC 20520, and the U.S. Department of Labor, Deputy Assistant Secretary for Federal Contract Compliance, when it has knowledge of any employee or potential employee being denied an entry visa to a country where this contract will be performed, and it believes the denial is attributable to the race, color, religion, sex, or national origin of the employee or potential employee.

**CLAUSE I.36 - FAR 52.222-35 – EQUAL OPPORTUNITY FOR VETERANS (JUL 2014)**

(a) *Definitions.* As used in this clause –
"Active duty wartime or campaign badge veteran," "Armed Forces service medal veteran," "disabled veteran," "protected veteran," "qualified disabled veteran," and "recently separated veteran" have the meanings given at FAR 22.1301.

(b) *Equal opportunity clause.* The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts of $100,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

## CLAUSE I.37 - FAR 52.222-36 – EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES (JUL 2014)

(a) *Equal opportunity clause.* The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) *Subcontracts.* The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of $15,000 unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

## CLAUSE I.38 - FAR 52.222-37 – EMPLOYMENT REPORTS ON VETERANS (JUL 2014)

(a) *Definitions.* As used in this clause, "Armed Forces service medal veteran," "disabled veteran," "active duty wartime or campaign badge veteran," and "recently separated veteran," have the meanings given in FAR 22.1301.

(b) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on –

(1) The total number of employees in the contractor's workforce, by job category and hiring location, who are disabled veterans, other protected veterans (*i.e.,* active duty wartime or campaign badge veterans), Armed Forces service medal veterans, and recently separated veterans;

(2) The total number of new employees hired during the period covered by the report, and of the total, the number of disabled veterans, other protected veterans (*i.e.,* active duty wartime or campaign badge veterans), Armed Forces service medal veterans, and recently separated veterans; and

(3) The maximum number and minimum number of employees of the Contractor or subcontractor at each hiring location during the period covered by the report.

(c) The Contractor shall report the above items by completing the Form VETS-100A, entitled "Federal Contractor Veterans' Employment Report (VETS-100A Report)."

(d) The Contractor shall submit VETS-100A Reports no later than September 30 of each year.

(e) The employment activity report required by paragraphs (b)(2) and (b)(3) of this clause shall reflect total new hires, and maximum and minimum number of employees, during the most recent 12-month period preceding the ending date selected for the report. Contractors may select an ending date –

(1) As of the end of any pay period between July 1 and August 31 of the year the report is due; or

(2) As of December 31, if the Contractor has prior written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(f) The number of veterans reported must be based on data known to the contractor when completing the VETS-100A. The contractor's knowledge of veterans status may be obtained in a variety of ways, including an invitation to applicants to self – identify (in accordance with 41 CFR 60-300.42), voluntary self-disclosure by employees, or actual knowledge of veteran status by the contractor. This paragraph does not relieve an employer of liability for discrimination under 38 U.S.C. 4212.

(g) The Contractor shall insert the terms of this clause in subcontracts of $100,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor.

## CLAUSE I.39 - FAR 52.222-40 – NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT (DEC 2010)

(a) During the term of this contract, the Contractor shall post an employee notice, of such size and in such form, and containing such content as prescribed by the Secretary of Labor, in conspicuous places in and about its plants and offices

where employees covered by the national Labor Relations Act engage in activities relating to the performance of the contract, including all places where notices to employees are customarily posted both physically and electronically, in the languages employees speak, in accordance with 29 CFR 471.2(d) and (f).

(1) Physical posting of the employee notice shall be in conspicuous places in and about the Contractor's plants and offices so that the notice is prominent and readily seen by employees who are covered by the National Labor Relations Act and engage in activities related to the performance of the contact.

(2) If the Contractor customarily posts notices to employees electronically, then the Contractor shall also post the required notice electronically by displaying prominently, on any Web site that is maintained by the Contractor and is customarily used for notices to employees about terms and conditions of employment, a link to the Department of Labor's Web site that contains the full text of the poster. The link to the Department's Web site, as referenced in (b)(3) of this section, must read, "Important Notice about Employee Rights to Organize and Bargain Collectively with Their Employers."

(b) This required employee notice, printed by the Department of Labor, may be—

(1) Obtained from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW., Room N-5609, Washington, DC 20210, (202) 693-0123, or from any field office of the Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Provided by the Federal contracting agency if requested;

(3) Downloaded from the Office of Labor-management Standards Web site at http://www.dol.gov/olms/regs/compliance/EO13496.htm; or

(4) Reproduced and used as exact duplicate copies of the Department of Labor's official poster.

(c) The required text of the employee notice referred to in this clause is located at Appendix A, Subpart A, 29 CFR Part 471.

(d) The Contractor shall comply with all provisions of the employee notice and related rules, regulations, and orders of the Secretary of Labor.

(e) In the event that the Contractor does not comply with the requirements set forth in paragraphs (a) through (d) of this clause, this contract may be terminated or suspended in whole or in part, and the Contractor may be suspended or debarred in accordance with 29 CFR 471.14 and subpart 9.4 Such other sanctions or

remedies may be imposed as are provided by 29 CFR part 471, which implements Executive Order 13496 or as otherwise provided by law.

(f) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (f), in every subcontract that exceeds $10,000 and will be performed wholly or partially in the Unites States, unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to section 3 of Executive Order 13496 of January 30, 2009, so that such provisions will be binding upon each subcontractor.

(2) The Contractor shall not procure supplies or services in a way designed to avoid the applicability of Executive Order 13496 or this clause.

(3) The Contractor shall take such action with respect to any such subcontract as may be directed by the Secretary of Labor as a means of enforcing such provisions, including the imposition of sanctions for noncompliance.

(4) However, if the Contractor becomes involved in litigation with a subcontractor, or is threatened with such involvement, as a result of such direction, the Contractor ma request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

**CLAUSE I.40 - <u>FAR 52.222-50 Combating Trafficking in Persons (Feb 2009)</u>**

(a) *Definitions.* As used in this clause—

"Coercion" means—

(1) Threats of serious harm to or physical restraint against any person;

(2) Any scheme, plan, or pattern intended to cause a person to believe that failure to perform an act would result in serious harm to or physical restraint against any person; or

(3) The abuse or threatened abuse of the legal process.

"Commercial sex act" means any sex act on account of which anything of value is given to or received by any person.

"Debt bondage" means the status or condition of a debtor arising from a pledge by the debtor of his or her personal services or of those of a person under his or her control as a security for debt, if the value of those services as reasonably

assessed is not applied toward the liquidation of the debt or the length and nature of those services are not respectively limited and defined.

“Employee” means an employee of the Contractor directly engaged in the performance of work under the contract who has other than a minimal impact or involvement in contract performance.

“Forced labor” means knowingly providing or obtaining the labor or services of a person—

(1) By threats of serious harm to, or physical restraint against, that person or another person;

(2) By means of any scheme, plan, or pattern intended to cause the person to believe that, if the person did not perform such labor or services, that person or another person would suffer serious harm or physical restraint; or

(3) By means of the abuse or threatened abuse of law or the legal process.

“Involuntary servitude” includes a condition of servitude induced by means of—

(1) Any scheme, plan, or pattern intended to cause a person to believe that, if the person did not enter into or continue in such conditions, that person or another person would suffer serious harm or physical restraint; or

(2) The abuse or threatened abuse of the legal process.

“Severe forms of trafficking in persons” means—

(1) Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act ahs not attained 18 years of age; or

(2) The recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

“Sex trafficking” means the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act.

(b) *Policy*. The United States Government has adopted a zero tolerance policy regarding trafficking in persons. Contractors and contractor employees shall not—

(1) Engage in severe forms of trafficking in persons during the period of performance of the contract;

(2) Procure commercial sex acts during the period of performance of the contract; or

(3) Use forced labor in the performance of the contract.

(c) *Contractor requirements*. The Contractor shall—

(1) Notify its employees of—

(i) The United States Government's zero tolerance policy described in paragraph (b) of this clause; and

(ii) The actions that will be taken against employees for violations of this policy. Such actions may include, but are not limited to, removal from the contract, reduction in benefits, or termination of employment; and

(2) Take appropriate action, up to and including termination, against employees or subcontractors that violate the policy in paragraph (b) of this clause.

(d) *Notification*. The Contractor shall inform the Contracting Officer immediately of—

(1) Any information it receives from any source (including host country law enforcement) that alleges a Contractor employee, subcontractor, or subcontractor employee has engaged in conduct that violates this policy; and

(2) Any actions taken against Contractor employees, subcontractors, or subcontractor employees pursuant to this clause.

(e) *Remedies*. In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraphs (c), (d), or (f) of this clause may result in—

(1) Requiring the Contractor to remove a Contractor employee or employees from the performance of the contract;

(2) Requiring the Contractor to terminate a subcontract;

(3) Suspension of contract payments;

(4) Loss of award fee, consistent with the award fee plan, for the performance period in which the Government determined Contractor non-compliance;

(5) Termination of the contract for default or cause, in accordance with the termination clause of this contract; or

(6) Suspension or debarment.

(f) *Subcontracts*. The Contractor shall include the substance of this clause, including this paragraph (f), in all subcontracts.

(g) *Mitigating Factor*. The Contracting Officer may consider whether the Contactor had a Trafficking in Persons awareness program at the time of the violation as a mitigating factor when determining remedies. Additional information about Trafficking in Persons and examples of awareness programs can be found at the website for the Department of State's Office to Monitor and Combat Trafficking in Persons at http://www.state.gov/g/tip .

**CLAUSE I.41 - FAR 52.223-2, AFFIRMATIVE PROCUREMENT OF BIOBASED PRODUCTS UNDER SERVICE AND CONSTRUCTION CONTRACTS (SEP 2013)**

(a) In the performance of this contract, the contractor shall make maximum use of biobased products that are United States Department of Agriculture (USDA)-designated items unless—

(1) The product cannot be acquired—

(i) Competitively within a time frame providing for compliance with the contract performance schedule;

(ii) Meeting contract performance requirements; or

(iii) At a reasonable price.

(2) The product is to be used in an application covered by a USDA categorical exemption (see 7 CFR 3201.3(e)). For example, all USDA-designated items are exempt from the preferred procurement requirement for the following:

(i) Spacecraft system and launch support equipment.

(ii) (ii) Military equipment, *i.e*., a product or system designed or procured for combat or combat-related missions.

(b) Information about this requirement and these products is available at *http://www.biopreferred.gov*.

(c) In the performance of this contract, the Contractor shall—

(1) Report to *http://www.sam.gov*, with a copy to the Contracting Officer, on the product types and dollar value of any USDA-designated biobased products purchased by the Contractor during the previous Government fiscal year, between October 1 and September 30; and

(2) Submit this report no later than—

(i) October 31 of each year during contract performance; and
(ii) At the end of contract performance.

**CLAUSE I.42 - FAR 52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997){ALTERNATE I (JUL 1995)**

(a) *"Hazardous material,"* as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

| **Material**<br>*(If none, insert "None")* | **Identification No.** |
|---|---|
| | |
| | |
| | |

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to --

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

*Alternate I (Jul 1995)*

(i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in paragraph (b) of this clause.

(1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.

(2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

## CLAUSE I.43 - FAR 52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (MAY 2011) (ALTERNATE I)

(a) *Definitions*. As used in this clause—

"Toxic chemical" means a chemical or chemical category listed in 40 CFR 372.65.

(b) Federal facilities are required to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11001-11050), and the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101-13109).

(c) The Contractor shall provide all information needed by the Federal facility to comply with the following:

(1) The emergency planning reporting requirements of Section 302 of EPCRA.

(2) The emergency notice requirements of Section 304 of EPCRA.

(3) The list of Material Safety Data Sheets, required by Section 311 of EPCRA.

(4) The emergency and hazardous chemical inventory forms of Section 312 of EPCRA.

(5) The toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA.

(6) The toxic chemical and hazardous substance release and use reduction goals of section 2(e) of Executive Order 13423 and of Executive Order 13514.

(7) The environmental management system as described in section 3(b) of E.O. 13423 and 2(j) of E.O. 13514.

## CLAUSE I.44 - FAR 52.223-10 WASTE REDUCTION PROGRAM (MAY 2011)

(a) *Definitions*. As used in this clause—

"Recycling" means the series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of products other than fuel for producing heat or power by combustion.

"Waste prevention" means any change in the design, manufacturing, purchase, or use of materials or products (including packaging) to reduce their amount or toxicity before they are discarded. Waste prevention also refers to the reuse of products or materials.

"Waste reduction" means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

(b) Consistent with the requirements of section 3(e) of Executive Order 13423, the Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. The Contractor's programs shall comply with applicable Federal, State, and local requirements, specifically including Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6962, *et seq*.) and implementing regulations (40 CFR Part 247).

## CLAUSE I.45 - FAR 52.223-11 OZONE-DEPLETING SUBSTANCES (MAY 2001)

(a) *Definition. "Ozone-depleting substance,"* as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR Part 82 as--

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II , including, but not limited to hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

**Warning**

Contains (or manufactured with, if applicable) *_____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

* The Contractor shall insert the name of the substance(s).

## CLAUSE I.46 - FAR 52.223-12 REFRIGERATION EQUIPMENT AND AIR CONDITIONERS (MAY 1995)

The Contractor shall comply with the applicable requirements of Sections 608 and 609 of the Clean Air Act (42 U.S.C. 7671g and 7671h) as each or both apply to this contract.

## CLAUSE I.47 – FAR 52.215-15, Pension Adjustments and Asset Reversions (OCT 2010)

(a) The Contractor shall promptly notify the Contracting Officer in writing when it determines that it will terminate a defined-benefit pension plan or otherwise recapture such pension fund assets.

(b) For segment closings, pension plan terminations, or curtailment of benefits, the amount of the adjustment shall be—

(1) For contracts and subcontracts that are subject to full coverage under the Cost Accounting Standards (CAS) Board rules and regulations (48 CFR Chapter 99), the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12); and

(2) For contracts and subcontracts that are not subject to full coverage under the CAS, the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12), except the numerator of the fraction at 48 CFR 9904.413-50(c)(12)(vi) shall be the sum of the pension plan costs allocated to all non-CAS covered contracts and subcontracts that are subject to Federal Acquisition Regulation (FAR) Subpart 31.2 or for which certified cost or pricing data were submitted.

(c) For all other situations where assets revert to the Contractor, or such assets are constructively received by it for any reason, the Contractor shall, at the Government's option, make a refund or give a credit to the Government for its equitable share of the gross amount withdrawn. The Government's equitable share shall reflect the Government's participation in pension costs through those contracts for which certified cost or pricing data were submitted or that are subject to FAR Subpart 31.2.

(d) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(g).

## CLAUSE I.48 – FAR 52.223-15 – ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS (DEC 2007)

(a) *Definition*. As used in this clause--

"Energy-efficient product"—

(1) Means a product that—

(i) Meets Department of Energy and Environmental Protection Agency criteria for use of the Energy Star trademark label; or

(ii) Is in the upper 25 percent of efficiency for all similar products as designated by the Department of Energy's Federal Energy Management Program.

(2) The term "product" does not include any energy-consuming product or system designed or procured for combat or combat-related missions (42 U.S.C. 8259b).

(b) The Contractor shall ensure that energy-consuming products are energy efficient products (*i.e.*, ENERGY STAR® products or FEMP-designated products) at the time of contract award, for products that are—

(1) Delivered;

(2) Acquired by the Contractor for use in performing services at a Federally-controlled facility;

(3) Furnished by the Contractor for use by the Government; or

(4) Specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance.

(c) The requirements of paragraph (b) apply to the Contractor (including any subcontractor) unless—

(1) The energy-consuming product is not listed in the ENERGY STAR® Program or FEMP; or

(2) Otherwise approved in writing by the Contracting Officer.

(d) Information about these products is available for—

(1) ENERGY STAR® at http://www.energystar.gov/products; and

(2) FEMP at http://www1.eere.energy.gov/femp/procurement/eep_requirements.html.

## CLAUSE I.49 - FAR 52.223-16 ACQUISITION OF EPEAT® -- REGISTERD PERSONAL COMPUTER PRODUCTS (JUN 2014)

(a) *Definitions.* As used in this clause –

"Computer" means a device that performs logical operations and processes data. Computers are composed of, at a minimum:

(1) A central processing unit (CPU) to perform operations;

(2) User input devices such as a keyboard, mouse, digitizer, or game controller; and

(3) A computer display screen to output information. Computers include both stationary and portable units, including desktop computers, integrated desktop computers, notebook computers, thin clients, and workstations. Although computers must be capable of using input devices and computer displays, as noted in (2) and (3) above, computer systems do not need to include these devices on shipment to meet this definition. This definition does not include server computers, gaming consoles, mobile telephones, portable hand-held calculators, portable digital assistants (PDAs), MP3 players, or any other mobile computing device with displays less than 4 inches, measured diagonally.

"Computer display" means a display screen and its associated electronics encased in a single housing or within the computer housing (e.g., notebook or integrated desktop computer) that is capable of displaying output information from a computer via one or more inputs such as a VGA, DVI, USB, DisplayPort, and/or IEEE 1394-2008™, Standard for High Performance Serial Bus. Examples of computer display technologies are the cathode-ray tube (CRT) and liquid crystal display (LCD).

"Desktop computer" means a computer where the main unit is intended to be located in a permanent location, often on a desk or on the floor. Desktops are not designed for portability and utilize an external computer display, keyboard, and mouse. Desktops are designed for a broad range of home and office applications.

"Integrated desktop computer" means a desktop system in which the computer and computer display function as a single unit that receives its AC power through a single cable. Integrated desktop computers come in one of two possible forms:

(1) A system where the computer display and computer are physically combined into a single unit; or

(2) A system packaged as a single system where the computer display is separate but is connected to the main chassis by a DC power cord and both the computer and computer display are powered from a single power supply. As a subset of desktop computers, integrated desktop computers are typically designed to provide similar functionality as desktop systems.

"Notebook computer" means a computer designed specifically for portability and to be operated for extended periods of time either with or without a direct connection to an AC power source. Notebooks must utilize an integrated computer display and be capable of operation off of an integrated battery or other portable power source. In addition, most notebooks use an external power supply and have an integrated keyboard and pointing device. Notebook computers are typically designed to provide similar functionality to desktops, including operation of software similar in functionality to that used in desktops. Docking stations are considered accessories for notebook computers, not notebook computers. Tablet PCs, which may use touch-sensitive screens along with, or instead of, other input devices, are considered notebook computers.

"Personal computer product" means a computer, computer display, desktop computer, integrated desktop computer, or notebook computer.

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for Contractor use at a Federally controlled facility, only personal computer products that, at the time of submission of proposals and at the time of award, were EPEAT® bronze-registered or higher.

(c) For information about EPEAT, see *www.epa.gov/epeat*.

**CLAUSE I.50 - FAR 52.223-17 – AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS (MAY 2008)**

(a) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—

(1) Competitively within a timeframe providing for compliance with the contract performance schedule;

(2) Meeting contract performance requirements; or

(3) At a reasonable price.

(b) Information about this requirement is available at EPA's Comprehensive Procurement Guidelines web site, http://www.epa.gov/cpg/ . The list of EPA-designate items is available at http://www.epa.gov/cpg/products.htm .

**CLAUSE I.51 - FAR 52.224-1 PRIVACY ACT NOTIFICATION (APR 1984)**

The Contractor will be required to design, develop, or operate a system of records on individuals to accomplish an agency function subject to the Privacy Act of 1974, Public Law 93-579, December 31, 1974 (5 U.S.C. 552a) and applicable agency regulations. Violation of the Act may involve the imposition of criminal penalties.

**CLAUSE I.52 - FAR 52.224-2 PRIVACY ACT (APR 1984)**

(a) The Contractor agrees to:

(1) Comply with the Privacy Act of 1974 (the Act) and the agency rules and regulations issued under the Act in the design, development, or operation of any system of records on individuals to accomplish an agency function when the contract specifically identifies:

(i) The system of records; and

(ii) The design, development, or operation work that the Contractor is to perform;

(2) Include the Privacy Act notification contained in this contract in every solicitation and resulting subcontract and in every subcontract awarded

without a solicitation, when the work statement in the proposed subcontract requires the redesign, development, or operation of a system of records on individuals that is subject to the Act; and

(3) Include this clause, including this subparagraph (3), in all subcontracts awarded under this contract which requires the design, development, or operation of such a system of records.

(b) In the event of violations of the Act, a civil action may be brought against the agency involved when the violation concerns the design, development, or operation of a system of records on individuals to accomplish an agency function, and criminal penalties may be imposed upon the officers or employees of the agency when the violation concerns the operation of a system of records on individuals to accomplish an agency function. For purposes of the Act, when the contract is for the operation of a system of records on individuals to accomplish an agency function, the Contractor is considered to be an employee of the agency.

(c)

(1) "Operation of a system of records", as used in this Clause, means performance of any of the activities associated with maintaining the system of records, including the collection, use, and dissemination of records.

(2) "Record", as used in this Clause, means any item, collection, or grouping of information about an individual that is maintained by an agency, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and that contains the person's name, or the identifying number, symbol, or other identifying particular assigned to the individual, such as a fingerprint or voiceprint or a photograph.

(3) "System of records on individuals," as used in this Clause, means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.

## CLAUSE I.53 – <u>FAR 52.225-1 BUY AMERICAN– SUPPLIES (MAY 2014)</u>

(a) *Definitions.* As used in this clause –

“Commercially available off-the-shelf (COTS) item” –

(1) Means any item of supply (including construction material) that is –

(i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

"Component" means an article, material, or supply incorporated directly into an end product.

"Cost of components" means –

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

"Domestic end product" means –

(1) An unmanufactured end product mined or produced in the United States;

(2) An end product manufactured in the United States, if –

(i) The cost of its components mined, produced, or manufactured in the United States exceed 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as those that the agency determines are not mined, produced, or manufactured in

sufficient and reasonably available commercial quantities of a satisfactory quality are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic; or

(ii) The end product is a COTS item.

"End product" means those articles, materials, and supplies to be acquired under the contract for public use.

"Foreign end product" means an end product other than a domestic end product.

"United States" means the 50 States, the District of Columbia, and outlying areas.

(b) 41 U.S.C. chapter 83, Buy American, provides a preference for domestic end products for supplies acquired for use in the United States. In accordance with 41 U.S.C. 1907, the component test of the Buy American statute is waived for an end product that is a COTS item (See 12.505(a)(1)).

(c) Offerors may obtain from the Contracting Officer a list of foreign articles that the Contracting Officer will treat as domestic for this contract.

(d) The Contractor shall deliver only domestic end products except to the extent that it specified delivery of foreign end products in the provision of the solicitation entitled "Buy American Certificate."

**CLAUSE I.54 - FAR 52.225-8 – DUTY-FREE ENTRY (OCT 2010)**

(a) *Definitions*. "Customs territory of the United States" means the States, the District of Columbia, and Puerto Rico.

(b) Except as otherwise approved by the Contracting Officer, the Contractor shall not include in the contract price any amount for duties on supplies specifically identified in the Schedule to be accorded duty-free entry.

(c) Except as provided in paragraph (d) of this clause or elsewhere in this contract, the following procedures apply to supplies not identified in the Schedule to be accorded duty-free entry:

(1) The Contractor shall notify the Contracting Officer in writing of any purchase of foreign supplies (including, without limitation, raw materials,

components, and intermediate assemblies) in excess of $15,000 that are to be imported into the customs territory of the United States for delivery to the Government under this contract, either as end products or for incorporation into end products. The Contractor shall furnish the notice to the Contracting Officer at least 20 calendar days before the importation. The notice shall identify the--

(i) Foreign supplies;

(ii) Estimated amount of duty; and

(iii) Country of origin.

The Contracting Officer will determine whether any of these supplies should be accorded duty-free entry and will notify the Contractor within 10 calendar days after receipt of the Contractor's notification.

(3) Except as otherwise approved by the Contracting Officer, the contract price shall be reduced by (or the allowable cost shall not include) the amount of duty that would be payable if the supplies were not entered duty-free.

(d) The Contractor is not required to provide the notification under paragraph (c) of this clause for purchases of foreign supplies if--

(1) The supplies are identical in nature to items purchased by the Contractor or any subcontractor in connection with its commercial business; and

(2) Segregation of these supplies to ensure use only on Government contracts containing duty-free entry provisions is not economical or feasible.

(e) The Contractor shall claim duty-free entry only for supplies to be delivered to the Government under this contract, either as end products or incorporated into end products, and shall pay duty on supplies, or any portion of them, other than scrap, salvage, or competitive sale authorized by the Contracting Officer, diverted to nongovernmental use.

(f) The Government will execute any required duty-free entry certificates for supplies to be accorded duty-free entry and will assist the Contractor in obtaining duty-free entry for these supplies.

(g) Shipping documents for supplies to be accorded duty-free entry shall consign the shipments to the contracting agency in care of the Contractor and shall include the—

(1) Delivery address of the Contractor (or contracting agency, if appropriate);

(2) Government prime contract number;

(3) Identification of carrier;

(4) Notation “UNITED STATES GOVERNMENT, _____ [*agency*], _____ Duty-free entry to be claimed pursuant to Item No(s) _____ [*from Tariff Schedules*] _____, Harmonized Tariff Schedules of the United States. Upon arrival of shipment at port of entry, District Director of Customs, please release shipment under 19 CFR part 142 and notify [*cognizant contract administration office*] for execution of Customs Forms 7501 and 7501-A and any required duty-free entry certificates.";

(5) Gross weight in pounds (if freight is based on space tonnage, state cubic feet in addition to gross shipping weight); and

(6) Estimated value in United States dollars.

(h) The Contractor shall instruct the foreign supplier to--

(1) Consign the shipment as specified in paragraph (g) of this clause;

(2) Mark all packages with the words “UNITED STATES GOVERNMENT" and the title of the contracting agency; and

(3) Include with the shipment at least two copies of the bill of lading (or other shipping document) for use by the District Director of Customs at the port of entry.

(i) The Contractor shall provide written notice to the cognizant contract administration office immediately after notification by the Contracting Officer that duty-free entry will be accorded foreign supplies or, for duty-free supplies identified in the Schedule, upon award by the Contractor to the overseas supplier. The notice shall identify the--

(1) Foreign supplies;

(2) Country of origin;

(3) Contract number; and

(4) Scheduled delivery date(s).

(j) The Contractor shall include the substance of this clause in any subcontract if—

(1) Supplies identified in the Schedule to be accorded duty-free entry will be imported into the customs territory of the United States; or

(2) Other foreign supplies in excess of $15,000 may be imported into the customs territory of the United States.

## CLAUSE I.55 - FAR 52.225-9 – BUY AMERICAN—CONSTRUCTION MATERIALS (MAY 2014)

(a) *Definitions.* As used in this clause –

"Commercially available off-the-shelf (COTS) item" –

(1) Means any item of supply (including construction material) that is –

(i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

"Component" means an article, material, or supply incorporated directly into a construction material.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

"Cost of components" means –

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

"Domestic construction material" means –

(1) An unmanufactured construction material mined or produced in the United States;

(2) A construction material manufactured in the United States, if –

(i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic; or

(ii) The construction material is a COTS item.

"Foreign construction material" means a construction material other than a domestic construction material.

"United States" means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference.

(1) This clause implements 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41

U.S.C. 1907, the component test of the Buy American statute is waived for construction material that is a COTS item. (See FAR 12.505(a)(2)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows:

None

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that –

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American statute is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American statute to a particular construction material would be impractical or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American statute.

(1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including –

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of Delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute.

(d) *Data.* To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

**Foreign and Domestic Construction Materials Cost Comparison**

| Construction Material Description | Unit of Measure | Quantity | Cost (Dollars)* |
|---|---|---|---|
| *Item 1*: | | | |
| *Foreign construction material* | _____ | _____ | _____ |
| *Domestic construction material* | _____ | _____ | _____ |
| *Item 2:* | | | |
| *Foreign construction material* | _____ | _____ | _____ |
| *Domestic construction material* | _____ | _____ | _____ |

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.] [Include other applicable supporting information.]

*Include all delivery costs to the construction site.

**CLAUSE I.56 - FAR 52.225-13 -- Restrictions on Certain Foreign Purchases (Jun 2008)**

(a) Except as authorized by the Office of Foreign Assets Control (OFAC) in the Department of the Treasury, the Contractor shall not acquire, for use in the performance of this contract, any supplies or services if any proclamation, Executive order, or statute administered by OFAC, or if OFAC's implementing regulations at 31 CFR chapter V, would prohibit such a transaction by a person

(b) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from Burma or North Korea, into the United States or its outlying areas. Lists of entities and individuals subject to economic sanctions are included in OFAC's List of Specially Designated Nationals and Blocked Persons at http://www.treas.gov/offices/enforcement/ofac/sdn/. More information about these restrictions, as well as updates, is available in the OFAC's regulations at 31 CFR chapter V and/or on OFAC's website at http://www.treas.gov/offices/enforcement/ofac.

(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

**CLAUSE I.57 FAR 52.225-21 – REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS—BUY AMERICAN STATUTE — CONSTRUCTION MATERIALS (MAY 2014)**

(a) *Definitions.* As used in this clause –

"Component" means an article, material, or supply incorporated directly into a construction material.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site.

"Domestic construction material" means the following –

(1) An unmanufactured construction material mined or produced in the United States. (The Buy American statute applies.)

(2) A manufactured construction material that is manufactured in the United States and, if the construction material consists wholly or predominantly of iron or steel, the iron or steel was produced in the United States. (Section 1605 of the Recovery Act applies.)

"Foreign construction material" means a construction material other than a domestic construction material.

"Manufactured construction material" means any construction material that is not unmanufactured construction material.

"Steel" means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.

"United States" means the 50 States, the District of Columbia, and outlying areas.

"Unmanufactured construction material" means raw material brought to the construction site for incorporation into the building or work that has not been –

(1) Processed into a specific form and shape; or

(2) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.

(b) Domestic preference.

(1) This clause implements –

(i) Section 1605 of the American Recovery and Reinvestment Act of 2009 (Recovery Act) (Pub. L. 111-5), by requiring, unless an exception applies, that all manufactured construction material in the project is manufactured in the United States and, if the construction material consists wholly or predominantly of iron or steel, the iron or steel was produced in the United States (produced in the United States means that all manufacturing processes of the iron or steel must take place in the United States, except metallurgical processes involving refinement of steel additives); and

(ii) 41 U.S.C. chapter 83, Buy American, by providing a preference for unmanufactured construction material mined or produced in the United States over unmanufactured construction material mined or produced in a foreign country.

(2) The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraph (b)(3) and (b)(4) of this clause.

(3) This requirement does not apply to the construction material or components listed by the Government as follows:

None

(4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that –

(i) The cost of domestic construction material would be unreasonable;

(A) The cost of domestic manufactured construction material, when compared to the cost of comparable foreign manufactured construction material, is unreasonable when the cumulative cost of such material will increase the cost of the contract by more than 25 percent;

(B) The cost of domestic unmanufactured construction material is unreasonable when the cost of such material exceeds the cost of comparable foreign unmanufactured construction material by more than 6 percent;

(ii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available quantities and of a satisfactory quality;

(iii) The application of the restriction of section 1605 of the Recovery Act to a particular manufactured construction material would be inconsistent with the public interest or the application of the Buy American statute to a particular unmanufactured construction material would be impracticable or inconsistent with the public interest.

(c) Request for determination of inapplicability of Section1605 of the Recovery Act or the Buy American statute.

(1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including –

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Cost;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(4) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed cost comparison table in the format in paragraph (d) of this clause.

(iii) The cost of construction material shall include all delivery costs to the construction site and any applicable duty.

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to section 1605 of the Recovery Act or the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable cost of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.

(3) Unless the Government determines that an exception to section 1605 of the Recovery Act or the Buy American statute applies, use of foreign construction material is noncompliant with section 1605 of the American Recovery and Reinvestment Act or the Buy American statute.

(d) *Data.* To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

**Foreign and Domestic Construction Materials Cost Comparison**

| Construction Material Description | Unit of Measure | Quantity | Cost (Dollars)* |
|---|---|---|---|
| *Item 1*: | | | |
| *Foreign construction material* | _____ | _____ | _____ |
| *Domestic construction material* | _____ | _____ | _____ |
| *Item 2:* | | | |
| *Foreign construction material* | _____ | _____ | _____ |
| *Domestic construction material* | _____ | _____ | _____ |

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.] [Include other applicable supporting information.]

*Include all delivery costs to the construction site.

## CLAUSE I.58 - FAR 52.226-1 -- UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (JUN 2000)

(a) *Definitions*. As used in this clause:

"Indian" means any person who is a member of any Indian tribe, band, group, pueblo, or community that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C.1452(c) and any "Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601).

"Indian organization" means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C., chapter 17.

"Indian-owned economic enterprise" means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity

established or organized for the purpose of profit, provided that Indian ownership constitutes not less than 51 percent of the enterprise.

“Indian tribe” means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1452(c).

“Interested party” means a prime contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

(b) The Contractor shall use its best efforts to give Indian organizations and Indian-owned economic enterprises (25 U.S.C. 1544) the maximum practicable opportunity to participate in the subcontracts it awards to the fullest extent consistent with efficient performance of its contract.

(1) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization or Indian-owned economic enterprise as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status. In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to the:

U.S. Department of the Interior
Bureau of Indian Affairs (BIA)
Attn: Chief, Division of Contracting and Grants Administration
1849 C Street, NW, MS-2626-MIB
Washington, DC 20240-4000

The BIA will determine the eligibility and notify the Contracting Officer. No incentive payment will be made within 50 working days of subcontract award or while a challenge is pending. If a subcontractor is determined to be an ineligible participant, no incentive payment will be made under the Indian Incentive Program.

(2) The Contractor may request an adjustment under the Indian Incentive Program to the following:

(i) The estimated cost of a cost-type contract.

(ii) The target cost of a cost-plus-incentive-fee prime contract.

(iii) The target cost and ceiling price of a fixed-price incentive prime contract.

(iv) The price of a firm-fixed-price prime contract.

(3) The amount of the adjustment to the prime contract is 5 percent of the estimated cost, target cost, or firm-fixed-price included in the subcontract initially awarded to the Indian organization or Indian-owned economic enterprise.

(4) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.

(c) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the amount paid to the subcontractor. The Contracting Officer will seek funding in accordance with agency procedures.

## CLAUSE I.59 - FAR 52.204-13 – SYSTEM FOR AWARD MANAGEMENT MAINTENANCE (JUL 2013)

(a) *Definition.* As used in this clause--

"Data Universal Numbering System (DUNS) number" means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities, which is used as the identification number for Federal Contractors.

"Data Universal Numbering System+4 (DUNS+4) number" means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional SAM records for identifying alternative Electronic Funds Transfer (EFT) accounts (see the FAR at subpart 32.11) for the same concern.

"Registered in the System for Award Management (SAM) database" means that—

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, the Contractor and government Entity (CAGE) code, as well as data required by the Federal Funding Accountability and Transparency Act of 2006 (see subpart 4.14), into the SAM database;

(2) The Contractor has completed the Core, Assertions, Representations and Certifications, and Points of Contact sections of the registration in the SAM database;

(3) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS). The Contractor will be required to provide consent for TIN validation to the Government as a part of the SAM registration process; and

(4) The Government has marked the record “Active”.

“System for Award Management (SAM)” means the primary Government repository for prospective Federal awardee and Federal awardee information and the centralized Government system for certain contracting, grants, and other assistance-related processes. It includes—

(1) Data collected from prospective Federal awardees required for the conduct of business with the Government;

(2) Prospective contractor-submitted annual representations and certifications in accordance with FAR subpart 4.12; and

(3) Identification of those parties excluded from receiving Federal contracts, certain subcontracts, and certain types of Federal financial and non-financial assistance and benefits.

(b) The Contractor is responsible for the accuracy and completeness of the data within the SAM database, and for any liability resulting from the Government’s reliance on inaccurate or incomplete data. To remain registered in the SAM database after the initial registration, the Contractor is required to review and update on an annual basis, from the date of initial registration or subsequent updates, its information in the SAM database to ensure it is current, accurate and complete. Updating information in the SAM does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(c)

(1)

(i) If a Contractor has legally changed its business name, doing business as name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day’s written notification of its intention to—

(A) Change the name in the SAM database;

(B) Comply with the requirements of subpart 42.12 of the FAR; and

(C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor shall

provide with the notification sufficient documentation to support he legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (c)(1)(i) of this clause, or fails to perform the agreement at paragraph (c)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the SAM information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the SAM record to reflect an assignee for the purpose of assignment of claims (see FAR subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the SAM. Information provided to the Contractor's SAM record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the EFT clause of this contract.

(3) The Contractor shall ensure that the DUNS number is maintained with Dun & Bradstreet throughout the life of the contract. The Contractor shall communicate any change to the DUNS number to the Contracting Officer within 30 days after the change, so an appropriate modification can be issued to update the data on the contract. A change in the DUNS number does not necessarily require a novation be accomplished. Dun & Bradstreet may be contacted—

(i) Via the internet at http://fedgov.dnb.com/webform or if the Contractor does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office.

(d) Contractors may obtain additional information on registration and annual confirmation requirements at https://www.acquisition.gov.

## CLAUSE I.60 - FAR 52.227-10 -- FILING OF PATENT APPLICATIONS – CLASSIFIED SUBJECT MATTER (DEC 2007)

(a) Before filing or causing to be filed a patent application in the United States disclosing any subject matter of this contract classified “Secret” or higher, the Contractor shall, citing the 30-day provision below, transmit the proposed application to the Contracting Officer. The Government shall determine whether, for reasons of national security, the application should be placed under an order of secrecy, sealed in accordance with the provision of 35 U.S.C. 181-188, or the issuance of a patent otherwise delayed under pertinent United States statutes or regulations. The Contractor shall observe any instructions of the Contracting Officer regarding the manner of delivery of the patent application to the United States Patent Office, but the Contractor shall not be denied the right to file the application. If the Contracting Officer shall not have given any such instructions within 30 days from the date of mailing or other transmittal of the proposed application, the Contractor may file the application.

(b) Before filing a patent application in the United States disclosing any subject matter of this contract classified “Confidential,’’ the Contractor shall furnish to the Contracting Officer a copy of the application for Government determination whether, for reasons of national security, the application should be placed under an order of secrecy or the issuance of a patent should be otherwise delayed under pertinent United States statutes or regulations.

(c) Where the subject matter of this contract is classified for reasons of security, the Contractor shall not file, or cause to be filed, in any country other than in the United States as provided in paragraphs (a) and (b) of this clause, an application or registration for a patent containing any of the subject matter of this contract without first obtaining written approval of the Contracting Officer.

(d) When filing any patent application coming within the scope of this clause, the Contractor shall observe all applicable security regulations covering the transmission of classified subject matter and shall promptly furnish to the Contracting Officer the serial number, filing date, and name of the country of any such application. When transmitting the application to the United States Patent Office, the Contractor shall by separate letter identify by agency and number the contract or contracts that require security classification markings to be placed on the application.

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in all subcontracts that cover or are likely to cover classified subject matter.

## CLAUSE I.61 - FAR 52.229-8 TAXES -- FOREIGN COST-REIMBURSEMENT CONTRACTS (MAR 1990)

(a) Any tax or duty from which the United States Government is exempt by agreement with the Government of the successor states of the former Soviet Union, (the Ukraine, Belarus, Kazakstan, Russia, the Baltic States of Latvia and Lithuania, and Uzbekistan) or from which the Contractor or any subcontractor under this contract is exempt under the laws of the successor states of the former Soviet Union, (the Ukraine, Belarus, Kazakstan, Russia, the Baltic States of Latvia and Lithuania, and Uzbekistan) shall not constitute an allowable cost under this contract.

(b) If the Contractor or subcontractor under this contract obtains a foreign tax credit that reduces its Federal income tax liability under the United States Internal Revenue Code (Title 26, U.S. Code) because of the payment of any tax or duty that was reimbursed under this contract, the amount of the reduction shall be paid or credited at the time of such offset to the Government of the United States as the Contracting Officer directs.

## CLAUSE I.62 - FAR 52.230–2 COST ACCOUNTING STANDARDS (MAY 2014)

(a) Unless the contract is exempt under 48 CFR 9903.201-1 and 9903.201-2, the provisions of 48 CFR Part 9903 are incorporated herein by reference and the Contractor, in connection with this contract, shall –

(1) *(CAS-covered Contracts Only)* By submission of a Disclosure Statement, disclose in writing the Contractor's cost accounting practices as required by 48 CFR 9903.202-1 through 9903.202-5, including methods of distinguishing direct costs from indirect costs and the basis used for a llocating indirect costs. The practices disclosed for this contract shall be the same as the practices currently disclosed and applied on all other contracts and subcontracts being performed by the Contractor and which contain a Cost Accounting Standards (CAS) clause. If the Contractor has notified the Contracting Officer that the Disclosure Statement contains trade secrets and commercial or financial information which is privileged and confidential, the Disclosure Statement shall be protected and shall not be released outside of the Government.

(2) Follow consistently the Contractor's cost accounting practices in accumulating and reporting contract performance cost data concerning this contract. If any change in cost accounting practices is made for the

purposes of any contract or subcontract subject to CAS requirements, the change must be applied prospectively to this contract and the Disclosure Statement must be amended accordingly. If the contract price or cost allowance of this contract is affected by such changes, adjustment shall be made in accordance with paragraph (a)(4) or (a)(5) of this clause, as appropriate.

(3) Comply with all CAS, including any modifications and interpretations indicated thereto contained in 48 CFR Part 9904, in effect on the date of award of this contract or, if the Contractor has submitted certified cost or pricing data, on the date of final agreement on price as shown on the Contractor's signed certificate of current cost or pricing data. The Contractor shall also comply with any CAS (or modifications to CAS) which hereafter become applicable to a contract or subcontract of the Contractor. Such compliance shall be required prospectively from the date of applicability to such contract or subcontract.

(4)

(i) (Agree to an equitable adjustment as provided in the Changes clause of this contract if the contract cost is affected by a change which, pursuant to paragraph (a)(3) of this clause, the Contractor is required to make to the Contractor's established cost accounting practices.

(ii) Negotiate with the Contracting Officer to determine the terms and conditions under which a change may be made to a cost accounting practice, other than a change made under other provisions of paragraph (a)(4) of this clause; provided that no agreement may be made under this provision that will increase costs paid by the United States.

(iii) When the parties agree to a change to a cost accounting practice, other than a change under subdivision (a)(4)(i) of this clause, negotiate an equitable adjustment as provided in the Changes clause of this contract.

(5) Agree to an adjustment of the contract price or cost allowance, as appropriate, if the Contractor or a subcontractor fails to comply with an applicable Cost Accounting Standard, or to follow any cost accounting

practice consistently and such failure results in any increased costs paid by the United States. Such adjustment shall provide for recovery of the increased costs to the United States, together with interest thereon computed at the annual rate established under section 6621(a)(2) of the Internal Revenue Code of 1986 (26 U.S.C. 6621(a)(2)) for such period, from the time the payment by the United States was made to the time the adjustment is effected. In no case shall the Government recover costs greater than the increased cost to the Government, in the aggregate, on the relevant contracts subject to the price adjustment, unless the Contractor made a change in its cost accounting practices of which it was aware or should have been aware at the time of price negotiations and which it failed to disclose to the Government.

(b) If the parties fail to agree whether the Contractor or a subcontractor has complied with an applicable CAS in 48 CFR 9904 or a CAS rule or regulation in 48 CFR 9903 and as to any cost adjustment demanded by the United States, such failure to agree will constitute a dispute under 41 U.S.C. chapter 71, Contract Disputes.

(c) The Contractor shall permit any authorized representatives of the Government to examine and make copies of any documents, papers, or records relating to compliance with the requirements of this clause.

(d) The Contractor shall include in all negotiated subcontracts which the Contractor enters into, the substance of this clause, except paragraph(b), and shall require such inclusion in all other subcontracts, of any tier, including the obligation to comply with all CAS in effect on the subcontractor's award date or if the subcontractor has submitted certified cost or pricing data, on the date of final agreement on price as shown on the subcontractor's signed Certificate of Current Cost or Pricing Data. If the subcontract is awarded to a business unit which pursuant to 48 CFR 9903.201-2 is subject to other types of CAS coverage, the substance of the applicable clause set forth in subsection 30.201-4 of the Federal Acquisition Regulation shall be inserted. This requirement shall apply only to negotiated subcontracts in excess of $700,000, except that the requirement shall not apply to negotiated subcontracts otherwise exempt from the requirement to include a CAS clause as specified in 48 CFR 9903.201-1.

## CLAUSE I.63 FAR 52.230-6 – ADMINISTRATION OF COST ACCOUNTING STANDARDS (JUN 2010)

For the purpose of administering the Cost Accounting Standards (CAS) requirements under this contract, the Contractor shall take the steps outlined in paragraphs (b) through (i) and (k) through (n) of this clause:

(a) *Definitions.* As used in this clause—

"Affected CAS-covered contract or subcontract" means a contract or subcontract subject to CAS rules and regulations for which a Contractor or subcontractor—

(1) Used one cost accounting practice to estimate costs and a changed cost accounting practice to accumulate and report costs under the contract or subcontract; or

(2) Used a noncompliant practice for purposes of estimating or accumulating and reporting costs under the contract or subcontract.

"Cognizant Federal agency official (CFAO)" means the Contracting Officer assigned by the cognizant Federal agency to administer the CAS.

"Desirable change" means a compliant change to a Contractor's established or disclosed cost accounting practices that the CFAO finds is desirable and not detrimental to the Government and is, therefore, not subject to the no increased cost prohibition provisions of CAS-covered contracts and subcontracts affected by the change.

"Fixed-price contracts and subcontracts" means—

(1) Fixed-price contracts and subcontracts described at FAR 16.202, 16.203, (except when price adjustments are based on actual costs of labor or material, described at 16.203-1(a)(2)), and 16.207;

(2) Fixed-price incentive contracts and subcontracts where the price is not adjusted based on actual costs incurred (FAR Subpart 16.4);

(3) Orders issued under indefinite-delivery contracts and subcontracts where final payment is not based on actual costs incurred (FAR Subpart 16.5); and

(4) The fixed-hourly rate portion of time-and-materials and labor-hours contracts and subcontracts (FAR Subpart 16.6).

"Flexibly-priced contracts and subcontracts" means—

(1) Fixed-price contracts and subcontracts described at FAR 16.203-1(a)(2), 16.204, 16.205, and 16.206;

(2) Cost-reimbursement contracts and subcontracts (FAR Subpart 16.3);

(3) Incentive contracts and subcontracts where the price may be adjusted based on actual costs incurred (FAR Subpart 16.4);

(4) Orders issued under indefinite-delivery contracts and subcontracts where final payment is based on actual costs incurred (FAR Subpart 16.5); and

(5) The materials portion of time-and-materials contracts and subcontracts (FAR Subpart 16.6).

"Noncompliance" means a failure in estimating, accumulating, or reporting costs to—

(1) Comply with applicable CAS; or

(2) Consistently follow disclosed or established cost accounting practices.

"Required change" means—

(1) A change in cost accounting practice that a Contractor is required to make in order to comply with applicable Standards, modifications or interpretations thereto, that subsequently become applicable to existing CAS-covered contracts or subcontracts due to the receipt of another CAS-covered contract or subcontract; or

(2) A prospective change to a disclosed or established cost accounting practice when the CFAO determines that the former practice was in compliance with applicable CAS and the change is necessary for the Contractor to remain in compliance.

"Unilateral change" means a change in cost accounting practice from one compliant practice to another compliant practice that a Contractor with a CAS-covered contract(s) or subcontract(s) elects to make that has not been deemed a desirable change by the CFAO and for which the Government will pay no aggregate increased costs.

(b) Submit to the CFAO a description of any cost accounting practice change as outlined in paragraphs (b)(1) through (3) of this clause (including revisions to the Disclosure Statement, if applicable), and any written statement that the cost impact of the change is immaterial. If a change in cost accounting practice is

implemented without submitting the notice required by this paragraph, the CFAO may determine the change to be a failure to follow paragraph (a)(2) of the clause at FAR 52.230-2, Cost Accounting Standards; paragraph (a)(4) of the clause at FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices; paragraph (a)(4) of the clause at FAR 52.230-4, Disclosure and Consistency of Cost Accounting Practices–Foreign Concerns; or paragraph (a)(2) of the clause at FAR 52.230-5, Cost Accounting Standards–Educational Institution.

(1) When a description has been submitted for a change in cost accounting practice that is dependent on a contact award and that contract is subsequently awarded, notify the CFAO within 15 days after such award.

(2) For any change in cost accounting practice not covered by (b)(1) of this clause that is required in accordance with paragraphs (a)(3) and (a)(4)(i) of the clause at FAR 52.230-2; or paragraphs (a)(3), (a)(4)(i), or (a)(4)(iv) of the clause at FAR 52.230-5; submit a description of the change to the CFAO not less than 60 days (or such other date as may be mutually agreed to by the CFAO and the Contractor) before implementation of the change.

(3) For any change in cost accounting practices proposed in accordance with paragraph (a)(4)(ii) or (iii) of the clauses at FAR 52.230-2 and FAR 52.230-5; or with paragraph (a)(3) of the clauses at FAR 52.230-3 and FAR 52.230-4, submit a description of the change not less than 60 days (or such other date as may be mutually agreed to by the CFAO and the Contractor) before implementation of the change. If the change includes a proposed retroactive date submit supporting rationale.

(4) Submit a description of the change necessary to correct a failure to comply with an applicable CAS or to follow a disclosed practice (as contemplated by paragraph (a)(5) of the clause at FAR 52.230-2 and FAR 52.230-5; or by paragraph (a)(4) of the clauses at FAR 52.230-3 and FAR 52.230-4)—

(i) Within 60 days (or such other date as may be mutually agreed to by the CFAO and the Contractor) after the date of agreement with the CFAO that there is a noncompliance; or

(ii) In the event of Contractor disagreement, within 60 days after the CFAO notifies the Contractor of the determination of noncompliance.

(c) When requested by the CFAO, submit on or before a date specified by the CFAO—

(1) A general dollar magnitude (GDM) proposal in accordance with paragraph (d) or (g) of this clause. The Contractor may submit a detailed cost-impact (DCI) proposal in lieu of the requested GDM proposal provided the DCI proposal is in accordance with paragraph (e) or (h) of this clause;

(2) A detailed cost-impact (DCI) proposal in accordance with paragraph (e) or (h) of this clause;

(3) For any request for a desirable change that is based on the criteria in FAR 30.603-2(b)(3)(ii), the data necessary to demonstrate the required cost savings; and

(4) For any request for a desirable change that is based on criteria other than that in FAR 30.603-2(b)(3)(ii), a GDM proposal and any other data necessary for the CFAO to determine if the change is a desirable change.

(d) For any change in cost accounting practice subject to paragraph (b)(1), (b)(2), or (b)(3) of this clause, the GDM proposal shall—

(1) Calculate the cost impact in accordance with paragraph (f) of this clause;

(2) Use one or more of the following methods to determine the increase or decrease in cost accumulations:

(i) A representative sample of affected CAS-covered contracts and subcontracts.

(ii) The change in indirect rates multiplied by the total estimated base computed for each of the following groups:

(A) Fixed-price contracts and subcontracts.

(B) Flexibly-priced contracts and subcontracts.

(iii) Any other method that provides a reasonable approximation of the total increase or decrease in cost accumulations for all affected fixed-price and flexibly-priced contracts and subcontracts;

(3) Use a format acceptable to the CFAO but, as a minimum, include the following data:

(i) The estimated increase or decrease in cost accumulations by Executive agency, including any impact the change may have on contract and subcontract incentives, fees, and profits, for each of the following groups:

(A) Fixed-price contracts and subcontracts.

(B) Flexibly-priced contracts and subcontracts.

(ii) For unilateral changes, the increased or decreased costs to the Government for each of the following groups:

(A) Fixed-price contracts and subcontracts.

(B) Flexibly-priced contracts and subcontracts; and

(4) When requested by the CFAO, identify all affected CAS-covered contracts and subcontracts.

(e) For any change in cost accounting practice subject to paragraph (b)(1), (b)(2), or (b)(3) of this clause, the DCI proposal shall—

(1) Show the calculation of the cost impact in accordance with paragraph (f) of this clause;

(2) Show the estimated increase or decrease in cost accumulations for each affected CAS-covered contract and subcontract unless the CFAO and Contractor agree to include—

(i) Only those affected CAS-covered contracts and subcontracts having an estimate to complete exceeding a specified amount; and

(ii) An estimate of the total increase or decrease in cost accumulations for all affected CAS-covered contracts and subcontracts, using the results in paragraph (e)(2)(i) of this clause;

(3) Use a format acceptable to the CFAO but, as a minimum, include the information in paragraph (d)(3) of this clause; and

(4) When requested by the CFAO, identify all affected CAS-covered contracts and subcontracts.

(f) For GDM and DCI proposals that are subject to the requirements of paragraph (d) or (e) of this clause, calculate the cost impact as follows:

(1) The cost impact calculation shall include all affected CAS-covered contracts and subcontracts regardless of their status (*i.e.*, open or closed) or the fiscal year in which the costs were incurred (*i.e.*, whether or not the final indirect rates have been established).

(2) For unilateral changes—

(i) Determine the increased or decreased cost to the Government for flexibly-priced contracts and subcontracts as follows:

(A) When the estimated cost to complete using the changed practice exceeds the estimated cost to complete using the current practice, the difference is increased cost to the Government.

(B) When the estimated cost to complete using the changed practice is less than the estimated cost to complete using the current practice, the difference is decreased cost to the Government;

(ii) Determine the increased or decreased cost to the Government for fixed-priced contracts and subcontracts as follows:

(A) When the estimated cost to complete using the changed practice is less than the estimated cost to complete using the current practice, the difference is increased cost to the Government.

(B) When the estimated cost to complete using the changed practice exceeds the estimated cost to complete using the current practice, the difference is decreased cost to the Government;

(iii) Calculate the total increase or decrease in contract and subcontract incentives, fees, and profits associated with the increased or decreased costs to the Government in accordance with 48 CFR 9903.306(c). The associated increase or decrease is based on the difference between the negotiated incentives, fees, and profits and the amounts that would have been negotiated had the cost impact been known at the time the contracts and subcontracts were negotiated; and

(iv) Calculate the increased cost to the Government in the aggregate.

(3) For equitable adjustments for required or desirable changes—

(i) Estimated increased cost accumulations are the basis for increasing contract prices, target prices and cost ceilings; and

(ii) Estimated decreased cost accumulations are the basis for decreasing contract prices, target prices and cost ceilings.

(g) For any noncompliant cost accounting practice subject to paragraph (b)(4) of this clause, prepare the GDM proposal as follows:

(1) Calculate the cost impact in accordance with paragraph (i) of this clause.

(2) Use one or more of the following methods to determine the increase or decrease in contract and subcontract prices or cost accumulations, as applicable:

(i) A representative sample of affected CAS-covered contracts and subcontracts.

(ii) When the noncompliance involves cost accumulation the change in indirect rates multiplied by the applicable base for only flexibly-priced contracts and subcontracts.

(iii) Any other method that provides a reasonable approximation of the total increase or decrease.

(3) Use a format acceptable to the CFAO but, as a minimum, include the following data:

(i) The total increase or decrease in contract and subcontract price and cost accumulations, as applicable, by Executive agency, including any impact the noncompliance may have on contract and subcontract incentives, fees, and profits, for each of the following groups:

(A) Fixed-price contracts and subcontracts.

(B) Flexibly-priced contracts and subcontracts.

(ii) The increased or decreased cost to the Government for each of the following groups:

(A) Fixed-price contracts and subcontracts.

(B) Flexibly-priced contracts and subcontracts.

(iii) The total overpayments and underpayments made by the Government during the period of noncompliance.

(4) When requested by the CFAO, identify all CAS-covered contracts and subcontracts.

(h) For any noncompliant practice subject to paragraph (b)(4) of this clause, prepare the DCI proposal as follows:

(1) Calculate the cost impact in accordance with paragraph (i) of this clause.

(2) Show the increase or decrease in price and cost accumulations for each affected CAS-covered contract and subcontract unless the CFAO and Contractor agree to—

(i) Include only those affected CAS-covered contracts and subcontracts having—

(A) Contract and subcontract values exceeding a specified amount when the noncompliance involves estimating costs; and

(B) Incurred costs exceeding a specified amount when the noncompliance involves accumulating costs; and

(ii) Estimate the total increase or decrease in price and cost accumulations for all affected CAS-covered contracts and subcontracts using the results in paragraph (h)(2)(i) of this clause.

(3) Use a format acceptable to the CFAO that, as a minimum, include the information in paragraph (g)(3) of this clause.

(4) When requested by the CFAO, identify all CAS-covered contracts and subcontracts.

(i) For GDM and DCI proposals that are subject to the requirements of paragraph (g) or (h) of this clause, calculate the cost impact as follows:

(1) The cost impact calculation shall include all affected CAS-covered contracts and subcontracts regardless of their status (*i.e.,* open or closed) or the fiscal year in which the costs are incurred (*i.e.*, whether or not the final indirect rates have been established).

(2) For noncompliances that involve estimating costs, determine the increased or decreased cost to the Government for fixed-price contracts and subcontracts as follows:

(i) When the negotiated contract or subcontract price exceeds what the negotiated price would have been had the Contractor used a compliant practice, the difference is increased cost to the Government.

(ii) When the negotiated contract or subcontract price is less than what the negotiated price would have been had the Contractor used a compliant practice, the difference is decreased cost to the Government.

(3) For noncompliances that involve accumulating costs, determine the increased or decreased cost to the Government for flexibly-priced contracts and subcontracts as follows:

(i) When the costs that were accumulated under the noncompliant practice exceed the costs that would have been accumulated using a compliant practice (from the time the noncompliant practice was first implemented until the date the noncompliant practice was replaced with a compliant practice), the difference is increased cost to the Government.

(ii) When the costs that were accumulated under the noncompliant practice are less than the costs that would have been accumulated using a compliant practice (from the time the noncompliant practice was first implemented until the date the noncompliant practice was replaced with a compliant practice), the difference is decreased cost to the Government.

(4) Calculate the total increase or decrease in contract and subcontracts incentives, fees, and profits associated with the increased or decreased cost to the Government in accordance with 48 CFR 9903.306(c). The associated increase or decrease is based on the difference between the negotiated incentives, fees, and profits and the amounts that would have been negotiated had the Contractor used a compliant practice.

(5) Calculate the increased cost to the Government in the aggregate.

(j) If the Contractor does not submit the information required by paragraph (b) or (c) of this clause within the specified time, or any extension granted by the CFAO, the CFAO may take one or both of the following actions:

(1) Withhold an amount not to exceed 10 percent of each subsequent amount payment to the Contractor’s affected CAS-covered contracts, (up to the estimated general dollar magnitude of the cost impact), until such time as the Contractor provides the required information to the CFAO.

(2) Issue a final decision in accordance with FAR 33.211 and unilaterally adjust the contract(s) by the estimated amount of the cost impact.

(k) Agree to—

(1) Contract modifications to reflect adjustments required in accordance with paragraph (a)(4)(ii) or (a)(5) of the clauses at FAR 52.230-2 and 52.230-5; or with paragraph (a)(3)(i) or (a)(4) of the clauses at FAR 52.230-3 and FAR 52.230-4; and

(2) Repay the Government for any aggregate increased cost paid to the Contractor.

(l) For all subcontracts subject to the clauses at FAR 52.230-2, 52.230-3, 52.230-4, or 52.230-5—

(1) So state in the body of the subcontract, in the letter of award, or in both (do not use self-deleting clauses);

(2) Include the substance of this clause in all negotiated subcontracts; and

(3) Within 30 days after award of the subcontract, submit the following information to the Contractor's CFAO:

(i) Subcontractor's name and subcontract number.

(ii) Dollar amount and date of award.

(iii) Name of Contractor making the award.

(m) Notify the CFAO in writing of any adjustments required to subcontracts under this contract and agree to an adjustment to this contract price or estimated cost and fee. The Contractor shall—

(1) Provide this notice within 30 days after the Contractor receives the proposed subcontract adjustments; and

(2) Include a proposal for adjusting the higher-tier subcontract or the contract appropriately.

(n) For subcontracts containing the clause or substance of the clause at FAR 52.230-2, FAR 52.230-3, FAR 52.230-4, or FAR 52.230-5, require the subcontractor to comply with all Standards in effect on the date of award or of final agreement on

price, as shown on the subcontractor's signed Certificate of Current Cost or Pricing Data, whichever is earlier.

## CLAUSE I.64 FAR 52.232-17 – INTEREST (MAY 2014)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Certified Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in 41 U.S.C. 7109, which is applicable to the period in which the amount becomes due, as provided in paragraph (e) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(b) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(c) *Final Decisions.* The Contracting Officer will issue a final decision as required by 33.211 if –

(1) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt in a timely manner;

(2) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(3) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see 32.607-2).

(d) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

(e) Amounts shall be due at the earliest of the following dates:

(1) The date fixed under this contract.

(2) The date of the first written demand for payment, including any demand for payment resulting from a default termination.

(f) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on –

(1) The date on which the designated office receives payment from the Contractor;

(2) The date of issuance of a Government check to the Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

(3) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(g) The interest charge made under this clause may be reduced under the procedures prescribed in 32.608-2 of the Federal Acquisition Regulation in effect on the date of this contract.

**CLAUSE I.65 - FAR 52.232-24 PROHIBITION OF ASSIGNMENT OF CLAIMS (MAY 2014)**

The assignment of claims under the Assignment of Claims Act of 1940 "(31 U.S.C. 3727, 41 U.S.C. 6305)" is prohibited for this contract.

**CLAUSE I.66 - FAR 52.233-1 DISPUTES (MAY 2014) (ALTERNATE I)**

(a) This contract is subject to 41 U.S.C chapter 71, Contract Disputes.

(b) Except as provided in 41 U.S.C chapter 71, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief

arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding $100,000 is not a claim under 41 U.S.C chapter 71 until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under 41 U.S.C chapter 71. The submission may be converted to a claim under 41 U.S.C chapter 71, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)

(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)

(i) The Contractor shall provide the certification specified in paragraph (d)(2)(iii) of this clause when submitting any claim exceeding $100,000.

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: “I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am authorized to certify the claim on behalf of the Contractor.”

(3) The certification may be executed by any person authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of $100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over $100,000, the Contracting Officer

must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in 41 U.S.C chapter 71.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the offer.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date that the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

## CLAUSE I.67 - FAR 52.233-3 PROTEST AFTER AWARD (AUG 1996) (ALTERNATE I) (JUNE 1985)

(a) Upon receipt of a notice of protest (as defined in 33.101 of the FAR) the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either --

(1) Cancel the stop-work order; or

(1) Terminate the work covered by the order as provided in the Termination clause of this contract.

(b) If a stop-work order issued under this clause is cancelled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule, the estimated cost, the fee, or a combination thereof, and in any other terms of the contract that may be affected, and the contract shall be modified, in writing, accordingly, if -

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within thirty (30) days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not cancelled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not cancelled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this Clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs.

## CLAUSE I.68 - FAR 52.233-4 -- APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004)

United States law will apply to resolve any claim of breach of this contract.

## CLAUSE I.69 - FAR 52.236-8 OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

## CLAUSE I.70 - FAR 52.237-3 CONTINUITY OF SERVICES (JAN 1991)

(a) The Contractor recognizes that the services under this contract are vital to the Government and must be continued without interruption and that, upon contract expiration, a successor, either the Government or another Contractor, may continue them. The Contractor agrees to (1) furnish phase-in training, and (2) exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.

(b) The Contractor shall, upon the Contracting Officer's written notice, (1) furnish phase-in, phase-out services for up to ninety (90) days after this contract expires and (2) negotiate in good faith a plan with a successor to determine the nature and extent of phase-in, phase-out services required. The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the Contracting Officer's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this contract are maintained at the required level of proficiency.

(c) The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the services required by this contract. The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.

(d) The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (i.e., costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations) and a fee (profit) not to exceed a pro rata portion of the fee (profit) under this contract.

## CLAUSE I.71 - FAR 52.242-1 NOTICE OF INTENT TO DISALLOW COSTS (APR 1984)

(a) Notwithstanding any other clause of this contract --

(1) The Contracting Officer may, at any time, issue to the Contractor a written notice of intent to disallow specified costs incurred or planned for incurrence under this contract that have been determined not to be allowable under the contract terms; and

(2) The Contractor may, after receiving a notice under subparagraph (1) above, submit a written response to the Contracting Officer, with justification for allowance of the costs. If the Contractor does respond within sixty (60) days, the Contracting Officer shall, within sixty (60) days of receiving the response, either make a written withdrawal of the notice or issue a written decision.

(b) Failure to issue a notice under this Notice of Intent to Disallow Costs clause shall not affect the Government's rights to take exception to incurred costs.

## CLAUSE I.72 - FAR 52.242-13 BANKRUPTCY (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five (5) days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

## CLAUSE I.73 - FAR 52.244-5 COMPETITION IN SUBCONTRACTING (DEC 1996)

(a) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

(b) If the Contractor is an approved mentor under the Department of Defense Pilot Mentor-Protege Program (Pub. L. 101-510, section 831 as amended), the Contractor may award subcontracts under this contract on a noncompetitive basis to its proteges.

**CLAUSE I.74 - FAR 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (JUL 2014)**

(a) *Definitions.* As used in this clause —

"Commercial item" has the meaning contained in Federal Acquisition Regulation 2.101, Definitions.

"Subcontract" includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c)

(1) The Contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.203-13, Contractor Code of Business Ethics and Conduct (Apr 2010) (41 U.S.C. 3509), if the subcontract exceeds $5,000,000 and has a performance period of more than 120 days. In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

(ii) 52.203-15, Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (Jun 2010) (Section 1553 of Pub. L. 111-5), if the subcontract is funded under the Recovery Act.

(iii) 52.219-8, Utilization of Small Business Concerns (May 2014) (15 U.S.C. 637(d)(2) and (3)), if the subcontract offers further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds $650,000 ($1.5 million for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(iv) 52.222-26, Equal Opportunity (Mar 2007) (E.O. 11246).

(v) 52.222-35, Equal Opportunity for Veterans (Jul 2014) (38 U.S.C. 4212(a));

(vi) 52.222-36, Equal Opportunity for Workers with Disabilities (Jul 2014) (29 U.S.C. 793).

(vii) 52.222-37, Employment Reports on Veterans (Jul 2014) (38 U.S.C. 4212)

(viii) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (Dec 2010) (E.O. 13496), if flow down is required in accordance with paragraph (f) of FAR clause 52.222-40.

(ix) 52.222-50, Combating Trafficking in Persons (Feb 2009) (22 U.S.C. 7104(g)).

(x) 52.225-26, Contractors Performing Private Security Functions Outside the United States (Jul 2013) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

(xi) 52.232-40, Providing Accelerated Payments to Small Business Subcontractors (Dec 2013), if flow down is required in accordance with paragraph (c) of FAR clause 52.232-40.

(xii) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) (46 U.S.C. App. 1241 and 10 U.S.C. 2631), if flow down is required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

## CLAUSE I.75- FAR 52.247-1 -- COMMERCIAL BILL OF LADING NOTATIONS (FEB 2006)

When the Contracting Officer authorizes supplies to be shipped on a commercial bill of lading and the Contractor will be reimbursed these transportation costs as direct allowable costs, the Contractor shall ensure before shipment is made that the

commercial shipping documents are annotated with either of the following notations, as appropriate:

(a) If the Government is shown as the consignor or the consignee, the annotation shall be:

> Transportation is for the U.S. Department of Energy and the actual total transportation charges paid to the carrier(s) by the consignor or consignee are assignable to, and shall be reimbursed by, the Government.

(b) If the Government is not shown as the consignor or the consignee, the annotation shall be:

> Transportation is for the U.S. Department of Energy and the actual total transportation charges paid to the carrier(s) by the consignor or consignee shall be reimbursed by the Government, pursuant to cost-reimbursement Contract No. DE-AC02-98CH10886. This may be confirmed by contacting the U.S. Department of Energy, Brookhaven Site Office, 53 Bell Avenue, Bldg. 464, Upton, New York 11973.

## CLAUSE I.76 - FAR 52.247-63 PREFERENCE FOR U.S. FLAG AIR CARRIERS (JUN 2003)

(a) *Definitions*. As used in this clause -- *International air transportation* means transportation by air between a place in the United States and a place outside the United States or between two places both of which are outside the United States.

*United States* means the 50 States, the District of Columbia, and outlying areas.

*U.S.-flag air carrier* means an air carrier holding a certificate under 49 U.S.C. Chapter 411.

(b) Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118)(Fly America-Act) requires that all Federal agencies and Government Contractors and subcontractors use U.S.-flag air carriers for U.S. Government-financed international air transportation of personnel (and their personal effects) or property, to the extent that service by those carriers is available. It requires the Comptroller General of the United States, in the absence of satisfactory proof of the necessity for foreign-flag air transportation, to disallow expenditures from funds, appropriated or otherwise established for the account of the United States, for international air transportation secured aboard a foreign-flag air carrier if a U.S.-flag air carrier is available to provide such services.

(c) If available, the Contractor, in performing work under this contract, shall use U.S.-flag air carriers for international air transportation of personnel (and their personal effects) or property.

(d) In the event that the Contractor selects a carrier other than a U.S.-flag air carrier for international air transportation, the Contractor shall include a statement on vouchers involving such transportation essentially as follows:

STATEMENT OF UNAVAILABILITY OF U.S.-FLAG AIR CARRIERS

International air transportation of persons (and their personal effects) or property by U.S.-flag air carrier was not available or it was necessary to use foreign-flag air carrier service for the following reasons (see Section 47.403 of the Federal Acquisition Regulation):

[State reasons]:

(End of Statement)

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in each subcontract or purchase order under this contract that may involve international air transportation.

## CLAUSE I.77 - FAR 52.247-64 PREFERENCE FOR PRIVATELY OWNED U.S.-FLAG COMMERCIAL VESSELS (FEB 2006)

(a) Except as provided in paragraph (e) of this clause, the Cargo Preference Act of 1954 (46 U.S.C. Appx 1241(b)) requires that Federal departments and agencies shall transport in privately owned U.S.-flag commercial vessels at least 50 percent of the gross tonnage of equipment, materials, or commodities that may be transported in ocean vessels (computed separately for dry bulk carriers, dry cargo liners, and tankers). Such transportation shall be accomplished when any equipment, materials, or commodities, located within or outside the United States, that may be transported by ocean vessel are --

(1) Acquired for a U.S. Government agency account;

(2) Furnished to, or for the account of, any foreign nation without provision for reimbursement;

(3) Furnished for the account of a foreign nation in connection with which the United States advances funds or credits, or guarantees the convertibility of foreign currencies; or

(4) Acquired with advance of funds, loans, or guaranties made by or on behalf of the United States.

(b) The Contractor shall use privately owned U.S.-flag commercial vessels to ship at least 50 percent of the gross tonnage involved under this contract (computed separately for dry bulk carriers, dry cargo liners, and tankers) whenever shipping any equipment, materials, or commodities under the conditions set forth in paragraph (a) above, to the extent that such vessels are available at rates that are fair and reasonable for privately owned U.S.-flag commercial vessels.

(c) (1) The Contractor shall submit one legible copy of a rated on-board ocean bill of lading for each shipment to both --

(i) The Contracting Officer, and

(ii) The:
Office of Cargo Preference
Maritime Administration (MAR-590)
400 Seventh Street, SW
Washington DC 20590

Subcontractor bills of lading shall be submitted through the Prime Contractor.

(2) The Contractor shall furnish these bill of lading copies (i) within 20 working days of the date of loading for shipments originating in the United States, or (ii) within 30 working days for shipments originating outside the United States. Each bill of lading copy shall contain the following information:

(A) Sponsoring U.S. Government agency.

(B) Name of vessel.

(C) Vessel flag of registry.

(D) Date of loading.

(E) Port of loading.

(F) Port of final discharge.

(G) Description of commodity.

(H) Gross weight in pounds and cubic feet if available.

(I) Total ocean freight revenue in U.S. dollars.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts or purchase orders under this contract, except those described in paragraph (e)(4).

(e) The requirement in paragraph (a) does not apply to --

(1) Cargoes carried in vessels as required or authorized by law or treaty;

(2) Ocean transportation between foreign countries of supplies purchased with foreign currencies made available, or derived from funds that are made available, under the Foreign Assistance Act of 1961 (22 U.S.C. 2353);

(3) Shipments of classified supplies when the classification prohibits the use of non-Government vessels; and

(4) Subcontracts or purchase orders for the acquisition of commercial items unless –

(i) This contract is –

(A) A contract or agreement for ocean transportation services; or

(B) A construction contract; or

(ii) The supplies being transported are –

(A) Items the Contractor is reselling or distributing to the Government without adding value. (Generally, the Contractor does not add value to the items when it subcontracts items for f.o.b. destination shipment); or

(B) Shipped in direct support of U.S. military –

(1) Contingency operations;

(2) Exercises; or

(3) Forces deployed in connection with United Nations or North Atlantic Treaty Organization humanitarian or peacekeeping operations.

(f) Guidance regarding fair and reasonable rates for privately owned U.S.-flag commercial vessels may be obtained from the:

Office of Costs and Rates
Maritime Administration
400 Seventh Street, SW
Washington DC 20590
Phone: 202-366-2324

**CLAUSE I.78 -FAR 52.247-67 -- SUBMISSION OF TRANSPORTATION DOCUMENTS FOR AUDIT (FEB 2006)**

(a) The Contractor shall submit to the address identified below, for prepayment audit, transportation documents on which the United States will assume freight charges that were paid

(1) By the Contractor under a cost-reimbursement contract; and

(2) By a first-tier subcontractor under a cost-reimbursement subcontract thereunder.

(b) Cost-reimbursement Contractors shall only submit for audit those bills of lading with freight shipment charges exceeding $100. Bills under $100 shall be retained on-site by the Contractor and made available for on-site audits. This exception only applies to freight shipment bills and is not intended to apply to bills and invoices for any other transportation services.

(c) Contractors shall submit the above referenced transportation documents to—

General Services Administration
Attn: FWA
1800 F Street, NW
Washington, DC 20405

**CLAUSE I.79 -FAR 52.249-6 TERMINATION (COST-REIMBURSEMENT) (MAY 2004) (MODIFIED BY DEAR 970.4905-1)**

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part, if --

(1) The Contracting Officer determines that a termination is in the Government's interest; or

(2) The Contractor defaults in performing this contract and fails to cure the default within 10 days (unless extended by the Contracting Officer) after receiving a notice specifying the default. "Default" includes failure to make progress in the work so as to endanger performance.

(b) The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying whether termination is for default of the Contractor or for convenience of the Government, the extent of termination, and the effective date. If, after termination for default, it is determined that the Contractor was not in default or that the Contractor's failure to perform or to make progress in performance is due to causes beyond the control and without the fault or negligence of the Contractor as set forth in the Excusable Delays clause, the rights and obligations of the parties will be the same as if the termination was for the convenience of the Government.

(c) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause), except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts, the cost of which would be reimbursable in whole or in part, under this contract; approval or ratification will be final for purposes of this clause.

(6) Transfer title (if not already transferred) and, as directed by the Contracting Officer, deliver to the Government --

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated;

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government; and

(iii) The jigs, dies, fixtures, and other special tools and tooling acquired or manufactured for this contract, the cost of which the Contractor has been or will be reimbursed under this contract.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (c)(6) of this clause; provided, however, that the Contractor

(i) is not required to extend credit to any purchaser and

(ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer.

The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(d) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(e) After expiration of the plant clearance period as defined in Subpart 49.001 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept the items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(f) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in

writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(g) Subject to paragraph (f) of this clause, the Contractor and the Contracting Officer may agree on the whole or any part of the amount to be paid (including an allowance for fee) because of the termination. The contract shall be amended, and the Contractor paid the agreed amount.

(h) If the Contractor and the Contracting Officer fail to agree in whole or in part on the amount of costs and/or fee to be paid because of the termination of work, the Contracting Officer shall determine, on the basis of information available, the amount, if any, due the Contractor, and shall pay that amount, which shall include the following:

(1) All costs reimbursable under this contract, not previously paid, for the performance of this contract before the effective date of the termination, and those costs that may continue for a reasonable time with the approval of or as directed by the Contracting Officer; however, the Contractor shall discontinue those costs as rapidly as practicable.

(2) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subparagraph (h)(1) of this clause.

(3) The reasonable costs of settlement of the work terminated, including --

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory. If the termination is for default, no amounts for the preparation of the Contractor’s termination settlement proposal may be included.

(4) A portion of the fee payable under the contract, determined as follows:

(i) If the contract is terminated for the convenience of the Government, the settlement shall include a percentage of the fee equal to the percentage of completion of work contemplated under the contract, but excluding subcontract effort included in subcontractors' termination proposals, less previous payments for fee.

(ii) If the contract is terminated for default, the total fee payable shall be such proportionate part of the fee as the total number of articles (or amount of services) delivered to and accepted by the Government is to the total number of articles (or amount of services) of a like kind required by the contract.

(5) If the settlement includes only fee, it will be determined under subparagraph (h)(4) of this clause.

(i) The cost principles and procedures in Part 31 of the Federal Acquisition Regulation, as supplemented in subpart 970.31of the Department of Energy Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (f), (h), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal within the time provided in paragraph (f) and failed to request a time extension, there is no right of appeal. If the Contracting Officer has made a determination of the amount due under paragraph (f), (h) or (l) of this clause, the Government shall pay the Contractor --

(1) The amount determined by the Contracting Officer if there is no right of appeal or if no timely appeal has been taken; or

(2) The amount finally determined on an appeal.

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

(1) All unliquidated advance or other payments to the Contractor, under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of materials, supplies, or other things acquired by the Contractor or sold under this clause and not recovered by or credited to the Government.

(l) The Contractor and Contracting Officer must agree to any equitable adjustment in fee for the continued portion of the contract when there is a partial termination. The Contracting Officer shall amend the contract to reflect the agreement.

(m) (1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) The provisions of this clause relating to fee are inapplicable if this contract does not include a fee.

## CLAUSE I.80 - FAR 52.249-14 EXCUSABLE DELAYS (APR 1984)

(a) Except for defaults of subcontractors at any tier, the Contractor shall not be in default because of any failure to perform this contract under its terms if the failure arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of these causes are (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance, the failure to perform must be beyond the control and without the fault or negligence of the Contractor. "Default" includes failure to make progress in the work so as to endanger performance.

(b) If the failure to perform is caused by the failure of a subcontractor at any tier to perform or make progress, and if the cause of the failure was beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be deemed to be in default, unless --

(1) The subcontracted supplies or services were obtainable from other sources;

(2) The Contracting Officer ordered the Contractor in writing to purchase these supplies or services from the other source; and

(3) The Contractor failed to comply reasonably with this order.

(c) Upon request of the Contractor, the Contracting Officer shall ascertain the facts and extent of the failure. If the Contracting Officer determines that any failure to perform results from one or more of the causes above, the delivery schedule shall be revised, subject to the rights of the Government under the termination clause of this contract.

**CLAUSE I.81 – FAR 52.250-1 INDEMNIFICATION UNDER PUBLIC LAW 85-804 – (APR 1984) ALTERNATE I (APR 1984)**

(a) "Contractor's principal officials," as used in this clause, means directors, officers, managers, superintendents, or other representatives supervising or directing –

(1) All or substantially all of the Contractor's business;

(2) All or substantially all of the Contractor's operations at any one plant or separate location in which this contract is being performed; or

(3) A separate and complete major industrial operation in connection with the performance of this contract.

(b) Under Public Law 85-804 (50 U.S.C. 1431-1435) and Executive Order 10789, as amended, and regardless of any other provisions of this contract, the Government shall, subject to the limitations contained in the other paragraphs of this clause, indemnify the Contractor against --

(1) Claims (including reasonable expenses of litigation or settlement) by third persons (including employees of the Contractor) for death; personal injury; or loss of, damage to, or loss of use of property;

(2) Loss of, damage to, or loss of use of Contractor property, excluding loss of profit; and

(3) Loss of, damage to, or loss of use of Government property, excluding loss of profit.

(c) This indemnification applies only to the extent that the claim, loss, or damage (1) arises out of or results from a risk defined in this contract as unusually hazardous or nuclear and (2) is not compensated for by insurance or otherwise. Any such claim, loss, or damage, to the extent that it is within the deductible amounts of the

Contractor's insurance, is not covered under this clause. If insurance coverage or other financial protection in effect on the date the approving official authorizes use of this clause is reduced, the Government's liability under this clause shall not increase as a result.

(d) When the claim, loss, or damage is caused by willful misconduct or lack of good faith on the part of any of the Contractor's principal officials, the Contractor shall not be indemnified for --

(1) Government claims against the Contractor (other than those arising through subrogation); or

(2) Loss or damage affecting the Contractor's property.

(e) With the Contracting Officer's prior written approval, the Contractor may, in any subcontract under this contract, indemnify the subcontractor against any risk defined in this contract as unusually hazardous or nuclear. This indemnification shall provide, between the Contractor and the subcontractor, the same rights and duties, and the same provisions for notice, furnishing of evidence or proof, and Government settlement or defense of claims as this clause provides. The Contracting Officer may also approve indemnification of subcontractors at any lower tier, under the same terms and conditions. The Government shall indemnify the Contractor against liability to subcontractors incurred under subcontract provisions approved by the Contracting Officer.

(f) The rights and obligations of the parties under this clause shall survive this contract's termination, expiration, or completion. The Government shall make no payment under this clause unless the agency head determines that the amount is just and reasonable. The Government may pay the Contractor or subcontractors, or may directly pay parties to whom the Contractor or subcontractors may be liable.

(g) The Contractor shall --

(1) Promptly notify the Contracting Officer of any claim or action against, or any loss by, the Contractor or any subcontractors that may be reasonably be expected to involve indemnification under this clause;

(2) Immediately furnish to the Government copies of all pertinent papers the Contractor receives;

(3) Furnish evidence or proof of any claim, loss, or damage covered by this clause in the manner and form the Government requires; and

(4) Comply with the Government's directions and execute any authorizations required in connection with settlement or defense of claims or actions.

(h) The Government may direct, control, or assist in settling or defending any claim or action that may involve indemnification under this clause.

(i) The cost of insurance (including self-insurance programs) covering a risk defined in this contract as unusually hazardous or nuclear shall not be reimbursed except to the extent that the Contracting Officer has required or approved this insurance. The Government's obligations under this clause are --

(1) Excepted from the release required under this contract's clause relating to allowable cost; and

(2) Not affected by this contract's Obligation of Funds clause.

## CLAUSE I.82 - FAR 52.251-1 – GOVERNMENT SUPPLY SOURCES (APR 2012) (DEVIATION)

The Contracting Officer may issue the Contractor an authorization to use Government supply sources in the performance of this contract. Title to all property acquired by the Contractor under such an authorization shall vest in the Government unless otherwise specified in the contract. The provisions of the clause at FAR 52.245-1, Government Property, apply to all property acquired under such authorization.

## CLAUSE I.83 - FAR 52.251-2 INTERAGENCY FLEET MANAGEMENT SYSTEM VEHICLES AND RELATED SERVICES (JAN 1991)

The Contracting Officer may issue the Contractor an authorization to obtain interagency fleet management system (IFMS) vehicles and related services for use in the performance of this contract. The use, service, and maintenance of interagency fleet management system vehicles and the use of related services by the Contractor shall be in accordance with 41 CFR 101-39 and 41 CFR 101-38.301-1.

## CLAUSE I.84 - FAR 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any Department of Energy Acquisition Regulation (48 CFR Chapter 9) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

**CLAUSE I.85 - FAR 52.253-1 COMPUTER GENERATED FORMS (JAN 1991)**

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the Parties will be determined based on the content of the required form.

**CLAUSE I.86 - DEAR 952.203-70 WHISTLEBLOWER PROTECTION FOR CONTRACTOR EMPLOYEES (DEC 2000)**

(a) The contractor shall comply with the requirements of “DOE Contractor Employee Protection Program” at 10 CFR part 708 for work performed on behalf of DOE directly related to activities at DOE-owned or -leased sites.

(b) The contractor shall insert or have inserted the substance of this clause, including this paragraph (b), in subcontracts at all tiers, for subcontracts involving work performed on behalf of DOE directly related to activities at DOE-owned or -leased sites.

**CLAUSE I.87 - DEAR 952.204-2 SECURITY (OCT 2013) (CLASS DEVIATION PER POLICY FLASH 2014-09; NOV 2013)**

(a) *Responsibility*. It is the Contractor's duty to protect all classified information, special nuclear material, and other DOE property. The Contractor shall, in accordance with DOE security regulations and requirements, be responsible for protecting all classified information and all classified matter (including documents, material and special nuclear material) which are in the

Contractor's possession in connection with the performance of work under this contract against sabotage, espionage, loss or theft. Except as otherwise expressly provided in this contract, the Contractor shall, upon completion or termination of this contract, transmit to DOE any classified matter or special nuclear material in the possession of the Contractor or any person under the Contractor's control in connection with performance of this contract. If retention by the Contractor of any classified matter is required after the completion or termination of the contract, the Contractor shall identify the items and classification levels and categories of matter proposed for retention, the reasons for the retention, and the proposed period of retention. If the retention is approved by the Contracting Officer, the security provisions of the contract shall continue to be applicable to the classified matter retained. Special nuclear material shall not be retained after the completion or termination of the contract.

(b) *Regulations.* The Contractor agrees to comply with all security regulations and contract requirements of DOE as incorporated into the contract.

(c) *Definition of Classified Information.* The term *Classified Information* means information that is classified as Restricted Data or Formerly Restricted Data under the Atomic Energy Act of 1954, or information determined to require protection against unauthorized disclosure under Executive Order 12958, *Classified National Security Information,* as amended, or prior executive orders, which is identified as *National Security Information.*

(d) *Definition of Restricted Data.* The term *Restricted Data* means all data concerning design, manufacture, or utilization of atomic weapons; production of special nuclear material; or use of special nuclear material in the production of energy, but excluding data declassified or removed from the Restricted Data category pursuant to 42 U.S.C. 2162 [Section 142, as amended, of the Atomic Energy Act of 1954].

(e) *Definition of Formerly Restricted Data.* The term *"Formerly Restricted Data"* means information removed from the Restricted Data category based on a joint determination by DOE or its predecessor agencies and the Department of Defense that the information-- **(1)** relates primarily to the military utilization of atomic weapons; and (2) can be adequately protected as National Security Information. However, such information is subject to the same restrictions on transmission to other countries or regional defense organizations that apply to Restricted Data.

(f) *Definition of National Security Information.* The term *"National Security Information"* means information that has been determined, pursuant to Executive Order 12958, Classified National Security Information, as

amended, or any predecessor order, to require protection against unauthorized disclosure, and that is marked to indicate its classified status when in documentary form.

(g) *Definition of Special Nuclear Material.* The term *"special nuclear material"* means—

(1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which, pursuant to 42 U.S.C. 2071 [section 51 as amended, of the Atomic Energy Act of 1954] has been determined to be special nuclear material, but does not include source material; or

(2) any material artificially enriched by any of the foregoing, but does not include source material.

(h) *Access authorizations of personnel.*

(1) The Contractor shall not permit any individual to have access to any classified information or special nuclear material, except in accordance with the Atomic Energy Act of 1954, and the DOE's regulations and contract requirements applicable to the particular level and category of classified information or particular category of special nuclear material to which access is required.

(2) The Contractor must conduct a thorough review, as defined at 48 CFR 904.40 I, of an uncleared applicant or uncleared employee, and must test the individual for illegal drugs, prior to selecting the individual for a position requiring a DOE access authorization.

(i) A review must-- verify an uncleared applicant's or uncleared employee's educational background, including any high school diploma obtained within the past five years, and degrees or diplomas granted by an institution of higher learning; contact listed employers for the last three years and listed personal references; conduct local law enforcement checks when such checks are not prohibited by state or local law or regulation and when the uncleared applicant or uncleared employee resides in the jurisdiction where the Contractor is located; and conduct a credit check and other checks as appropriate.

(ii) Contractor reviews are not required for an applicant for DOE access authorization who possesses a current access authorization from DOE or another Federal agency, or whose access authorization may be reapproved without a federal background investigation pursuant to Executive Order 12968,

Access to Classified Information (August 4, 1995), Sections 3.3(c) and (d).

(iii) In collecting and using this information to make a determination as to whether it is appropriate to select an uncleared applicant or uncleared employee to a position requiring an access authorization, the Contractor must comply with all applicable laws, regulations, and Executive Orders, including those—

(A) governing the processing and privacy of an individual's information, such as the Fair Credit Reporting Act, Americans with Disabilities Act (ADA), and Health Insurance Portability and Accountability Act; and

(B) prohibiting discrimination in employment, such as under the ADA, Title VII and the Age Discrimination in Employment Act, including with respect to pre- and post-offer of employment disability related questioning.

(iv) In addition to a review, each candidate for a DOE access authorization must be tested to demonstrate the absence of any illegal drug, as defined in 10 CFR 707.4. All positions requiring access authorizations are deemed *testing designated positions* in accordance with 10 CFR part 707. All employees possessing access authorizations are subject to applicant, random or for cause testing for use of illegal drugs. DOE will not process candidates for a DOE access authorization unless their tests confirm the absence from their system of any illegal drug.

(v) When an uncleared applicant or uncleared employee receives an offer of employment for a position that requires a DOE access authorization, the Contractor shall not place that individual in such a position prior to the individual's receipt of a DOE access authorization, unless an approval has been obtained from the head of the cognizant local security office. If the individual is hired and placed in the position prior to receiving an access authorization, the uncleared employee may not be afforded access to classified information or matter or special nuclear material (in categories requiring access authorization) until an access authorization has been granted.

(vi) The Contractor must maintain a record of information concerning each uncleared applicant or uncleared employee who is selected for a position requiring an access authorization. Upon request only,

the following information will be furnished to the head of the cognizant local DOE Security Office.

(A) The date(s) each Review was conducted;

(B) Each entity that provided information concerning the individual;

(C) A certification that the review was conducted in accordance with all applicable laws, regulations, and Executive Orders, including those governing the processing and privacy of an individual's information collected during the review;

(D) A certification that all information collected during the review was reviewed and evaluated in accordance with the Contractor's personnel policies; and

(E) The results of the test for illegal drugs.

(i) *Criminal liability.* It is understood that disclosure of any classified information relating to the work or services ordered hereunder to any person not entitled to receive it, or failure to protect any classified information, special nuclear material, or other Government property that may come to the Contractor or any person under the Contractor's control in connection with work under this contract, may subject the Contractor, its agents, employees, or Subcontractors to criminal liability under the laws of the United States (see the Atomic Energy Act of 1954, 42 U.S.C. 2011 et seq.; 18 U.S.C. 793 and 794).

(j) *Foreign Ownership, Control, or Influence.*

(1) The Contractor shall immediately provide the cognizant security office written notice of any change in the extent and nature of foreign ownership, control or influence over the Contractor which would affect any answer to the questions presented in the Standard Form (SF) 328, *Certificate Pertaining to Foreign Interests,* executed prior to award of this contract. In addition, any notice of changes in ownership or control which are required to be reported to the Securities and Exchange Commission, the Federal Trade Commission, or the Department of Justice, shall also be furnished concurrently to the Contracting Officer. Contractors are encouraged to submit this information through the use of the online tool at https://foci.td.anl.gov. When completed the Contractor must print and sign one copy of the SF 328 and submit it to the Contracting Officer.

(2) If a Contractor has changes involving foreign ownership, control, or influence, DOE must determine whether the changes will pose an undue risk to the common defense and security. In making this determination, DOE will consider proposals made by the Contractor to avoid or mitigate foreign influences.

(3) If the cognizant security office at any time determines that the Contractor is, or is potentially, subject to foreign ownership, control, or influence, the Contractor shall comply with such instructions as the Contracting Officer shall provide in writing to protect any classified information or special nuclear material.

(4) The Contracting Officer may terminate this contract for default either if the Contractor fails to meet obligations imposed by this clause or if the Contractor creates a foreign ownership, control, or influence situation in order to avoid performance or a termination for default. The Contracting Officer may terminate this contract for convenience if the Contractor becomes subject to foreign ownership, control, or influence and for reasons other than avoidance of performance of the contract, cannot, or chooses not to, avoid or mitigate the foreign ownership, control, or influence problem.

(k) *Employment announcements.* When placing announcements seeking applicants for positions requiring access authorizations, the Contractor shall include in the written vacancy announcement, a notification to prospective applicants that reviews, and tests for the absence of any illegal drug as defined in 10 CFR 707.4, will be conducted by the employer and a background investigation by the Federal Government may be required to obtain an access authorization prior to employment, and that subsequent reinvestigations may be required. If the position is covered by the Counterintelligence Evaluation Program regulations at 10 CFR 709, the announcement should also alert applicants that successful completion of a counterintelligence evaluation may include a counterintelligence-scope polygraph examination.

(l) *Flow down to subcontracts.* The Contractor agrees to insert terms that conform substantially to the language of this clause, including this paragraph, in all subcontracts under its contract that will require subcontractor employees to possess access authorizations. Additionally, the Contractor must require such subcontractors to have an existing DOD or DOE facility clearance or submit a completed SF 328, *Certificate Pertaining to Foreign Interests,* as required in 48 CFR 952.204-73, Facility Clearance, and obtain a foreign ownership, control and influence determination and facility clearance prior to award of a subcontract. Information to be provided by a subcontractor pursuant to this clause may be submitted directly to the Contracting Officer.

For purposes of this clause, Subcontractor means any subcontractor at any tier and the term "Contracting Officer" means the DOE Contracting Officer. When this clause is included in a subcontract, the term "Contractor" shall mean subcontractor and the term "contract" shall mean subcontract.

**CLAUSE I.88 - DEAR 952.204-70 CLASSIFICATION/DECLASSIFICATION (SEP 1997)**

In the performance of work under this contract, the Contractor or subcontractor shall comply with all provisions of the Department of Energy's regulations and mandatory DOE directives which apply to work involving the classification and declassification of information, documents, or material. In this section, "information" means facts, data, or knowledge itself; "document" means the physical medium on or in which information is recorded; and "material" means a product or substance which contains or reveals information, regardless of its physical form or characteristics. Classified information is "Restricted Data" and "Formerly Restricted Data" (classified under the Atomic Energy Act of 1954, as amended) and "National Security Information" (classified under Executive Order 12958 or prior Executive Orders). The original decision to classify or declassify information is considered an inherently Governmental function. For this reason, only Government personnel may serve as original classifiers, i.e., Federal Government Original Classifiers. Other personnel (Government or Contractor) may serve as derivative classifiers which involves making classification decisions based upon classification guidance which reflect decisions made by Federal Government Original Classifiers.

The Contractor or subcontractor shall ensure that any document or material that may contain classified information is reviewed by either a Federal Government or a Contractor Derivative Classifier in accordance with classification regulations including mandatory DOE directives and classification/declassification guidance furnished to the Contractor by the Department of Energy to determine whether it contains classified information prior to dissemination. For information which is not addressed in classification/declassification guidance, but whose sensitivity appears to warrant classification, the Contractor or subcontractor shall ensure that such information is reviewed by a Federal Government Original Classifier.

In addition, the Contractor or subcontractor shall ensure that existing classified documents (containing either Restricted Data or Formerly Restricted Data or National Security Information) which are in its possession or under its control are periodically reviewed by a Federal Government or Contractor Derivative Declassifier in accordance with classification regulations, mandatory DOE directives and classification/ declassification guidance furnished to the Contractor by the Department of Energy to determine if the documents are no longer appropriately classified. Priorities for declassification review of classified documents shall be based on the degree of public and researcher interest and the likelihood of declassification upon review. Documents

which no longer contain classified information are to be declassified. Declassified documents then shall be reviewed to determine if they are publicly releasable. Documents which are declassified and determined to be publicly releasable are to be made available to the public in order to maximize the public's access to as much Government information as possible while minimizing security costs.

The Contractor or subcontractor shall insert this clause in any subcontract which involves or may involve access to classified information.

**CLAUSE I.89 - DEAR 952.204-73 – FACILITY CLEARANCE (MAR 2011)**

Section 2536 of title 10, United States Code, prohibits the award of a contract under a national security program to an entity controlled by a foreign government if it is necessary for that entity to be given access to information in a proscribed category of information in order to perform the contract unless a waiver is granted by the Secretary of Energy. In addition, a Facility Clearance and foreign ownership, control and influence (FOCI) information are required when the contract or subcontract to be awarded is expected to require employees to have access authorizations.

Offerors who have either a Department of Defense or a Department of Energy Facility Clearance generally need not resubmit the following foreign ownership information unless specifically requested to do so. Instead, provide your DOE Facility Clearance code or your DOD assigned commercial and government entity (CAGE) code. If uncertain, consult the office which issued this solicitation.

(a) Use of Certificate Pertaining to Foreign Interests, Standard Form 328

(1) The contract work anticipated by this solicitation will require access to classified information or special nuclear material. Such access will require a Facility Clearance for the Contractor organization and access authorizations (security clearances) for Contractor personnel working with the classified information or special nuclear material. To obtain a Facility Clearance the offeror must submit a Certificate Pertaining to Foreign Interests, Standard Form 328, and all required supporting documents to form a complete Foreign Ownership, Control or Influence (FOCI) Package. Contractors are encouraged to submit this information through the use of the online tool at https://foci.td.anl.gov. When completed the Contractor must print and sign one copy of the SF 328 and submit it to the Contracting Officer.

(2) Information submitted by the offeror in response to the Standard Form 328 will be used solely for the purposes of evaluating foreign ownership, control or influence and will be treated by DOE, to the extent permitted by law, as business or financial information submitted in confidence.

(3) Following submission of a Standard Form 328 and prior to contract award, the Contractor shall immediately submit to the Contracting Officer written notification of any changes in the extent and nature of FOCI which could affect the offeror's answers to the questions in Standard Form 328. Following award of a contract, the Contractor must immediately submit to the cognizant security office written

notification of any changes in the extent and nature of FOCI which could affect the offeror's answers to the questions in Standard Form 328. Notice of changes in ownership or control which are required to be reported to the Securities and Exchange Commission, the Federal Trade Commission, or the Department of Justice must also be furnished concurrently to the cognizant security office.

(b) Definitions

(1) (i) A foreign government, foreign government agency, or representative of a foreign government;

(ii) Any form of business enterprise or legal entity organized, chartered or incorporated under the laws of any country other than the United States or its possessions and trust territories; and

(iii) Any person who is not a citizen or national of the United States.

(2) *Foreign Ownership, Control, or Influence (FOCI)* means the situation where the degree of ownership, control, or influence over a Contractor by a foreign interest is such that a reasonable basis exists for concluding that compromise of classified information or special nuclear material may result.

(c) Facility Clearance means an administrative determination that a facility is eligible to access, produce, use or store classified information, or special nuclear material. A Facility Clearance is based upon a determination that satisfactory safeguards and security measures are carried out for the activities being performed at the facility. It is DOE policy that all Contractors or Subcontractors requiring access authorizations be processed for a Facility Clearance at the level appropriate to the activities being performed under the contract. Approval for a Facility Clearance shall be based upon—

(1) A favorable foreign ownership, control, or influence (FOCI) determination based upon the Contractor's response to the ten questions in Standard Form 328 and any required, supporting data provided by the Contractor;

(2) A contract or proposed contract containing the appropriate security clauses;

(3) Approved safeguards and security plans which describe protective measures appropriate to the activities being performed at the facility;

(4) An established Reporting Identification Symbol code for the Nuclear Materials Management and Safeguards Reporting System if access to nuclear materials is involved;

(5) A survey conducted no more than 6 months before the Facility Clearance date, with a composite facility rating of satisfactory, if the facility is to possess classified matter or special nuclear material at its location;

(6) Appointment of a Facility Security Officer, who must possess or be in the process of obtaining an access authorization equivalent to the Facility Clearance; and, if applicable, appointment of a Materials Control and Accountability Representative; and

(7) Access authorizations for key management personnel who will be determined on a case-by-case basis, and must possess or be in the process of obtaining access authorizations equivalent to the level of the Facility Clearance.

(d) A Facility Clearance is required prior to the award of a contract requiring access to classified information and the granting of any access authorizations under a contract. Prior to award of a contract, the DOE must determine that award of the contract to the offeror will not pose an undue risk to the common defense and security as a result of its access to classified information or special nuclear material in the performance of the contract. The Contracting Officer may require the offeror to submit such additional information as deemed pertinent to this determination.

(e) A Facility Clearance is required even for contracts that do not require the Contractor's corporate offices to receive, process, reproduce, store, transmit, or handle classified information or special nuclear material, but which require DOE access authorizations for the Contractor's employees to perform work at a DOE location. This type facility is identified as a non-possessing facility.

(f) Except as otherwise authorized in writing by the Contracting Officer, the provisions of any resulting contract must require that the Contractor insert provisions similar to the foregoing in all subcontracts and purchase orders. Any Subcontractors requiring access authorizations for access to classified information or special nuclear material shall be directed to provide responses to the questions in Standard Form 328, Certificate Pertaining to Foreign Interests, directly to the prime Contractor or the Contracting Officer for the prime contract.

## NOTICE TO OFFERORS—CONTENTS REVIEW
## (PLEASE REVIEW BEFORE SUBMITTING)

Prior to submitting the Standard Form 328, required by paragraph (a)(1) of this clause, the offeror should review the FOCI submission to ensure that:

(1) The Standard Form 328 has been signed and dated by an authorized official of the company;

(2) If publicly owned, the Contractor's most recent annual report, and its most recent proxy statement for its annual meeting of stockholders have been attached; or, if privately owned, the audited, consolidated financial information for the most recently closed accounting year has been attached;

(3) A copy of the company's articles of incorporation and an attested copy of the company's by-laws, or similar documents filed for the company's existence and management, and all amendments to those documents;

(4) A list identifying the organization's owners, officers, directors, and executive personnel, including their names, social security numbers, citizenship, titles of all positions they hold within the organization, and what clearances, if any, they possess or are in the process of obtaining, and identification of the government agency(ies) that granted or will be granting those clearances; and,

(5) A summary FOCI data sheet.

NOTE: A FOCI submission must be attached for each tier parent organization (i.e. ultimate parent and any intervening levels of ownership). If any of these documents are missing, award of the contract cannot be completed.

## CLAUSE I.90 - DEAR 952.204-75 PUBLIC AFFAIRS (DEC 2000)

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

(b) The Contractor is responsible for the development, planning, and coordination of proactive approaches for the timely dissemination of unclassified information regarding DOE activities onsite and offsite, including, but not limited to,

operations and programs. Proactive public affairs programs may utilize a variety of communication media, including public workshops, meetings or hearings, open houses, newsletters, press releases, conferences, audio/visual presentations, speeches, forums, tours, and other appropriate stakeholder interactions.

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

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

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

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

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

**CLAUSE I.91 - <u>DEAR 952.204-77 Computer Security (AUG 2006)</u>**

(a) Definitions.

(1) Computer means desktop computers, portable computers, computer networks (including the DOE Network and local area networks at or controlled by DOE organizations), network devices, automated information systems, and or other related computer equipment owned by, leased, or operated on behalf of the DOE.

(2) Individual means a DOE Contractor or subcontractor employee, or any other person who has been granted access to a DOE computer or to information on a DOE computer, and does not include a member of the public who sends an e-mail message to a DOE computer or who obtains information available to the public on DOE Web sites.

(b) Access to DOE computers. A Contractor shall not allow an individual to have access to information on a DOE computer unless—

(1) The individual has acknowledged in writing that the individual has no expectation of privacy in the use of a DOE computer; and

(2) The individual has consented in writing to permit access by an authorized investigative agency to any DOE computer used during the period of that individual's access to information on a DOE computer, and for a period of three years thereafter.

(c) No expectation of privacy. Notwithstanding any other provision of law (including any provision of law enacted by the Electronic Communications Privacy Act of 1986), no individual using a DOE computer shall have any expectation of privacy in the use of that computer.

(d) Written records. The Contractor is responsible for maintaining written records for itself and subcontractors demonstrating compliance with the provisions of paragraph (b) of this section. The Contractor agrees to provide access to these records to the DOE, or its authorized agents, upon request.

(e) Subcontracts. The Contractor shall insert this clause, including this paragraph (e), in subcontracts under this contract that may provide access to computers owned, leased or operated on behalf of the DOE.

## CLAUSE I.92 - DEAR 952.208-7 TAGGING OF LEASED VEHICLES (APR 1984)

(a) DOE intends to use U.S. Government license tags.

(b) While it is the intention that vehicles leased hereunder shall operate on Federal tags, the DOE reserves the right to utilize State tags, if necessary, to accomplish its mission. Should State tags be required, the Contractor shall furnish the DOE the documentation required by the State to acquire such tags.

## CLAUSE I.93 - DEAR 952.209-72 ORGANIZATIONAL CONFLICTS OF INTEREST (AUG 2009) (ALTERNATE I)

(a) Purpose. The purpose of this clause is to ensure that the Contractor (1) is not biased because of its financial, contractual, organizational, or other interests which relate to the work under this contract, and (2) does not obtain any unfair competitive advantage over other parties by virtue of its performance of this contract.

(b) Scope. The restrictions described herein shall apply to performance or participation by the Contractor and any of its affiliates or their successors in interest (hereinafter collectively referred to as "Contractor") in the activities covered by this clause as a prime Contractor, subcontractor, cosponsor, joint venturer, consultant, or in any similar capacity. For the purpose of this clause, affiliation occurs when a business concern is controlled by or has the power to control another or when a third party has the power to control both.

(1) Use of Contractor's Work Product.

(i) The Contractor shall be ineligible to participate in any capacity in Department contracts, subcontracts, or proposals therefore (solicited and unsolicited) which stem directly from the Contractor's performance of work under this contract for a period of (Contracting Officer see 48 CFR 909.507-2 and enter specific term) years after the completion of this contract. Furthermore, unless so directed in writing by the Contracting Officer, the Contractor shall not perform any advisory and assistance services work under this contract on any of its products or services or the products or services of another firm if the Contractor is or has been substantially involved in their development or marketing. Nothing in this subparagraph shall preclude the Contractor from competing for follow-on contracts for advisory and assistance services.

(ii) If, under this contract, the Contractor prepares a complete or essentially complete statement of work or specifications to be used in competitive acquisitions, the Contractor shall be ineligible to perform or participate in any capacity in any contractual effort which is based on such statement of work or specifications. The Contractor shall not incorporate its products or services in such statement of work or specifications unless so directed in writing by the Contracting Officer, in which case the restriction in this subparagraph shall not apply.

(iii) Nothing in this paragraph shall preclude the Contractor from offering or selling its standard and commercial items to the Government.

(2) Access to and use of information.

(i) If the Contractor, in the performance of this contract, obtains access to information, such as Department plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (5 U.S.C. 552a), or data which has not been released or otherwise made available to the public, the Contractor agrees that without prior written approval of the Contracting Officer it shall not—

(A) use such information for any private purpose unless the information has been released or otherwise made available to the public;

(B) compete for work for the Department based on such information for a period of six (6) months after either the completion of this contract or until such information is released or otherwise made available to the public, whichever is first;

(C) submit an unsolicited proposal to the Government which is based on such information until one year after such information is released or otherwise made available to the public; and

(D) release such information unless such information has previously been released or otherwise made available to the public by the Department.

(ii) In addition, the Contractor agrees that to the extent it receives or is given access to proprietary data, data protected by the Privacy Act of 1974 (5 U.S.C. 552a), or other confidential or privileged technical, business, or financial information under this contract, it shall treat such information in accordance with any restrictions imposed on such information.

(iii) The Contractor may use technical data it first produces under this contract for its private purposes consistent with paragraphs (b)(2)(i)(A) and (D) of this clause and the patent, rights in data, and security provisions of this contract.

(c) Disclosure after award.

(1) The Contractor agrees that, if changes, including additions, to the facts disclosed by it prior to award of this contract, occur during the performance of this contract, it shall make an immediate and full disclosure of such changes in writing to the Contracting Officer. Such disclosure may include a description of any action which the Contractor has taken or proposes to take to avoid, neutralize, or mitigate any resulting conflict of interest. The Department may, however, terminate the contract for convenience if it deems such termination to be in the best interest of the Government.

(2) In the event that the Contractor was aware of facts required to be disclosed or the existence of an actual or potential organizational conflict of interest and did not disclose such facts or such conflict of interest to the Contracting Officer, DOE may terminate this contract for default.

(d) Remedies. For breach of any of the above restrictions or for nondisclosure or misrepresentation of any facts required to be disclosed concerning this contract, including the existence of an actual or potential organizational conflict of interest at the time of or after award, the Government may terminate the contract for default, disqualify the Contractor from subsequent related contractual efforts, and pursue such other remedies as may be permitted by law or this contract.

(e) Waiver. Requests for waiver under this clause shall be directed in writing to the Contracting Officer and shall include a full description of the requested waiver and the reasons in support thereof. If it is determined to be in the best interests of the Government, the Contracting Officer may grant such a waiver in writing.

(f) Subcontracts.

(1) The Contractor shall include a clause, substantially similar to this clause, including this paragraph (f), in subcontracts expected to exceed the simplified acquisition threshold determined in accordance with 48 CFR part 13 and involving the performance of advisory and assistance services as that term is defined at 48 CFR 2.101. The terms "contract, " "Contractor," and "Contracting Officer" shall be appropriately modified to preserve the Government's rights.

(2) Prior to the award under this contract of any such subcontracts for advisory and assistance services, the Contractor shall obtain from the proposed subcontractor or consultant the disclosure required by 48 CFR 909.507-1, and shall determine in writing whether the interests disclosed present an actual or significant potential for an organizational conflict of interest. Where an actual or significant potential organizational conflict of interest is identified, the Contractor shall take actions to avoid, neutralize, or mitigate the organizational conflict to the satisfaction of the Contractor. If the conflict cannot be avoided or neutralized, the Contractor must obtain the approval of the DOE Contracting Officer prior to entering into the subcontract.

## CLAUSE I.94 - DEAR 952.211-71 PRIORITIES AND ALLOCATIONS (ATOMIC ENERGY) (APR 2008)

The Contractor shall follow the provisions of Defense Priorities and Allocations System (DPAS) regulation (15 CFR Part 700) in obtaining controlled materials and other products and materials needed to fill this contract.

## CLAUSE I.95 - DEAR 952.215-70 KEY PERSONNEL (DEC 2000)

(a) The personnel listed below or elsewhere in this contract, Section J.5, Appendix E – Key Personnel, are considered essential to the work being performed under this

contract. Before removing, replacing, or diverting any of the listed or specified personnel, the Contractor must:

(1) Notify the Contracting Officer reasonably in advance;

(2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract; and

(3) obtain the Contracting Officer's written approval.

Notwithstanding the foregoing, if the Contractor deems immediate removal or suspension of any member of its management team is necessary to fulfill its obligation to maintain satisfactory standards of employee competency, conduct, and integrity under the clause at 48 CFR 970.5203-3, Contractor's Organization**,** the Contractor may remove or suspend such person at once, although the Contractor must notify Contracting Officer prior to or concurrently with such action.

(b) The list of personnel may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel.

## CLAUSE I.96 – DEAR 952.217-70 ACQUISITION OF REAL PROPERTY (MAR 2011)

(a) Notwithstanding any other provision of the contract, the prior approval of the Contracting Officer shall be obtained when, in performance of this contract, the Contractor acquires or proposes to acquire use of real property by:

(1) Purchase, on the Government's behalf or in the Contractor's own name, with title eventually vesting in the Government.

(2) Lease for which the Department of Energy will reimburse the incurred costs as a reimbursable contract cost.

(3) Acquisition of temporary interest through easement, license or permit, and the Government funds the entire cost of the temporary interest.

(b) Justification of and execution of any real property acquisitions shall be in accordance and compliance with directions provided by the Contracting Officer.

(c) The substance of this clause, including this paragraph (c), shall be included in any subcontract occasioned by this contract under which property described in paragraph (a) of this clause shall be acquired.

## CLAUSE I.97 - DEAR 952.223-75 PRESERVATION OF INDIVIDUAL OCCUPATIONAL RADIATION EXPOSURE RECORDS (APR 1984)

Individual occupational radiation exposure records generated in the performance of work under this contract shall be subject to inspection by DOE and shall be preserved by the Contractor until disposal is authorized by DOE or at the option of the Contractor delivered to DOE upon completion or termination of the contract. If the Contractor exercises the foregoing option, title to such records shall vest in DOE upon delivery.

## CLAUSE I.98 - DEAR 952.223-78 – SUSTAINABLE ACQUISITION PROGRAM (OCT 2010)

(a) Pursuant to Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance, the Department of Energy (DOE) is committed to managing its facilities in an environmentally preferable and sustainable manner that will promote the natural environment and protect the health and well being of its Federal employees and contractor service providers. In the performance of work under this contract, the Contractor shall provide its services in a manner that promotes the natural environment, reduces greenhouse gas emissions and protects the health and well being of Federal employees, contract service providers and visitors using the facility.

(b) Green purchasing or sustainable acquisition has several interacting initiatives. The Contractor must comply with initiatives that are current as of the contract award date. DOE may require compliance with revised initiatives from time to time. The Contractor may request an equitable adjustment to the terms of its contract using the procedures in the Changes clause of the contract. The initiatives important to these Orders are explained on the following Government or Industry Internet Sites:

(1) Recycled Content Products are described at http://epa.gov/cpg

(2) Biobased Products are described at http://www.biopreferred.gov/

(3) Energy efficient products are at http://energystar.gov/products for Energy Star products

(4) Energy efficient products are at http://www.femp.energy.gov/procurement for FEMP designated products

(5) Environmentally preferable and energy efficient electronics including desktop computers, laptops and monitors are at http://www.epeat.net the

Electronic Products Environmental Assessment Tool (EPEAT) the Green Electronics Council site

(6) Green house gas emission inventories are required, including Scope 3 emissions which include contractor emissions. These are discussed at Section 13 of Executive Order 13514 which can be found at http://www.archives.gov/federal-register/executive-orders/disposition.html

(7) Non-Ozone Depleting Alternative Products are at http://www.epa.gov/ozone/strathome.html

(8) Water efficient plumbing products are at http://epa.gov/watersense.

(c) The clauses at FAR 52.223-2, Affirmative Procurement of Biobased Products under Service and Construction Contracts, 52.223-15, Energy Efficiency in Energy Consuming Products, and 52.223-17 Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts, require the use of products that have biobased content, are energy efficient, or have recycled content. To the extent that the services provided by the Contractor require provision of any of the above types of products, the Contractor must provide the energy efficient and environmentally sustainable type of product unless that type of product—

(1) Is not available;

(2) Is not life cycle cost effective or does not exceed 110% of the price of alternative items if life cycle cost data is unavailable (EPEAT is an example of lifecycle costs that have been analyzed by DOE and found to be acceptable at the silver and gold level);

(3) Does not meet performance needs; or,

(4) Cannot be delivered in time to meet a critical need.

(d) In the performance of this contract, the Contractor shall comply with the requirements of Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, (http://www.epa.gov/greeningepa/practices/eo13423.htm) and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance (http://www.archives.gov/federal-register/executive-orders/disposition.html). The Contractor shall also consider the best practices within the DOE Acquisition Guide, Chapter 23, *Acquisition Considerations Regarding Federal Leadership in Environmental, Energy, and Economic Performance.* This guide includes information concerning recycled content products, biobased products, energy efficient products, water efficient products,

alternative fuels and vehicles, non ozone depleting substances and other environmentally

preferable products and services. This guide is available on the Internet at: http://management.energy.gov/documents/AcqGuide23pt0Rev1.pdf.

(e) Contractors must establish and maintain a documented energy management program which includes requirements for energy and water efficient equipment, EnergyStar or WaterSense, as applicable and procedures for verification of purchases, following the criteria in DOE Order 430.2B, Departmental Energy, Renewable Energy, and Transportation Management, Attachment 1, or its successor to the extent required elsewhere in the contract. This requirement should not be flowed down to subcontractors.

(f) In complying with the requirements of paragraph (c) of this clause, the Contractor(s) shall coordinate its activities with and submit required reports through the Environmental Sustainability Coordinator or equivalent position. Reporting under this paragraph and paragraphs (g) and (h) of this clause is only required if the contract or subcontract offers subcontracting opportunities for energy efficient and environmentally sustainable products or services exceeding $100,000 in any contract year.

(g) The Contractor shall prepare and submit performance reports, if required, using prescribed DOE formats, at the end of the Federal fiscal year, on matters related to the acquisition of environmentally preferable and sustainable products and services. This is a material delivery under the contract. Failure to perform this requirement may be considered a failure that endangers performance of this contract and may result in termination for default.

(h) These provisions shall be flowed down only to first tier subcontracts exceeding the simplified acquisition threshold that support operation of the DOE facility and offer significant subcontracting opportunities for energy efficient or environmentally sustainable products or services. The Subcontractor, if subcontracting opportunities for sustainable and environmentally preferable products or services exceed the threshold in paragraph (f) of this clause, will comply with the procedures in paragraphs (c) through (f) of this clause regarding the collection of all data necessary to generate the reports required under paragraphs (c) through (f) of this clause, and submit the reports directly to the Prime Contractor's Environmental Sustainability Coordinator at the supported facility. The Subcontractor will advise the Contractor if it is unable to procure energy efficient and environmentally sustainable items and cite which of the reasons in paragraph (c) of this clause apply. The reports may be submitted at the conclusion of the subcontract term provided that the subcontract delivery term is not multi-year in nature. If the delivery term is multi-year, the Subcontractor shall report its accomplishments for each Federal fiscal year in a manner and at a

time or times acceptable to both parties. Failure to comply with these reporting requirements may be considered a breach of contract with attendant consequences.

(i) When this clause is used in a subcontract, the word "Contractor" will be understood to mean "Subcontractor."

**CLAUSE I.99 - RESERVED**

**CLAUSE I.100 - DEAR 952.226-74 DISPLACED EMPLOYEE HIRING PREFERENCE (JUN 1997)**

(a) Definition.

Eligible employee means a current or former employee of a Contractor or subcontractor employed at a Department of Energy Defense Nuclear Facility (1) whose position of employment has been, or will be, involuntarily terminated (except if terminated for cause), (2) who has also met the eligibility criteria contained in the Department of Energy guidance for Contractor work force restructuring, as may be amended or supplemented from time to time, and (3) who is qualified for a particular job vacancy with the Department or one of its Contractors with respect to work under its contract with the Department at the time the particular position is available.

(b) Consistent with Department of Energy guidance for Contractor work force restructuring, as may be amended or supplemented from time to time, the Contractor agrees that it will provide a preference in hiring to an eligible employee to the extent practicable for work performed under this contract.

(c) The requirements of this clause shall be included in subcontracts at any tier (except for subcontracts for commercial items pursuant to 41 U.S.C. 403) expected to exceed $500,000.

**CLAUSE I.101 - DEAR 952.235-71 RESEARCH MISCONDUCT (JUL 2005)**

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

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

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

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

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

(c) The Department may elect to act in lieu of the contractor in conducting an inquiry or investigation into an allegation of research misconduct if the contracting officer finds that:

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

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

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

(4) The allegation involves possible criminal misconduct.

(d) In conducting the activities under paragraphs (b) and (c)of this clause, the contractor and the Department, if it elects to conduct the inquiry or investigation,

shall adhere to the following guidelines:

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

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

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

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

(5) Remediation and Sanction. If the contractor finds that research misconduct has occurred, it shall assess the seriousness of the misconduct and its impact on the research completed or in process. The contractor must take all necessary corrective actions. Such action may include but are not limited to, correcting the research record and as appropriate imposing restrictions, controls, or other parameters on research in process or to be conducted in the future. The contractor must coordinate remedial actions with the contracting officer. The contractor must also consider whether personnel sanctions are appropriate. Any such sanction must be considered and effected consistent with any applicable personnel laws,

policies, and procedures, and shall take into account the seriousness of the misconduct and its impact, whether it was done knowingly or intentionally, and whether it was an isolated event or pattern of conduct.

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

(f) Definitions.

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

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

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

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

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

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

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

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

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

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

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

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

## CLAUSE I.102 - DEAR 952.242-70 TECHNICAL DIRECTION (DEC 2000)

(a) Performance of the work under this contract shall be subject to the technical direction of the DOE Contracting Officer's Representative (COR). The term "technical direction" is defined to include, without limitation:

(1) Providing direction to the contractor that redirects contract effort, shift work emphasis between work areas or tasks, require pursuit of certain lines of inquiry, fill in details, or otherwise serve to accomplish the contractual Statement of Work.

(2) Providing written information to the contractor that assists in interpreting drawings, specifications, or technical portions of the work description.

(3) Reviewing and, where required by the contract, approving, technical reports, drawings, specifications, and technical information to be delivered by the contractor to the Government.

(b) The contractor will receive a copy of the written COR designation from the contracting officer. It will specify the extent of the COR's authority to act on behalf of the contracting officer.

(c) Technical direction must be within the scope of work stated in the contract. The COR does not have the authority to, and may not, issue any technical direction that:

(1) Constitutes an assignment of additional work outside the Statement of Work;

(2) Constitutes a change as defined in the contract clause entitled "Changes;"

(3) In any manner causes an increase or decrease in the total estimated contract cost, the fee (if any), or the time required for contract performance;

(4) Changes any of the expressed terms, conditions or specifications of the contract; or

(5) Interferes with the contractor's right to perform the terms and conditions of the contract.

(d) All technical direction shall be issued in writing by the COR.

(e) The contractor must proceed promptly with the performance of technical direction duly issued by the COR in the manner prescribed by this clause and within its authority under the provisions of this clause. If, in the opinion of the contractor, any instruction or direction by the COR falls within one of the categories defined in (c)(1) through (c)(5) of this clause, the contractor must not proceed and must notify the Contracting Officer in writing within five (5) working days after receipt of any such instruction or direction and must request the Contracting Officer to modify the contract accordingly. Upon receiving the notification from the contractor, the Contracting Officer must:

(1) Advise the contractor in writing within thirty (30) days after receipt of the contractor's letter that the technical direction is within the scope of the contract effort and does not constitute a change under the Changes clause of the contract;

(2) Advise the contractor in writing within a reasonable time that the Government will issue a written change order; or

(3) Advise the contractor in writing within a reasonable time not to proceed with the instruction or direction of the COR.

(f) A failure of the contractor and Contracting Officer either to agree that the technical direction is within the scope of the contract or to agree upon the contract action to be taken with respect to the technical direction will be subject to the provisions of the clause entitled "Disputes."

## CLAUSE I.103 – DEAR 952.247-70 – FOREIGN TRAVEL (JUN 2010)

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

## CLAUSE I.104 – DEAR 952.250-70 NUCLEAR HAZARDS INDEMNITY AGREEMENT (OCT 2005) ) (AL-2005-15)

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

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

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

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

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

(e) (1) Waiver of Defenses. In the event of a nuclear incident, as defined in the Act, arising out of nuclear waste activities, as defined in the Act, the contractor, on behalf of itself and other persons indemnified, agrees to waive any issue or defense as to charitable or governmental immunity.

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

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

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

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

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

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

1. Negligence;

2. Contributory negligence;

3. Assumption of risk; or

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

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

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

The waiver shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified.

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

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

(3) The waivers set forth above:

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

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

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

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

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

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

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

(viii) Shall not apply to, or prejudice the prosecution or defense of, any claim or portion of claim which is not within the protection afforded under (A) the limit of liability provisions under subsection 170e. of the Act, and (B) the terms of this agreement and the terms of insurance policies, contracts, or other proof of financial protection.

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

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

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

(i) *Civil penalties.* The contractor and its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to civil penalties, pursuant to section 234A of the Act, for violations of applicable DOE nuclear-safety related rules, regulations, or orders. If the contractor is a not-for-profit contractor, as defined by section 234Ad.(2), the total amount of civil penalties paid shall not exceed the total amount of fees paid within any 1-year period (as determined by the Secretary) under this contract.

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

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

## CLAUSE I.105 - DEAR 952.251-70 CONTRACTOR EMPLOYEE TRAVEL DISCOUNTS (AUG 2009)

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

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

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

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

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

(f) Obtaining travel discounts.

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

Management Centers or the Department of Defense's Commercial Travel Offices.

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

OFFICIAL AGENCY LETTERHEAD

TO: Participating Vendor

SUBJECT: OFFICIAL TRAVEL OF GOVERNMENT CONTRACTOR

(FULL NAME OF TRAVELER), the bearer of this letter is an employee of (COMPANY NAME) which has a contract with this agency under Government contract (CONTRACT NUMBER). During the period of the contract (GIVE DATES), AND WITH THE APPROVAL OF THE CONTRACT VENDOR, the employee is eligible and authorized to use available travel discount rates in accordance with Government contracts and/or agreements. Government Contract City Pair fares are not available to Contractors.

SIGNATURE, Title and telephone number of Contracting Officer

## CLAUSE I.106 - DEAR 970.5203-1 MANAGEMENT CONTROLS (JUN 2007) (DEVIATION)

(a) (1) The contractor shall be responsible for maintaining, as an integral part of its organization, effective systems of management controls for both administrative and programmatic functions. Management controls comprise the plan of organization, methods, and procedures adopted including consideration of outsourcing of functions by management to reasonably ensure that: the mission and functions assigned to the contractor are properly executed; efficient and effective operations are promoted; resources are safeguarded against waste, loss, mismanagement, unauthorized use, or misappropriation; all encumbrances and costs that are incurred under the contract and fees that are earned are in compliance with applicable clauses and other current terms, conditions, and intended purposes; all collections accruing to the contractor in connection with the work under this contract, expenditures, and all other transactions and assets are properly recorded, managed, and reported; and financial, statistical, and other reports necessary to maintain accountability and managerial control are accurate, reliable, and timely.

(2) The systems of controls employed by the contractor shall be documented and satisfactory to DOE.

(3) Such systems shall be an integral part of the contractor's management functions, including defining specific roles and responsibilities for each level of management, and holding employees accountable for the adequacy of the management systems and controls in their areas of assigned responsibility.

(4) The contractor shall, as part of the internal audit program required elsewhere in this contract, periodically review the management systems and controls employed in programs and administrative areas to ensure that they are adequate to provide reasonable assurance that the objectives of the systems are being accomplished and that these systems and controls are working effectively. Annually, or at other intervals directed by the contracting officer, the contractor shall supply to the contracting officer copies of the reports reflecting the status of recommendations resulting from management audits performed by its internal audit activity and any other audit organization. This requirement may be satisfied in part by the reports required under paragraph (i) of 970.5232-3, Accounts, records, and inspection.

(b) The contractor shall be responsible for maintaining, as a part of its operational responsibilities, a baseline quality assurance program that implements documented performance, quality standards, and control and assessment techniques.

(c) On an annual basis, the Contractor, through an officer at a level above the President of BSA, shall submit an assurance to the Contracting Officer that the system of management controls, including all systems revised in accordance with the clause of this Contract entitled, “Application of DOE Contractor Requirements Documents”, is adequate to assure that the objectives of the management system are being accomplished and that the system and controls are effective and efficient.

## CLAUSE I.107 - DEAR 970.5203-2 PERFORMANCE IMPROVEMENT AND COLLABORATION (MAY 2006)

(a) The contractor agrees that it shall affirmatively identify, evaluate, and institute practices, where appropriate, that will improve performance in the areas of environmental and health, safety, scientific and technical, security, business and administrative, and any other areas of performance in the management and operation of the contract. This may entail the alteration of existing practices or the institution of new procedures to more effectively or efficiently perform any aspect of contract performance or reduce overall cost of operation under the contract. Such improvements may result from changes in organization, outsourcing

decisions, simplification of systems while retaining necessary controls, or any other approaches consistent with the statement of work and performance measures of this contract.

(b) The contractor agrees to work collaboratively with the Department, all other management and operating, DOE major facilities management contractors and affiliated contractors which manage or operate DOE sites or facilities for the following purposes: (i) to exchange information generally, (ii) to evaluate concepts that may be of benefit in resolving common issues, in confronting common problems, or in reducing costs of operations, and (iii) to otherwise identify and implement DOE-complex-wide management improvements discussed in paragraph (a). In doing so, it shall also affirmatively provide information relating to its management improvements to such contractors, including lessons learned, subject to security considerations and the protection of data proprietary to third parties.

(c) The contractor may consult with the contracting officer in those instances in which improvements being considered pursuant to paragraph (a) involve the cooperation of the DOE. The contractor may request the assistance of the contracting officer in the communication of the success of improvements to other management and operating contractors in accordance with paragraph (b) of this clause.

(d) The contractor shall notify the contracting officer and seek approval where necessary to fulfill its obligations under the contract. Compliance with this clause in no way alters the obligations of the Contractor under any other provision of this contract.

## CLAUSE I.108 - DEAR 970.5203-3 CONTRACTOR'S ORGANIZATION (DEC 2000) (DEVIATION)

(a) Organization chart. As promptly as possible after the execution of this contract, the contractor shall furnish to the contracting officer a chart showing the names, duties, and organization of key personnel (see 48 CFR 952.215-70) and managerial personnel (see 48 CFR 970.5245-1 (j)) to be employed in connection with the work, and shall furnish supplemental information to reflect any changes as they occur.

(b) Supervisory representative of contractor. Unless otherwise directed by the contracting officer, a competent full-time resident supervisory representative of the contractor satisfactory to the contracting officer shall be in charge of the work at the site, and any work off-site, at all times.

(c) Control of employees. The contractor shall be responsible for maintaining satisfactory standards of employee competency, conduct, and integrity and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary.

(d) Standards and procedures. The contractor shall establish such standards and procedures as are necessary to implement the requirements set forth in 48 CFR 970.0371. Such standards and procedures shall be subject to the approval of the contracting officer.

## CLAUSE I.109 - DEAR 970.5204-1 – COUNTERINTELLIGENCE (DEC 2010)

(a) The Contractor shall take all reasonable precautions in the work under this contract to protect DOE programs, facilities, technology, personnel, unclassified sensitive information and classified matter from foreign intelligence threats and activities conducted for governmental or industrial purposes, in accordance with DOE Order 475.1, Counterintelligence Program; or its successor, Executive Order 12333, U.S. Intelligence Activities; and other pertinent national and Departmental Counterintelligence requirements.

(b) The Contractor shall appoint a qualified employee(s) to function as the Contractor Counterintelligence Officer. The Contractor Counterintelligence Officer will be responsible for conducting defensive Counterintelligence briefings and debriefings of employees traveling to foreign countries or interacting with foreign nationals; providing thoroughly documented written reports relative to targeting, suspicious activity and other matters of Counterintelligence interest; immediately reporting targeting, suspicious activity and other Counterintelligence concerns to the DOE Headquarters Counterintelligence Division; and providing assistance to other elements of the U.S. Intelligence Community as stated in the aforementioned Executive Order, the DOE Counterintelligence Order, and other pertinent national and Departmental Counterintelligence requirements.

## CLAUSE I.110 - DEAR 970.5204-2 LAWS, REGULATIONS AND DOE DIRECTIVES (DEC 2000)(DEVIATION)

(a) In performing work under this contract, the contractor shall comply with the requirements of applicable Federal, State, and local laws and regulations (including DOE regulations), unless relief has been granted in writing by the appropriate regulatory agency. A List of Applicable Laws and Regulations (Appendix I/List A) may be appended to this contract for information purposes. Omission of any applicable law or regulation from Appendix I/List A does not affect the obligation of the contractor to comply with such law or regulation pursuant to this paragraph.

(b) The Contractor will perform the work of this Contract in accordance with each of the Contractor Requirements Documents (CRDs) appended to this Contract as "Appendix I", until such time as the Contracting Officer approves the substitution of an alternative procedure, standard, system of oversight, or assessment mechanism resulting from the process described in the clause of this contract, entitled, "Application of DOE Contractor Requirements Documents".

(c) Except as otherwise directed by the Contracting Officer, the contractor shall procure all necessary permits or licenses required for the performance of work under this contract.

(d) Regardless of the performer of the work, the contractor is responsible for compliance with the requirements of this clause. The contractor is responsible for flowing down the requirements of this clause to subcontracts at any tier to the extent necessary to ensure the contractor's compliance with the requirements.

**CLAUSE I.111 - <u>DEAR 970.5204-3 ACCESS TO AND OWNERSHIP OF RECORDS (JUL 2005)</u>**

(a) Government-owned records. Except as provided in paragraph (b) of this clause, all records acquired or generated by the contractor in its performance of this contract shall be the property of the Government and shall be delivered to the Government or otherwise disposed of by the contractor either as the contracting officer may from time to time direct during the progress of the work or, in any event, as the contracting officer shall direct upon completion or termination of the contract.

(b) Contractor-owned records. The following records are considered the property of the contractor and are not within the scope of paragraph (a) of this clause. [The contracting officer shall identify which of the following categories of records will be included in the clause.]

(1) Employment-related records (such as worker's compensation files; employee relations records, records on salary and employee benefits; drug testing records, labor negotiation records; records on ethics, employee concerns; records generated during the course of responding to allegations of research misconduct; records generated during other employee related investigations conducted under an expectation of confidentiality; employee assistance program records; and personnel and medical/health-related records and similar files), and non-employee patient medical/health-related records, except for those records described by the contract as being maintained in Privacy Act systems of records.

(2) Confidential contractor financial information, and correspondence between the contractor and other segments of the contractor located away from the DOE facility (i.e., the contractor's corporate headquarters);

(3) Records relating to any procurement action by the contractor, except for records that under 48 CFR 970.5232-3, Accounts, Records, and Inspection, are described as the property of the Government; and

(4) Legal records, including legal opinions, litigation files, and documents covered by the attorney-client and attorney work product privileges; and

(5) The following categories of records maintained pursuant to the technology transfer clause of this contract:

(i) Executed license agreements, including exhibits or appendices containing information on royalties, royalty rates, other financial information, or commercialization plans, and all related documents, notes and correspondence.

(ii) The contractor's protected Cooperative Research and Development Agreement (CRADA) information and appendices to a CRADA that contain licensing terms and conditions, or royalty or royalty rate information.

(iii) Patent, copyright, mask work, and trademark application files and related contractor invention disclosures, documents and correspondence, where the contractor has elected rights or has permission to assert rights and has not relinquished such rights or turned such rights over to the Government.

(c) Contract completion or termination. In the event of completion or termination of this contract, copies of any of the contractor-owned records identified in paragraph (b) of this clause, upon the request of the Government, shall be delivered to DOE or its designees, including successor contractors. Upon delivery, title to such records shall vest in DOE or its designees, and such records shall be protected in accordance with applicable federal laws (including the Privacy Act), as appropriate.

(d) Inspection, copying, and audit of records. All records acquired or generated by the contractor under this contract in the possession of the contractor, including those described at paragraph (b) of this clause, shall be subject to inspection, copying, and audit by the Government or its designees at all reasonable times, and the contractor shall afford the Government or its designees reasonable facilities for such inspection, copying, and audit; provided, however, that upon request by the contracting officer, the contractor shall deliver such records to a

location specified by the contracting officer for inspection, copying, and audit. The Government or its designees shall use such records in accordance with applicable federal laws (including the Privacy Act), as appropriate.

(e) Applicability. Paragraphs (b), (c), and (d) of this clause apply to all records without regard to the date or origination of such records.

(f) Records retention standards. Special records retention standards, described at DOE Order 200.1, Information Management Program (version in effect on effective date of contract), are applicable for the classes of records described therein, whether or not the records are owned by the Government or the contractor. In addition, the contractor shall retain individual radiation exposure records generated in the performance of work under this contract until DOE authorizes disposal. The Government may waive application of these record retention schedules, if, upon termination or completion of the contract, the Government exercises its right under paragraph (c) of this clause to obtain copies and delivery of records described in paragraphs (a) and (b) of this clause.

(g) Subcontracts. The contractor shall include the requirements of this clause in all subcontracts that are of a cost-reimbursement type if any of the following factors is present:

(1) The value of the subcontract is greater than $2 million (unless specifically waived by the contracting officer);

(2) The contracting officer determines that the subcontract is, or involves, a critical task related to the contract; or

(3) The subcontract includes 48 CFR 970.5223-1, Integration of Environment, Safety, and Health into Work Planning and Execution, or similar clause.

## CLAUSE I.112 - <u>DEAR 970.5208-1 PRINTING (DEC 2000)</u>

(a) To the extent that duplicating or printing services may be required in the performance of this contract, the Contractor shall provide or secure such services in accordance with the Government Printing and Binding Regulations, Title 44 of the U.S. Code, and DOE Directives relative thereto.

(b) The term “Printing” includes the following processes: composition, platemaking, presswork, binding, microform publishing, or the end items produced by such processes. Provided, however, that performance of a requirement under this contract involving the duplication of less than 5,000 copies of a single page, or no more than 25,000 units in the aggregate of multiple pages, will not be deemed to be printing.

(c) Printing services not obtained in compliance with this guidance shall result in the cost of such printing being disallowed.

(d) The Contractor shall include the substance of this clause in all subcontracts hereunder which require printing (as that term is defined in Title I of the U.S. Government Printing and Binding Regulations).

## CLAUSE I.113 – DEAR 970.5211-1 WORK AUTHORIZATION (MAY 2007)

(a) Work authorization proposal. Prior to the start of each fiscal year, the Contracting Officer or designee shall provide the contractor with program execution guidance in sufficient detail to enable the contractor to develop an estimated cost, scope, and schedule. In addition, the Contracting Officer may unilaterally assign work. The contractor shall submit to the Contracting Officer or other designated official, a detailed description of work, a budget of estimated costs, and a schedule of performance for the work it recommends be undertaken during that upcoming fiscal year.

(b) Cost estimates. The contractor and the Contracting Officer shall establish a budget of estimated costs, description of work, and schedule of performance for each work assignment. If agreement cannot be reached as to scope, schedule, and estimated cost, the Contracting Officer may issue a unilateral work authorization, pursuant to this clause. The work authorization, whether issued bilaterally or unilaterally shall become part of the contract. No activities shall be authorized or costs incurred prior to Contracting Officer issuance of a work authorization or direction concerning continuation of activities of the contract.

(c) Performance. The contractor shall perform work as specified in the work authorization, consistent with the terms and conditions of this contract.

(d) Modification. The Contracting Officer may at any time, without notice, issue changes to work authorizations within the overall scope of the contract. A proposal for adjustment in estimated costs and schedule for performance of work, recognizing work made unnecessary as a result, along with new work, shall be submitted by the contractor in accordance with paragraph (a) of this clause. Resolution shall be in accordance with paragraph (b) of this clause.

(e) Increase in estimated cost. The contractor shall notify the Contracting Officer immediately whenever the cost incurred, plus the projected cost to complete work is projected to differ (plus or minus) from the estimate by 10 percent. The contractor shall submit a proposal for modification in accordance with paragraph (a) of this clause. Resolution shall be in accordance with paragraph (b) of this clause.

(f) Expenditure of funds and incurrence of costs. The expenditure of monies by the contractor in the performance of all authorized work shall be governed by the ``Obligation of Funds'' or equivalent clause of the contract.

(g) Responsibility to achieve environment, safety, health, and security compliance. Notwithstanding other provisions of the contract, the contractor may, in the event of an emergency, take that corrective action necessary to sustain operations consistent with applicable environmental, safety, health, and security statutes, regulations, and procedures. If such action is taken, the contractor shall notify the Contracting Officer within 24 hours of initiation and, within 30 days, submit a proposal for adjustment in estimated costs and schedule established in accordance with paragraphs (a) and (b) of this clause.

**CLAUSE I.114 - <u>DEAR 970.5215-1 TOTAL AVAILABLE FEE: BASE FEE AMOUNT AND PERFORMANCE FEE AMOUNT (DEC 2000) (ALTERNATES II AND IV) (DEC 2000)</u>**

(a) *Total available fee*. Total available fee, consisting of a base fee amount (which may be zero) and a performance fee amount (consisting of an incentive fee component for objective performance requirements, an award fee component for subjective performance requirements, or both) determined in accordance with the provisions of this clause, is available for payment in accordance with the clause of this contract entitled, "Payments and advances."

(b) *Fee Negotiations*. Prior to the beginning of each fiscal year under this contract, or other appropriate period as mutually agreed upon and, if exceeding one year, approved by the Senior Procurement Executive, or designee, the Contracting Officer and Contractor shall enter into negotiation of the requirements for the year or appropriate period, including the evaluation areas and individual requirements subject to incentives, the total available fee, and the allocation of fee. The Contracting Officer shall modify this contract at the conclusion of each negotiation to reflect the negotiated requirements, evaluation areas and individual requirements subject to incentives, the total available fee, and the allocation of fee. In the event the parties fail to agree on the requirements, the evaluation areas and individual requirements subject to incentives, the total available fee, or the allocation of fee, a unilateral determination will be made by the Contracting Officer. The total available fee amount shall be allocated to a twelve month cycle composed of one or more evaluation periods, or such longer period as may be mutually agreed to between the parties and approved by the Senior Procurement Executive, or designee.

(c) *Determination of Total Available Fee Amount Earned*.

(1) The Government shall, at the conclusion of each specified evaluation period, evaluate the Contractor's performance of all requirements, including performance based incentives completed during the period, and determine the

total available fee amount earned. At the Contracting Officer's discretion, evaluation of incentivized performance may occur at the scheduled completion of specific incentivized requirements.

(2) The DOE Operations/Field Office Manager, or designee, will be (insert title of DOE Operations/Field Office Manager, or designee). The Contractor agrees that the determination as to the total available fee earned is a unilateral determination made by the DOE Operations/Field Office Manager, or designee.

(3) The evaluation of Contractor performance shall be in accordance with the Performance Evaluation and Measurement Plan(s) described in subparagraph (d) of this clause unless otherwise set forth in the contract. The Contractor shall be promptly advised in writing of the fee determination, and the basis of the fee determination. In the event that the Contractor's performance is considered to be less than the level of performance set forth in the Statement of Work, as amended to include the current Work Authorization Directive or similar document, for any contract requirement, it will be considered by the DOE Operations/Field Office Manager, or designee, who may at his/her discretion adjust the fee determination to reflect such performance. Any such adjustment shall be in accordance with the clause entitled, "Conditional Payment of Fee, Profit, and Other Incentives—Facility Management Contracts" if contained in the contract.

(4) Award fee not earned during the evaluation period shall not be allocated to future evaluation periods.

(d) *Performance Evaluation and Measurement Plan(s).* To the extent not set forth elsewhere in the contract:

(1) The Government shall establish a Performance Evaluation and Measurement Plan(s) upon which the determination of the total available fee amount earned shall be based. The Performance Evaluation and Measurement Plan(s) will address all of the requirements of contract performance specified in the contract directly or by reference. A copy of the Performance Evaluation and Measurement Plan(s) shall be provided to the Contractor—

(i) Prior to the start of an evaluation period if the requirements, evaluation areas, specific incentives, amount of fee, and allocation of fee to such evaluation areas and specific incentives have been mutually agreed to by the parties; or

(ii) Not later than thirty days prior to the scheduled start date of the evaluation period, if the requirements, evaluation areas, specific incentives, amount of

fee, and allocation of fee to such evaluation areas and specific incentives have been unilaterally established by the Contracting Officer.

(2) The Performance Evaluation and Measurement Plan(s) will set forth the criteria upon which the Contractor will be evaluated relating to any technical, schedule, management, and/or cost objectives selected for evaluation. Such criteria should be objective, but may also include subjective criteria. The Plan(s) shall also set forth the method by which the total available fee amount will be allocated and the amount earned determined.

(3) The Performance Evaluation and Measurement Plan(s) may, consistent with the contract statement of work, be revised during the period of performance. The Contracting Officer shall notify the contractor—

(i) Of such unilateral changes at least ninety calendar days prior to the end of the affected evaluation period and at least thirty calendar days prior to the effective date of the change;

(ii) Of such bilateral changes at least sixty calendar days prior to the end of the affected evaluation period; or

(iii) If such change, whether unilateral or bilateral, is urgent and high priority, at least thirty calendar days prior to the end of the evaluation period.

(e) *Schedule for total available fee amount earned determinations*. The DOE Operations/Field Office Manager, or designee, shall issue the final total available fee amount earned determination in accordance with: the schedule set forth in the Performance Evaluation and Measurement Plan(s); or as otherwise set forth in this contract. However, a determination must be made within sixty calendar days after the receipt by the Contracting Officer of the Contractor's self-assessment, if one is required or permitted by paragraph (f) of this clause, or seventy calendar days after the end of the evaluation period, whichever is later, or a longer period if the Contractor and Contracting Officer agree. If the Contracting Officer evaluates the Contractor's performance of specific requirements on their completion, the payment of any earned fee amount must be made within seventy calendar days (or such other time period as mutually agreed to between the Contracting Officer and the Contractor) after such completion. If the determination is delayed beyond that date, the Contractor shall be entitled to interest on the determined total available fee amount earned at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 *(41 U.S.C. 611)* that is in effect on the payment date. This rate is referred to as the "Renegotiation Board Interest Rate," and is published in the Federal Register semiannually on or about January 1 and July 1. The interest on any late total available fee amount earned determination will accrue daily and be compounded in 30-day increments inclusive from the first day after the schedule determination date through the

actual date the determination is issued. That is, interest accrued at the end of any 30-day period will be added to the determined amount of fee earned and be subject to interest if not paid in the succeeding 30-day period.

(f) *Contractor self-assessment.* Following each evaluation period, the Contractor may submit a self-assessment, provided such assessment is submitted within 45 calendar days after the end of the period. This self-assessment shall address both the strengths and weaknesses of the Contractor's performance during the evaluation period. Where deficiencies in performance are noted, the Contractor shall describe the actions planned or taken to correct such deficiencies and avoid their recurrence. The DOE Operations/Field Office Manager, or designee, will review the Contractor's self-assessment, if submitted, as part of its independent evaluation of the Contractor's management during the period. A self-assessment, in and of itself may not be the only basis for the award fee determination.

**CLAUSE I.115 - DEAR 970.5215-3 CONDITIONAL PAYMENT OF FEE, PROFIT, AND OTHER INCENTIVES – FACILITY MANAGEMENT CONTRACTS (AUG 2009)**

(a) General.

(1) The payment of earned fee, fixed fee, profit, or share of cost savings under this contract is dependent upon—

(i) The Contractor's or Contractor employees' compliance with the terms and conditions of this contract relating to environment, safety and health (ES&H), which includes worker safety and health (WS&H), including performance under an approved Integrated Safety Management System (ISMS); and

(ii) The Contractor's or Contractor employees' compliance with the terms and conditions of this contract relating to the safeguarding of Restricted Data and other classified information.

(2) The ES&H performance requirements of this contract are set forth in its ES&H terms and conditions, including the DOE approved contractor ISMS or similar document. Financial incentives for timely mission accomplishment or cost effectiveness shall never compromise or impede full and effective implementation of the ISMS and full ES&H compliance.

(3) The performance requirements of this contract relating to the safeguarding of Restricted Data and other classified information are set forth in the clauses of this contract entitled, "Security" and "Laws, Regulations, and DOE Directives," as well as in other terms and conditions.

(4) If the Contractor does not meet the performance requirements of this contract relating to ES&H or to the safeguarding of Restricted Data and other classified information during any performance evaluation period established under the contract pursuant to the clause of this contract entitled, ``Total Available Fee: Base Fee Amount and Performance Fee Amount,'' otherwise earned fee, fixed fee, profit or share of cost savings may be unilaterally reduced by the contracting officer.

(b) Reduction Amount.

(1) The amount of earned fee, fixed fee, profit, or share of cost savings that may be unilaterally reduced will be determined by the severity of the performance failure pursuant to the degrees specified in paragraphs (c) and (d) of this clause.

(2) If a reduction of earned fee, fixed fee, profit, or share of cost savings is warranted, unless mitigating factors apply, such reduction shall not be less than 26% nor greater than 100% of the amount of earned fee, fixed fee, profit, or the Contractor's share of cost savings for a first degree performance failure, not less than 11% nor greater than 25% for a second degree performance failure, and up to 10% for a third degree performance failure.

(3) In determining the amount of the reduction and the applicability of mitigating factors, the contracting officer must consider the Contractor’s overall performance in meeting the ES&H or security requirements of the contract. Such consideration must include performance against any site specific performance criteria/requirements that provide additional definition, guidance for the amount of reduction, or guidance for the applicability of mitigating factors. In all cases, the contracting officer must consider mitigating factors that may warrant a reduction below the applicable range (see 48 CFR 970.1504-1-2). The mitigating factors include, but are not limited to, the following ((v), (vi), (vii) and (viii) apply to ES&H only).

(i) Degree of control the Contractor had over the event or incident.

(ii) Efforts the Contractor had made to anticipate and mitigate the possibility of the event in advance.

(iii) Contractor self-identification and response to the event to mitigate impacts and recurrence.

(iv) General status (trend and absolute performance) of: ES&H and compliance in related areas; or of safeguarding Restricted Data and other classified information and compliance in related areas.

(v) Contractor demonstration to the Contracting Officer's satisfaction that the principles of industrial ES&H standards are routinely practiced (e.g., Voluntary Protection Program, ISO 14000).

(vi) Event caused by "Good Samaritan" act by the Contractor (e.g., offsite emergency response).

(vii) Contractor demonstration that a performance measurement system is routinely used to improve and maintain ES&H performance (including effective resource allocation) and to support DOE corporate decision-making (e.g., policy, ES&H programs).

(viii) Contractor demonstration that an Operating Experience and Feedback Program is functioning that demonstrably affects continuous improvement in ES&H by use of lessons-learned and best practices inter- and intra-DOE sites.

(4) (i) The amount of fee, fixed fee, profit, or share of cost savings that is otherwise earned by a contractor during an evaluation period may be reduced in accordance with this clause if it is determined that a performance failure warranting a reduction under this clause occurs within the evaluation period.

(ii) The amount of reduction under this clause, in combination with any reduction made under any other clause in the contract, shall not exceed the amount of fee, fixed fee, profit, or the Contractor's share of cost savings that is otherwise earned during the evaluation period.

(iii) For the purposes of this clause, earned fee, fixed fee, profit, or share of cost savings for the evaluation period shall mean the amount determined by the contracting officer or fee determination official as otherwise payable based on the Contractor's performance during the evaluation period. Where the contract provides for financial incentives that extend beyond a single evaluation period, this amount shall also include: any provisional amounts determined otherwise payable in the evaluation period; and, if provisional payments are not provided for, the allocable amount of any incentive determined otherwise payable at the conclusion of a subsequent evaluation period. The allocable amount shall be the total amount of the earned incentive divided by the number of evaluation periods over which it was earned.

(iv) The Government will effect the reduction as soon as practicable after the end of the evaluation period in which the performance failure occurs. If the Government is not aware of the failure, it will effect the reduction as soon as practical after becoming aware. For

any portion of the reduction requiring an allocation the Government will effect the reduction at the end of the evaluation period in which it determines the total amount earned under the incentive. If at any time a reduction causes the sum of the payments the Contractor has received for fee, fixed fee, profit, or share of cost savings to exceed the sum of fee, fixed fee, profit, or share of cost savings the Contractor has earned (provisionally or otherwise), the Contractor shall immediately return the excess to the Government. (What the Contractor “has earned” reflects any reduction made under this or any other clause of the contract.)

(v) At the end of the contract—

(A) The Government will pay the Contractor the amount by which the sum of fee, fixed fee, profit, or share of cost savings the Contractor has earned exceeds the sum of the payments the Contractor has received; or

(B) The Contractor shall return to the Government the amount by which the sum of the payments the Contractor has received exceeds the sum of fee, fixed fee, profit, or share of cost savings the Contractor has earned. (What the Contractor “has earned" reflects any reduction made under this or any other clause of the contract.)

(c) Environment, Safety and Health (ES&H). Performance failures occur if the Contractor does not comply with the contract’s ES&H terms and conditions, including the DOE approved Contractor ISMS. The degrees of performance failure under which reductions of earned or fixed fee, profit, or share of cost savings will be determined are:

(1) First Degree: Performance failures that are most adverse to ES&H. Failure to develop and obtain required DOE approval of an ISMS is considered first degree. The Government will perform necessary review of the ISMS in a timely manner and will not unreasonably withhold approval of the Contractor’s ISMS. The following performance failures or performance failures of similar import will be considered first degree.

(i) Type A accident (defined in DOE Order 225.1A).

(ii) Two Second Degree performance failures during an evaluation period.

(2) Second Degree: Performance failures that are significantly adverse to ES&H. They include failures to comply with an approved ISMS that result in an actual injury, exposure, or exceedence that occurred or nearly occurred but had minor practical long-term health consequences. They

also include breakdowns of the Safety Management System. The following performance failures or performance failures of similar import will be considered second degree:

(i) Type B accident (defined in DOE Order 225.1A).

(ii) Non-compliance with an approved ISMS that results in a near miss of a Type A or B accident. A near miss is a situation in which an inappropriate action occurs, or a necessary action is omitted, but does not result in an adverse effect.

(iii) Failure to mitigate or notify DOE of an imminent danger situation after discovery, where such notification is a requirement of the contract.

(3) Third Degree: Performance failures that reflect a lack of focus on improving ES&H. They include failures to comply with an approved ISMS that result in potential breakdown of the System. The following performance failures or performance failures of similar import will be considered third degree:

(i) Failure to implement effective corrective actions to address deficiencies/non-compliances documented through: external (e.g., Federal) oversight and/or reported per DOE Order 231.1-2 requirements; or internal oversight of DOE Order 440.1A requirements.

(ii) Multiple similar non-compliances identified by external (e.g., Federal) oversight that in aggregate indicate a significant programmatic breakdown.

(iii) Non-compliances that either have, or may have, significant negative impacts to the worker, the public, or the environment or that indicate a significant programmatic breakdown.

(iv) Failure to notify DOE upon discovery of events or conditions where notification is required by the terms and conditions of the contract.

(d) Safeguarding Restricted Data and Other Classified Information. Performance failures occur if the Contractor does not comply with the terms and conditions of this contract relating to the safeguarding of Restricted Data and other classified information. The degrees of performance failure under which reductions of fee, profit, or share of cost savings will be determined are as follows:

(1) First Degree: Performance failures that have been determined, in accordance with applicable law, DOE regulation, or directive, to have resulted in, or that can reasonably be expected to result in, exceptionally grave damage to the national security. The following are examples of

performance failures or performance failures of similar import that will be considered first degree:

(i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating a risk of, loss, compromise, or unauthorized disclosure of Top Secret Restricted Data or other information classified as Top Secret, any classification level of information in a Special Access Program (SAP), information identified as sensitive compartmented information (SCI), or high risk nuclear weapons-related data.

(ii) Contractor actions that result in a breakdown of the safeguards and security management system that can reasonably be expected to result in the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data, or other information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.

(iii) Failure to promptly report the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data, or other information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.

(iv) Failure to timely implement corrective actions stemming from the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data or other information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.

(2) Second Degree: Performance failures that have been determined, in accordance with applicable law, DOE regulation, or directive, to have actually resulted in, or that can reasonably be expected to result in, serious damage to the national security. The following are examples of performance failures or performance failures of similar import that will be considered second degree:

(i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating risk of, loss, compromise, or unauthorized disclosure of Secret Restricted Data or other information classified as Secret.

(ii) Contractor actions that result in a breakdown of the safeguards and security management system that can reasonably be expected to result in the loss, compromise, or unauthorized disclosure of Secret Restricted Data, or other information classified as Secret.

(iii) Failure to promptly report the loss, compromise, or unauthorized disclosure of Restricted Data or other classified information regardless of classification (except for information covered by paragraph (d)(1)(iii) of this clause).

(iv) Failure to timely implement corrective actions stemming from the loss, compromise, or unauthorized disclosure of Secret Restricted Data or other classified information classified as Secret.

(3) Third Degree: Performance failures that have been determined, in accordance with applicable law, regulation, or DOE directive, to have actually resulted in, or that can reasonably be expected to result in, undue risk to the common defense and security. In addition, this category includes performance failures that result from a lack of Contractor management and/or employee attention to the proper safeguarding of Restricted Data and other classified information. These performance failures may be indicators of future, more severe performance failures and/or conditions, and if identified and corrected early would prevent serious incidents. The following are examples of performance failures or performance failures of similar import that will be considered third degree:

(i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating risk of, loss, compromise, or unauthorized disclosure of Restricted Data or other information classified as Confidential.

(ii) Failure to promptly report alleged or suspected violations of laws, regulations, or directives pertaining to the safeguarding of Restricted Data or other classified information.

(iii) Failure to identify or timely execute corrective actions to mitigate or eliminate identified vulnerabilities and reduce residual risk relating to the protection of Restricted Data or other classified information in accordance with the Contractor's Safeguards and Security Plan or other security plan, as applicable.

(iv) Contractor actions that result in performance failures which unto themselves pose minor risk, but when viewed in the aggregate indicate degradation in the integrity of the Contractor's safeguards and security management system relating to the protection of Restricted Data and other classified information.

**CLAUSE I.116 – DEAR 970.5217-1 WORK FOR OTHERS PROGRAM (NON-DOE FUNDED WORK) (JAN 2005)**

(a) Authority to Perform Work for Others. Pursuant to the Economy Act of 1932, as amended (31 U.S.C. 1535), and the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*) or other applicable authority, the Contractor may perform work for non-DOE entities (sponsors) on a fully reimbursable basis in accordance with this clause.

(b) Contractor's Implementation. The Contractor must draft, implement, and maintain formal policies, practices, and procedures in accordance with this clause, which must be submitted to the Contracting Officer for review and approval.

(c) Conditions of Participation in Work for Others Program. The Contractor:

(1) Must not perform Work for Others activities that would place it in direct competition with the domestic private sector;

(2) Must not respond to a request for proposals or any other solicitation from another Federal agency or non-Federal organization that involves direct comparative competition, either as an offeror, team member, or subcontractor to an offeror; however, the Contractor may, following notification to the Contracting Officer, respond to Broad Agency Announcements, Financial Assistance solicitations, and similar solicitations from another Federal Agency or non-Federal organizations when the selection is based on merit or peer review, the work involves basic or applied research to further advance scientific knowledge or understanding, and a response does not result in direct, comparative competition;

(3) Must not commence work on any Work for Others activity until a Work for Others proposal package has been approved by the DOE Contracting Officer or designated representative;

(4) Must not incur project costs until receipt of DOE notification that a budgetary resource is available for the project, except as provided in 48 CFR 970.5232-6;

(5) Must ensure that all costs associated with the performance of the work, including specifically all DOE direct costs and applicable surcharges, are included in any Work for Others proposal;

(6) Must maintain records for the accumulation of costs and the billing of such work to ensure that DOE's appropriated funds are not used in support of Work for Others activities and to provide an accounting of the expenditures

to DOE and the sponsor upon request;

(7) Must perform all Work for Others projects in accordance with the standards, policies, and procedures that apply to performance under this contract, including but not limited to environmental, safety and health, security, safeguards and classification procedures, and human and animal research regulations;

(8) May subcontract portion(s) of a Work for Others project; however, the Contractor must select the subcontractor and the work to be subcontracted. Any subcontracted work must be in direct support of the DOE contractor's performance as defined in the DOE approved work for others proposal package; and,

(9) Must maintain a summary listing of project information for each active Work for Others project, consisting of:

(i) Sponsoring agency;

(ii) Total estimated costs;

(iii) Project title and description;

(iv) Project point of contact; and,

(v) Estimated start and completion dates.

(d) Negotiation and Execution of Work for Others Agreement.

(1) When delegated authority by the Contracting Officer, the Contractor may negotiate the terms and conditions that will govern the performance of a specific Work for Others project. Such terms and conditions must be consistent with the terms, conditions, and requirements of the Contractor's contract with DOE. The Contractor may use DOE-approved contract terms and conditions as delineated in DOE Manual 481.1-1A or terms and conditions previously approved by the responsible Contracting Officer or authorized designee for agreements with non-Federal entities. The Contractor must not hold itself out as representing DOE when negotiating the proposed Work for Others agreement.

(2) The Contractor must submit all Work for Others agreements to the DOE Contracting Officer for DOE review and approval. The Contractor may not execute any proposed agreement until it has received notice of DOE approval.

(e) Preparation of Project Proposals. When the Contractor proposes to perform Work for Others activities pursuant to this clause, it may assist the project sponsor in the preparation of project proposal packages including the preparation of cost estimates.

(f) Work for Others Appraisals. DOE may conduct periodic appraisals of the Contractor's compliance with its Work for Others Program policies, practices and procedures. The Contractor must provide facilities and other support in conjunction with such appraisals as directed by the Contracting Officer or authorized designee.

(g) Annual Work for Others Report. The Contractor must provide assistance as required by the Contracting Officer or authorized designee in the preparation of a DOE Annual Summary Report of Work for Others Activities under the contract.

## CLAUSE I.117 - DEAR 970.5222-1 COLLECTIVE BARGAINING AGREEMENTS -- MANAGEMENT AND OPERATING CONTRACTS (DEC 2000)

When negotiating collective bargaining agreements applicable to the work force under this contract, the Contractor shall use its best efforts to ensure such agreements contain provisions designed to assure continuity of services. All such agreements entered into during the contract period of performance should provide that grievances and disputes involving the interpretation or application of the agreement will be settled without resorting to strike, lockout, or other interruption of normal operations. For this purpose, each collective bargaining agreement should provide an effective grievance procedure with arbitration as its final step, unless the parties mutually agree upon some other method of assuring continuity of operations. As part of such agreements, management and labor should agree to cooperate fully with the Federal Mediation and Conciliation Service. The contractor shall include the substance of this clause in any subcontracts for protective services or other services performed on the DOE-owned site which will affect the continuity of operation of the facility.

## CLAUSE I.118 - DEAR 970.5222-2 OVERTIME MANAGEMENT (DEC 2000)

(a) The Contractor shall maintain adequate internal controls to ensure that employee overtime is authorized only if cost effective and necessary to ensure performance of work under this contract.

(b) The Contractor shall notify the Contracting Officer when in any given year it is likely that overtime usage as a percentage of payroll may exceed 4%.

(c) The Contracting Officer may require the submission, for approval, of a formal annual overtime control plan whenever Contractor overtime usage as a

percentage of payroll has exceeded, or is likely to exceed, 4%, or if the Contracting Officer otherwise deems overtime expenditures excessive. The plan shall include, at a minimum:

(1) An overtime premium fund (maximum dollar amount);

(2) Specific controls for casual overtime for non-exempt employees;

(3) Specific parameters for allowability of exempt overtime;

(4) An evaluation of alternatives to the use of overtime; and

(5) Submission of a semi-annual report that includes for exempt and non-exempt employees:

(i) Total cost of overtime;

(ii) Total cost of straight time;

(iii) Overtime cost as a percentage of straight-time cost;

(iv) Total overtime hours;

(v) Total straight-time hours; and

(vi) Overtime hours as a percentage of straight-time hours.

**CLAUSE I.119 - <u>DEAR 970.5223-1 INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO WORK PLANNING AND EXECUTION (DEC 2000)</u>**

(a) For the purposes of this clause,

(1) Safety encompasses environment, safety and health, including pollution prevention and waste minimization; and

(2) Employees include subcontractor employees.

(b) In performing work under this contract, the contractor shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable for the safe performance of work. The contractor shall exercise a degree of care commensurate with the work and the associated hazards. The contractor shall ensure that management of environment, safety and health (ES&H) functions and activities becomes an

integral but visible part of the contractor's work planning and execution processes. The contractor shall, in the performance of work, ensure that:

(1) Line management is responsible for the protection of employees, the public, and the environment. Line management includes those contractor and subcontractor employees managing or supervising employees performing work.

(2) Clear and unambiguous lines of authority and responsibility for ensuring (ES&H) are established and maintained at all organizational levels.

(3) Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.

(4) Resources are effectively allocated to address ES&H, programmatic, and operational considerations. Protecting employees, the public, and the environment is a priority whenever activities are planned and performed.

(5) Before work is performed, the associated hazards are evaluated and an agreed-upon set of ES&H standards and requirements are established which, if properly implemented, provide adequate assurance that employees, the public, and the environment are protected from adverse consequences.

(6) Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards. Emphasis should be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.

(7) The conditions and requirements to be satisfied for operations to be initiated and conducted are established and agreed-upon by DOE and the contractor. These agreed-upon conditions and requirements are requirements of the contract and binding upon the contractor. The extent of documentation and level of authority for agreement shall be tailored to the complexity and hazards associated with the work and shall be established in a Safety Management System.

(c) The contractor shall manage and perform work in accordance with a documented Safety Management System (System) that fulfills all conditions in paragraph (b) of this clause at a minimum. Documentation of the System shall describe how the contractor will:

(1) Define the scope of work;

(2) Identify and analyze hazards associated with the work;

(3) Develop and implement hazard controls;

(4) Perform work within controls; and

(5) Provide feedback on adequacy of controls and continue to improve safety management.

(d) The System shall describe how the contractor will establish, document, and implement safety performance objectives, performance measures, and commitments in response to DOE program and budget execution guidance while maintaining the integrity of the System. The System shall also describe how the contractor will measure system effectiveness.

(e) The contractor shall submit to the contracting officer documentation of its System for review and approval. Dates for submittal, discussions, and revisions to the System will be established by the contracting officer. Guidance on the preparation, content, review, and approval of the System will be provided by the contracting officer. On an annual basis, the contractor shall review and update, for DOE approval, its safety performance objectives, performance measures, and commitments consistent with and in response to DOE's program and budget execution guidance and direction. Resources shall be identified and allocated to meet the safety objectives and performance commitments as well as maintain the integrity of the entire System. Accordingly, the System shall be integrated with the contractor's business processes for work planning, budgeting, authorization, execution, and change control.

(f) The contractor shall comply with, and assist the Department of Energy in complying with, ES&H requirements of all applicable laws and regulations, and applicable directives identified in the clause of this contract entitled “Laws, Regulations, and DOE Directives.” The contractor shall cooperate with Federal and non-Federal agencies having jurisdiction over ES&H matters under this contract.

(g) The contractor shall promptly evaluate and resolve any noncompliance with applicable ES&H requirements and the System. If the contractor fails to provide resolution or if, at any time, the contractor's acts or failure to act causes substantial harm or an imminent danger to the environment or health and safety of employees or the public, the contracting officer may issue an order stopping work in whole or in part. Any stop work order issued by a contracting officer under this clause (or issued by the contractor to a subcontractor in accordance with paragraph (i) of this clause) shall be without prejudice to any other legal or contractual rights of the Government. In the event that the contracting officer issues a stop work order, an order authorizing the resumption of the work may be

issued at the discretion of the contracting officer. The contractor shall not be entitled to an extension of time or additional fee or damages by reason of, or in connection with, any work stoppage ordered in accordance with this clause.

(h) Regardless of the performer of the work, the contractor is responsible for compliance with the ES&H requirements applicable to this contract. The contractor is responsible for flowing down the ES&H requirements applicable to this contract to subcontracts at any tier to the extent necessary to ensure the contractor's compliance with the requirements.

(i) The contractor shall include a clause substantially the same as this clause in subcontracts involving complex or hazardous work on site at a DOE-owned or -leased facility. Such subcontracts shall provide for the right to stop work under the conditions described in paragraph (g) of this clause. Depending on the complexity and hazards associated with the work, the contractor may choose not to require the subcontractor to submit a Safety Management System for the contractor's review and approval.

## CLAUSE I.120 – RESERVED

## CLAUSE I.121 - DEAR 970.5223-4 – WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (DEC 2010)

(a) Program Implementation. The Contractor shall, consistent with 10 CFR part 707, Workplace Substance Abuse Programs at DOE Sites, incorporated herein by reference with full force and effect, develop, implement, and maintain a workplace substance abuse program.

(b) Remedies. In addition to any other remedies available to the Government, the Contractor's failure to comply with the requirements of 10 CFR part 707 or to perform in a manner consistent with its approved program may render the Contractor subject to: the suspension of contract payments, or, where applicable, a reduction in award fee; termination for default; and suspension or debarment.

(c) *Subcontracts.*

(1) The Contractor agrees to notify the Contracting Officer reasonably in advance of, but not later than 30 days prior to, the award of any subcontract the Contractor believes may be subject to the requirements of 10 CFR part 707, unless the Contracting Officer agrees to a different date.

(2) The DOE Prime Contractor shall require all subcontracts subject to the provisions of 10 CFR part 707 to agree to develop and implement a workplace substance abuse program that complies with the requirements of 10 CFR part 707, Workplace Substance Abuse Programs at DOE Sites, as a condition for award of the subcontract. The DOE Prime Contractor shall review and approve each subcontractor's program, and shall periodically monitor each subcontractor's implementation of the program for effectiveness and compliance with 10 CFR part 707.

(3) The Contractor agrees to include, and require the inclusion of, the requirements of this clause in all subcontracts, at any tier, that are subject to the provisions of 10 CFR part 707.

**CLAUSE I.122 – RESERVED**

**CLAUSE I.123 - DEAR 970.5226-1 DIVERSITY PLAN (DEC 2000)**

The Contractor shall submit a Diversity Plan to the Contracting Officer for approval within 90 days after the effective date of this contract (or contract modification, if appropriate). The Contractor shall submit an update to its Plan annually or with its annual fee proposal. Guidance for preparation of a Diversity Plan is provided in Appendix M. The Plan shall include innovative strategies for increasing opportunities to fully use the talents and capabilities of a diverse work force. The Plan shall address, at a minimum, the Contractor's approach for promoting diversity through (1) the Contractor's work force, (2) educational outreach, (3) community involvement and outreach, (4) subcontracting, (5) economic development (including technology transfer), and (6) the prevention of profiling based on race or national origin.

**CLAUSE I.124 - DEAR 970.5226-2 WORKFORCE RESTRUCTURING UNDER SECTION 3161 OF THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 1993 (DEC 2000)**

(a) Consistent with the objectives of Section 3161 of the National Defense Authorization Act for Fiscal Year 1993, *42 U.S.C. 7274h,* in instances where the Department of Energy has determined that a change in workforce at a Department of Energy Defense Nuclear Facility is necessary, the contractor agrees to (1) comply with the Department of Energy Workforce Restructuring Plan for the facility, if applicable, and (2) use its best efforts to accomplish workforce restructuring or displacement so as to mitigate social and economic impacts.

(b) The requirements of this clause shall be included in subcontracts at any tier (except subcontracts for commercial items pursuant to *41 U.S.C. 403)* expected to exceed $500,000.

## CLAUSE I.125 - DEAR 970.5226-3 COMMUNITY COMMITMENT (DEC 2000)

It is the policy of the DOE to be a constructive partner in the geographic region in which DOE conducts its business. The basic elements of this policy include: (1) recognizing the diverse interests of the region and its stakeholders, (2) engaging regional stakeholders in issues and concerns of mutual interest, and (3) recognizing that giving back to the community is a worthwhile business practice. Accordingly, the Contractor agrees that its business operations and performance under the Contract will be consistent with the intent of the policy and elements set forth above.

## CLAUSE I.126 - DEAR 970.5227-2 RIGHTS IN DATA -- TECHNOLOGY TRANSFER (DEVIATION-JULY 2006)

(a) *Definitions.*

(1) Computer data bases, as used in this clause, means a collection of data in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

(2) Computer software, as used in this clause, means (i) computer programs which are data comprising a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations and (ii) data comprising source code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the computer program to be produced, created, or compiled. The term does not include computer data bases.

(3) Data, as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term "data" does not include data incidental to the administration of this contract, such as financial, administrative, cost and pricing, or management information.

(4) Limited rights data, as used in this clause, means data, other than computer software, developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged. The Government's rights to use, duplicate, or disclose limited rights data are as set forth in the Limited Rights Notice of paragraph (h) of this clause.

(5) Restricted computer software, as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published

copyrighted computer software, including minor modifications of any such computer software. The Government's rights to use, duplicate, or disclose restricted computer software are as set forth in the Restricted Rights Notice of subparagraph (i) of this clause.

(6) Technical data, as used in this clause, means recorded data, regardless of form or characteristic, that are of a scientific or technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer data base.

(7) Unlimited rights, as used in this clause, means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, including by electronic means, and perform publicly and display publicly, in any manner, including by electronic means, and for any purpose whatsoever, and to have or permit others to do so.

(8) Open Source Software, as used in this clause, means computer software that is distributed under a license in which the user is granted the rights to use, copy, modify, prepare derivative works and distribute, in source code or other format, the software, in original or modified form and derivative works thereof, without having to make royalty payments. The Contractor's right to distribute computer software first produced in the performance of this Contract as Open Source Software is as set forth in paragraph (f).

(b) *Allocation of Rights.*

(1) The Government shall have:

(i) Ownership of all technical data and computer software first produced in the performance of this Contract;

(ii) Unlimited rights in technical data and computer software specifically used in the performance of this Contract, except as provided herein regarding copyright, limited rights data, or restricted computer software, and except for data subject to the withholding provisions for protected Cooperative Research and Development Agreement (CRADA) information in accordance with Technology Transfer actions under this Contract, or other data specifically protected by statute for a period of time or, where, approved by DOE, appropriate instances of the DOE Work for Others Program;

(iii) The right to inspect technical data and computer software first produced or specifically used in the performance of this Contract at all reasonable times. The Contractor shall make available all

necessary facilities to allow DOE personnel to perform such inspection;

(iv) The right to have all technical data and computer software first produced or specifically used in the performance of this Contract delivered to the Government or otherwise disposed of by the Contractor, either as the contracting officer may from time to time direct during the progress of the work or in any event as the contracting officer shall direct upon completion or termination of this Contract. The Contractor agrees to leave a copy of such data at the facility or plant to which such data relate, and to make available for access or to deliver to the Government such data upon request by the contracting officer. If such data are limited rights data or restricted computer software. the rights of the Government in such data shall be governed solely by the provisions of paragraph (h) of this clause ("Rights in Limited Rights Data") or paragraph (i) of this clause ("Rights in Restricted Computer Software"); and (v) The right to remove, cancel, correct, or ignore any markings not authorized by the terms of this Contract on any data furnished hereunder if, in response to a written inquiry by DOE concerning the propriety of the markings, the Contractor fails to respond thereto within 60 days or fails to substantiate the propriety of the markings. In either case DOE will notify the Contractor of the action taken.

(2) The Contractor shall have:

(i) The right to withhold limited rights data and restricted computer software unless otherwise provided in provisions of this clause;

(ii) The right to use for its private purposes, subject to patent, security or other provisions of this Contract, data it first produces in the performance of this Contract, except for data in DOE's Uranium Enrichment Technology, including diffusion, centrifuge, and atomic vapor laser isotope separation, provided the data requirements of this Contract have been met as of the date of the private use of such data; and

(iii) The right to assert copyright subsisting in scientific and technical articles as provided in paragraph (d) of this clause and the right to request permission to assert copyright subsisting in works other than scientific and technical articles as provided in paragraph (e) of this clause.

(3) The Contractor agrees that for limited rights data or restricted computer

software or other technical business or financial data in the form of recorded information which it receives from, or is given access to by DOE or a third party, including a DOE contractor or subcontractor, and for technical data or computer software it first produces under this Contract which is authorized to be marked by DOE, the Contractor shall treat such data in accordance with any restrictive legend contained thereon.

(c) *Copyright (General).*

(1) The Contractor agrees not to mark, register, or otherwise assert copyright in any data in a published or unpublished work, other than as set forth in paragraphs (d) and (e) of this clause.

(2) Except for material to which the Contractor has obtained the right to assert copyright in accordance with either paragraph (d) or (e) of this clause, the Contractor agrees not to include in the data delivered under this Contract any material copyrighted by the Contractor and not to knowingly include any material copyrighted by others without first granting or obtaining at no cost a license therein for the benefit of the Government of the same scope as set forth in paragraph (d) of this clause. If the Contractor believes that such copyrighted material for which the license cannot be obtained must be included in the data to be delivered, rather than merely incorporated therein by reference, the Contractor shall obtain the written authorization of the contracting officer to include such material in the data prior to its delivery.

(d) *Copyrighted Works (Scientific and Technical Articles).*

(1) The Contractor shall have the right to assert, without prior approval of the contracting officer, copyright subsisting in scientific and technical articles composed under this contract or based on or containing data first produced in the performance of this Contract, and published in academic, technical or professional journals, symposia, proceedings, or similar works. When assertion of copyright is made, the Contractor shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) on the data when such data are delivered to the Government as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. The Contractor grants to the Government, and others acting on its behalf, a nonexclusive, paid-up, irrevocable, world-wide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.

(2) The contractor shall mark each scientific or technical article first produced or composed under this Contract and submitted for journal publication or similar means of dissemination with a notice, similar in all material respects to the following, on the front reflecting the Government's non-exclusive, paid-up, irrevocable, world-wide license in the copyright.

Notice: This manuscript has been authored by [insert the name of the Contractor] under Contract No. [insert the contract number] with the U.S. Department of Energy. The United States Government retains and the publisher, by accepting the article for publication, acknowledges that the United States Government retains a non-exclusive, paid-up, irrevocable, world-wide license to publish or reproduce the published form of this manuscript, or allow others to do so, for United States Government purposes.

(End of Notice)

(3) The title to the copyright of the original of unclassified graduate theses and the original of related unclassified scientific papers shall vest in the author thereof, subject to the right of DOE to retain duplicates of such documents and to use such documents for any purpose whatsoever without any claim on the part of the author or the contractor for additional compensation.

(e) *Copyrighted Works (Other Than Scientific and Technical Articles and Data Produced under a CRADA).* The Contractor may obtain permission to assert copyright subsisting in technical data and computer software first produced by the Contractor in performance of this Contract, where the Contractor can show that commercialization would be enhanced by such copyright protection, subject to the following:

(1) Contractor Request to Assert Copyright.

(i) For data other than scientific and technical articles and data produced under a CRADA, the Contractor shall submit in writing to Patent Counsel its request to assert copyright in data first produced in the performance of this Contract pursuant to this clause. The right of the Contractor to copyright data first produced under a CRADA is as described in the individual CRADA. Each request by the Contractor must include:

(A) The identity of the data (including any computer program) for which the Contractor requests permission to assert copyright, as well as an abstract which is descriptive of the data and is suitable for dissemination purposes, (B) The program under which it was funded, (C) Whether, to the best knowledge of the Contractor, the data is subject to an international treaty or

agreement, (D) Whether the data is subject to export control, (E) A statement that the Contractor plans to commercialize the data in compliance with the clause of this contract entitled, "Technology Transfer Mission," within five (5) years after obtaining permission to assert copyright or, on a case-by-case basis, a specified longer period where the Contractor can demonstrate that the ability to commercialize effectively is dependent upon such longer period, and (F) For data other than computer software, a statement explaining why the assertion of copyright is necessary to enhance commercialization and is consistent with DOE's dissemination responsibilities.

(ii) For data that is developed using other funding sources in addition to DOE funding, the permission to assert copyright in accordance with this clause must also be obtained by the Contractor from all other funding sources prior to the Contractor's request to Patent Counsel. The request shall include the Contractor's certification or other documentation acceptable to Patent Counsel demonstrating such permission has been obtained.

(iii) Permission for the Contractor to assert copyright in excepted categories of data as determined by DOE will be expressly withheld. Such excepted categories include data whose release (A) would be detrimental to national security, i.e., involve classified information or data or sensitive information under Section 148 of the Atomic Energy Act of 1954, as amended, or are subject to export control for nonproliferation and other nuclear-related national security purposes, (B) would not enhance the appropriate transfer or dissemination and commercialization of such data, (C) would have a negative impact on U.S. industrial competitiveness, (D) would prevent DOE from meeting its obligations under treaties and international agreements, or (E) would be detrimental to one or more of DOE's programs. Additional excepted categories may be added by the Assistant General Counsel for Technology Transfer and Intellectual Property. Where data are determined to be under export control restriction, the Contractor may obtain permission to assert copyright subject to the provisions of this clause for purposes of limited commercialization in a manner that complies with export control statutes and applicable regulations. In addition, notwithstanding any other provision of this Contract, all data developed with Naval Reactors' funding and those data that are classified fall within excepted categories. The rights of the Contractor in data are subject to the disposition of data rights in the

treaties and international agreements identified under this Contract as well as those additional treaties and international agreements which DOE may from time to time identify by unilateral amendment to the Contract; such amendment listing added treaties and international agreements is effective only for data which is developed after the date such treaty or international agreement is added to this Contract. Also, the Contractor will not be permitted to assert copyright in data in the form of various technical reports generated by the Contractor under the Contract without first obtaining the advanced written permission of the contracting officer.

(2) DOE Review and Response to Contractor's Request. The Patent Counsel shall use its best efforts to respond in writing within 90 days of receipt of a complete request by the Contractor to assert copyright in technical data and computer software pursuant to this clause. Such response shall either give or withhold DOE's permission for the Contractor to assert copyright or advise the Contractor that DOE needs additional time to respond, and the reasons therefor.

(3) Permission for Contractor to Assert Copyright.

(i) For computer software, the Contractor shall furnish to the DOE designated, centralized software distribution and control point, the Energy Science and Technology Software Center, at the time permission to assert copyright is given under paragraph (e)(2) of this clause: (A) An abstract describing the software suitable for publication, (B) the source code for each software program, and (C) the object code and at least the minimum support documentation needed by a technically competent user to understand and use the software. The Patent Counsel, for good cause shown by the Contractor, may allow the minimum support documentation to be delivered within 60 days after permission to assert copyright is given or at such time the minimum support documentation becomes available. The Contractor acknowledges that the DOE designated software distribution and control point may provide a technical description of the software in an announcement identifying its availability from the copyright holder.

(ii) Unless otherwise directed by the contracting officer, for data other than computer software to which the Contractor has received permission to assert copyright under paragraph (e)(2) of this clause above, the Contractor shall within sixty (60) days of obtaining such permission furnish to DOE's Office of Scientific and Technical Information (OSTI) a copy of such data as well as an abstract of the data suitable for dissemination purposes. The Contractor

acknowledges that OSTI may provide an abstract of the data in an announcement to DOE, its contractors and to the public identifying its availability from the copyright holder.

(iii) For a five year period or such other specified period as specifically approved by Patent Counsel beginning on the date the Contractor is given permission to assert copyright in data, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works and perform publicly and display publicly, by or on behalf of the Government. Upon request, the initial period may be extended after DOE approval. The DOE approval will be based on the standard that the work is still commercially available and the market demand is being met.

(iv) After the period approved by Patent Counsel for application of the limited Government license described in paragraph (e)(3)(iii) of this clause, or if, prior to the end of such period(s), the Contractor abandons commercialization activities pertaining to the data to which the Contractor has been given permission to assert copyright, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, distribute copies to the public, prepare derivative works, perform publicly and display publicly, and to permit others to do so.

(v) Whenever the Contractor asserts copyright in data pursuant to this paragraph (e), the Contractor shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 on the copyrighted data and also an acknowledgment of the Government sponsorship and license rights of paragraphs (e)(3) (iii) and (iv) of this clause. Such action shall be taken when the data are delivered to the Government, published, licensed or deposited for registration as a published work in the U.S. Copyright Office. The acknowledgment of Government sponsorship and license rights shall be as follows:

Notice: These data were produced by (insert name of Contractor) under Contract No. with the Department of Energy. For (period approved by DOE Patent Counsel) from (date permission to assert copyright was obtained), the Government is granted for itself and others acting on its behalf a nonexclusive, paid-up, irrevocable worldwide license in this data to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government. There is provision for the possible extension of the term of this license. Subsequent to that period or any extension granted, the Government is granted for itself and others acting on its behalf a nonexclusive, paid-up, irrevocable worldwide license in this data to reproduce, prepare derivative works,

distribute copies to the public, perform publicly and display publicly, and to permit others to do so. The specific term of the license can be identified by inquiry made to Contractor or DOE. NEITHER THE UNITED STATES NOR THE UNITED STATES DEPARTMENT OF ENERGY, NOR ANY OF THEIR EMPLOYEES, MAKES ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUMES ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, OR USEFULNESS OF ANY DATA, APPARATUS, PRODUCT, OR PROCESS DISCLOSED, OR REPRESENTS THAT ITS USE WOULD NOT INFRINGE PRIVATELY OWNED RIGHTS.
(End of Notice)

(vi) With respect to any data to which the Contractor has received permission to assert copyright, the DOE has the right, during the five (5) year or specified longer period approved by Patent Counsel as provided for in paragraph (e) of this clause, to request the Contractor to grant a nonexclusive, partially exclusive or exclusive license in any field of use to a responsible applicant(s) upon terms that are reasonable under the circumstances, and if the Contractor refuses such request, to grant such license itself, if the DOE determines that the Contractor has not made a satisfactory demonstration that either it or its licensee(s) is actively pursuing commercialization of the data as set forth in subparagraph (e)(1)(A) of this clause. Before licensing under this subparagraph (vi), DOE shall furnish the Contractor a written request for the Contractor to grant the stated license, and the Contractor shall be allowed thirty (30) days (or such longer period as may be authorized by the contracting officer for good cause shown in writing by the Contractor) after such notice to show cause why the license should not be granted. The Contractor shall have the right to appeal the decision of the DOE to grant the stated license to the Invention Licensing Appeal Board as set forth in 10 CFR 781.65 -- "Appeals."

(vii) No costs shall be allowable for maintenance of copyrighted data, primarily for the benefit of the Contractor and/or a licensee which exceeds DOE Program needs, except as expressly provided in writing by the contracting officer. The Contractor may use its net royalty income to effect such maintenance costs.

(viii) At any time the Contractor abandons commercialization activities for data for which the Contractor has received permission to assert copyright in accordance with this clause, it shall advise OSTI and Patent Counsel and upon request assign the copyright to the Government so that the Government can distribute the data to the public.

(4) The following notice may be placed on computer software prior to any publication and prior to the Contractor's obtaining permission from the Department of Energy to assert copyright in the computer software pursuant to paragraph (c)(3) of this section.

Notice: This computer software was prepared by [insert the Contractor's name and the individual author], hereinafter the Contractor, under Contract [insert the Contract Number] with the Department of Energy (DOE). All rights in the computer software are reserved by DOE on behalf of the United States Government and the Contractor as provided in the Contract. You are authorized to use this computer software for Governmental purposes but it is not to be released or distributed to the public. NEITHER THE GOVERNMENT NOR THE CONTRACTOR MAKES ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUMES ANY LIABILITY FOR THE USE OF THIS SOFTWARE. This notice including this sentence must appear on any copies of this computer software.

(End of Notice)

(5) A similar notice can be used for data, other than computer software, upon approval of DOE Patent Counsel.

(f) *Open Source Software.* The Contractor may release computer software first produced by the Contractor in the performance of this Contract under an open source software license. Such software shall hereinafter be referred to as Open Source Software or OSS, subject to the following:

(1) Obtain Program Approval.

(i) The Contractor shall ensure that the DOE Program or Programs that have provided funding (Funding Source) to develop the software have approved the distribution of the software as OSS. The funding Program(s) may provide blanket approval for all software developed with funding from that Program. However, OSS release for any one such software shall be subject to approval by all other funding Programs which provide a substantial portion of the funds for the software, if any. If approval from the funding Program(s) is not practicable, DOE Patent Counsel may provide approval instead. For software jointly developed under a CRADA or User Facility, authorization from the CRADA Participant(s) or User Facility User(s), as applicable, shall be additionally obtained for OSS release.

(ii) If the software is developed with funding from a federal government agency or agencies other than DOE, then authorization from all the funding source(s) shall be obtained for OSS release, if practicable.

Such federal government agency(ies) may provide blanket approval for all software developed with funding from that agency. However, OSS release of any one of such software shall be subject to approval by all other funding sources for the software, if any. If majority approval from such federal government agency(s) is not practicable, DOE Patent Counsel may provide approval instead.

(2) Assert Copyright in the OSS. Once the Contractor has obtained Funding Source approval in accordance with subparagraph (1) of this section, copyright in the software to be distributed as OSS, may be asserted by the Contractor, or, for OSS developed under a CRADA or User Facility, either by the Contractor, CRADA Participant, or User Facility User, as applicable, which precludes marking such OSS as Protected Information.

(3) Form DOE F 241.4 for OSS to ESTSC. The Contractor must submit the form DOE F 241.4 (or the current form as may be required by DOE) to DOE's Energy Science and Technology Software Center (ESTSC) at the Office of Scientific and Technical Information (OSTI).The Contractor shall provide the unique URL on the form for ESTSC to distribute.

(4) OSS Record. The Contractor must maintain a record, available for inspection by DOE, of software distributed as OSS. The record shall contain the following information: (i) name of the computer software (or other identifier), (ii) an abstract with description or purpose of the software, (iii) evidence of the funding Program's or source's approval, (iv) the planned or actual OSS location on the Contractor's webpage or other publicly available location (see subparagraph (5) below); (v) any names, logos or other identifying marks used in connection with the OSS, whether or not registered; (vi) the type of OSS license used; and (vii) release version of the software for OSS containing derivative works. Upon request of Patent Counsel, the Contractor shall periodically provide Patent Counsel a copy of the record.

(5) Provide Public Access to the OSS. The Contractor shall ensure that the OSS is publicly accessible as an open source via the Contractor's website, Open Source Bulletin Boards operated by third parties, DOE, or other industry standard means.

(6) Select an OSS License. Each OSS will be distributed pursuant to an OSS license. The Contractor may choose among industry standard OSS licenses or create its own set of Contractor standard licenses. To assist the Contractor, the DOE Assistant General Counsel for Technology Transfer and Intellectual Property may periodically issue guidance on OSS licenses. Each Contractor created OSS license, must contain, at a minimum, the following provisions:

(i) A disclaimer or equivalent that disclaims the Government's and Contractor's liability for licensees' and third parties' use of the software; and

(ii) A grant of permission for licensee to distribute OSS containing the licensee's derivative works subject to trademark restrictions (see subparagraph (10) below). This provision might allow the licensee and third parties to commercialize their derivative works or might request that the licensee's derivative works be forwarded to the Contractor for incorporation into future OSS versions.

(7) Collection of administrative costs is permissible. However, the Contractor may not collect a royalty or other fee in excess of a good faith amount for cost recovery from any licensee for the Contractor's OSS.

(8) Relationship to Other Required Clauses in the Contract. OSS distributed in accordance with this section shall not be subject to the requirements relating to indemnification of the Contractor or Federal Government, U.S. Competitiveness and U.S. Preference as set forth in paragraphs (g) and (h) of the clause within this contract entitled Technology Transfer Mission (DEAR 970.5227-3). The requirement for Contractor to request permission to assert copyright for the purpose of engaging in licensing software for royalties as set forth elsewhere in this clause is not modified by this section.

(9) Performance of Periodic Export Control Reviews by the Contractor. The Contractor is required to follow its Export Control review procedures before designating any software as OSS. If the Contractor is integrating the original OSS with other copyrightable works created by the Contractor or third parties, the Contractor may need to perform periodic export control reviews of the derivative versions.

(10) Determine if Trademark Protection for the OSS is Appropriate. DOE Programs and Contractors have established trademarks on some of their computer software. Therefore, the Contractor should determine whether the OSS is already protected by use of an existing trademark. If the OSS is not so protected, then the Program or the Contractor may want to seek trademark protection. If the OSS is protected by a trademark, the OSS license should state that the derivative works of the licensee or other third party may not be distributed using the proprietary trademark without appropriate prior approval.

(11) Government License. For all OSS, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive,

irrevocable worldwide license in data copyrighted in accordance with paragraph (f)(2) of this clause to reproduce, distribute copies to the public, prepare derivative works, perform publicly and display publicly, and to permit others to do so.

(12) Availability of Original OSS. The object code and source code of the original OSS developed by the Contractor shall be available to any third party who requests such from the Contractor for so long as such OSS is publicly available. If the Contractor ceases to make the software publicly available, then the Contractor shall submit to ESTSC the object code and source code of the latest version of the OSS developed by the Contractor in addition to a revised DOE F 241.4 form (which includes an abstract) and the Contractor shall direct any inquiries from third parties seeking to obtain the original OSS to ESTSC.

(g) *Subcontracting.*

(1) Unless otherwise directed by the contracting officer, the Contractor agrees to use in subcontracts in which technical data or computer software is expected to be produced or in subcontracts for supplies that contain a requirement for production or delivery of data in accordance with the policy and procedures of 48 CFR Subpart 27.4 as supplemented by 48 CFR 927.401 through 927.409, the clause entitled, "Rights in Data -- General" at 48 CFR 52.227-14 modified in accordance with 927.409(a) and including Alternate V. Alternates II through IV of that clause may be included as appropriate with the prior approval of DOE Patent Counsel, and the Contractor shall not acquire rights in a subcontractor's limited rights data or restricted computer software, except through the use of Alternates II or III, respectively, without the prior approval of DOE Patent Counsel. The clause at 48 CFR 52.227-16, Additional Data Requirements, shall be included in subcontracts in accordance with 48 CFR 927.409(h). The Contractor shall use instead the Rights in Data -- Facilities clause at 48 CFR 970.5227-1 in subcontracts, including subcontracts for related support services, involving the design or operation of any plants or facilities or specially designed equipment for such plants or facilities that are managed or operated under its contract with DOE.

(2) It is the responsibility of the Contractor to obtain from its subcontractors technical data and computer software and rights therein, on behalf of the Government, necessary to fulfill the Contractor's obligations to the Government with respect to such data. In the event of refusal by a subcontractor to accept a clause affording the Government such rights, the Contractor shall:

(i) Promptly submit written notice to the contracting officer setting forth

reasons or the subcontractor's refusal and other pertinent information which may expedite disposition of the matter, and

(ii) Not proceed with the subcontract without the written authorization of the contracting officer.

(3) Neither the Contractor nor higher-tier subcontractors shall use their power to award subcontracts as economic leverage to acquire rights in a subcontractor's limited rights data and restricted computer software for their private use.

(h) *Rights in Limited Rights Data.* Except as may be otherwise specified in this Contract as data which are not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable nonexclusive, paid-up license by or for the Government, in any limited rights data of the Contractor specifically used in the performance of this Contract, provided, however, that to the extent that any limited rights data when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Limited Rights Notice" set forth below. All such limited rights data shall be marked with the following "Limited Rights Notice:"

Limited Rights Notice

These data contain "limited rights data," furnished under Contract No. with the United States Department of Energy which may be duplicated and used by the Government with the express limitations that the "limited rights data" may not be disclosed outside the Government or be used for purposes of manufacture without prior permission of the Contractor, except that further disclosure or use may be made solely for the following purposes:

(a) Use (except for manufacture) by support services contractors within the scope of their contracts;

(b) This "limited rights data" may be disclosed for evaluation purposes under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;

(c) This "limited rights data" may be disclosed to other contractors participating in the Government's program of which this Contract is a part for information or use (except for manufacture) in connection with the work performed under their contracts and under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;

(d) This "limited rights data" may be used by the Government or others on its behalf for emergency repair or overhaul work under the restriction that the "limited rights data" be retained in confidence and not be further disclosed; and

(e) Release to a foreign government, or instrumentality thereof, as the interests of the United States Government may require, for information or evaluation, or for emergency repair or overhaul work by such government.

This Notice shall be marked on any reproduction of this data in whole or in part.

(End of Notice)

(i) *Rights in Restricted Computer Software.*

(1) Except as may be otherwise specified in this Contract as data which are not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up, license by or for the Government, in any restricted computer software of the Contractor specifically used in the performance of this Contract; provided, however, that to the extent that any restricted computer software when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Restricted Rights Notice" set forth below. All such restricted computer software shall be marked with the following "Restricted Rights Notice:"

Restricted Rights Notice -- Long Form

(a) This computer software is submitted with restricted rights under Department of Energy Contract No. . It may not be used, reproduced, or disclosed by the Government except as provided in paragraph (b) of this notice.

(b) This computer software may be:

(1) Used or copied for use in or with the computer or computers for which it was acquired, including use at any Government installation to which such computer or computers may be transferred;

(2) Used, copied for use, in a backup or replacement computer if any computer for which it was acquired is inoperative or is replaced;

(3) Reproduced for safekeeping (archives) or backup purposes;

(4) Modified, adapted, or combined with other computer software, provided that only the portions of the derivative software consisting of the restricted computer software are to be made subject to the same restricted rights; and

(5) Disclosed to and reproduced for use by contractors under a service contract (of the type defined in 48 CFR 37.101) in accordance with subparagraphs (b)(1) through (4) of this Notice, provided the Government makes such disclosure or reproduction subject to these restricted rights.

(c) Notwithstanding the foregoing, if this computer software has been published under copyright, it is licensed to the Government, without disclosure prohibitions, with the rights set forth in the restricted rights notice above.

(d) This Notice shall be marked on any reproduction of this computer software, in whole or in part.

(End of Notice)

(2) Where it is impractical to include the Restricted Rights Notice on restricted computer software, the following short-form Notice may be used in lieu thereof:

Restricted Rights Notice -- Short Form

Use, reproduction, or disclosure is subject to restrictions set forth in the Long Form Notice of DOE Contract No. with (name of Contractor).

(End of Notice)

(3) If the software is embedded, or if it is commercially impractical to mark it with human readable text, then the symbol R and the clause date (mo/yr) in brackets or a box, a [R-mo/yr], may be used. This will be read to mean restricted computer software, subject to the rights of the Government as described in the Long Form Notice, in effect as of the date indicated next to the symbol. The symbol shall not be used to mark human readable material. In the event this Contract contains any variation to the rights in the Long Form Notice, then the contract number must also be cited.

(4) If restricted computer software is delivered with the copyright notice of 17 U.S.C. 401, the software will be presumed to be published copyrighted computer software licensed to the Government without disclosure

prohibitions and with unlimited rights, unless the Contractor includes the following statement with such copyright notice "Unpublished -- rights reserved under the Copyright Laws of the United States."

(j) *Relationship to Patents.* Nothing contained in this clause creates or is intended to imply a license to the Government in any patent or is intended to be construed as affecting the scope of any licenses or other rights otherwise granted to the Government under any patent.

**CLAUSE I.127 - DEAR 970.5227-3 TECHNOLOGY TRANSFER MISSION (DEVIATION -JULY 2006; ALTERNATE I)**

This clause has as its purpose implementation of the National Competitiveness Technology Transfer Act of 1989 (Sections 3131, 3132, 3133, and 3157 of Pub. L. 101-189 and as amended by Pub. L. 103-160, Sections 3134 and 3160). The Contractor shall conduct technology transfer activities with a purpose of providing benefit from Federal research to U.S. industrial competitiveness.

(a) *Authority.*

(1) In order to ensure the full use of the results of research and development efforts of, and the capabilities of, the Laboratory, technology transfer, including Cooperative Research and Development Agreements (CRADAs), is established as a mission of the Laboratory consistent with the policy, principles and purposes of Sections 11(a)(1) and 12(g) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a); Section 3132(b) of Pub. L. 101-189, Sections 3134 and 3160 of Pub. L. 103-160, and of Chapter 38 of the Patent Laws (35 U.S.C. 200 *et seq.*); Section 152 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2182); Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908); and Executive Order 12591 of April 10, 1987.

(2) In pursuing the technology transfer mission, the Contractor is authorized to conduct activities including but not limited to: identifying and protecting Intellectual Property made, created or acquired at or by the Laboratory; negotiating licensing agreements and assignments for Intellectual Property made, created or acquired at or by the Laboratory that the Contractor controls or owns; bailments; negotiating all aspects of and entering into CRADAs; providing technical consulting and personnel exchanges; conducting science education activities and reimbursable Work for Others (WFO); providing information exchanges; and making available laboratory or weapon production user facilities. It is fully expected that the Contractor

shall use all of the mechanisms available to it to accomplish this technology transfer mission, including, but not limited to, CRADAs, user facilities, WFO, science education activities, consulting, personnel exchanges, assignments, and licensing in accordance with this clause.

(b) *Definitions.*

(1) Contractor's Laboratory Director means the individual who has supervision over all or substantially all of the Contractor's operations at the Laboratory.

(2) Intellectual Property means patents, trademarks, copyrights, mask works, protected CRADA information, and other forms of comparable property rights protected by Federal Law and other foreign counterparts.

(3) Cooperative Research and Development Agreement (CRADA) means any agreement entered into between the Contractor as operator of the Laboratory, and one or more parties including at least one non-Federal party under which the Government, through its laboratory, provides personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the Laboratory; except that such term does not include a procurement contract, grant, or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of Title 31 of the United States Code.

(4) Joint Work Statement (JWS) means a proposal for a CRADA prepared by the Contractor, signed by the Contractor's Laboratory Director or designee which describes the following:

(i) Purpose;

(ii) Scope of Work which delineates the rights and responsibilities of the Government, the Contractor and Third Parties, one of which must be a non-Federal party;

(iii) Schedule for the work; and

(iv) Cost and resource contributions of the parties associated with the work and the schedule.

(5) Assignment means any agreement by which the Contractor transfers

ownership of Laboratory Intellectual Property, subject to the Government's retained rights.

(6) Laboratory Biological Materials means biological materials capable of replication or reproduction, such as plasmids, deoxyribonucleic acid molecules, ribonucleic acid molecules, living organisms of any sort and their progeny, including viruses, prokaryote and eukaryote cell lines, transgenic plants and animals, and any derivatives or modifications thereof or products produced through their use or associated biological products, made under this contract by Laboratory employees or through the use of Laboratory research facilities.

(7) Laboratory Tangible Research Product means tangible material results of research which

(i) are provided to permit replication, reproduction, evaluation or confirmation of the research effort, or to evaluate its potential commercial utility;

(ii) are not materials generally commercially available; and

(iii) were made under this contract by Laboratory employees or through the use of Laboratory research facilities.

(8) Bailment means any agreement in which the Contractor permits the commercial or non-commercial transfer of custody, access or use of Laboratory Biological Materials or Laboratory Tangible Research Product for a specified purpose of technology transfer or research and development, including without limitation evaluation, and without transferring ownership to the bailee.

(9) Privately funded technology transfer means the prosecuting, maintaining, licensing, and marketing of inventions which are not owned by the Government (and not related to CRADAs) when such activities are conducted entirely without the use of Government funds.

(c) *Allowable Costs.*

(1) The Contractor shall establish and carry out its technology transfer efforts through appropriate organizational elements consistent with the requirements for an Office of Research and Technology Applications (ORTA) pursuant to paragraphs (b) and (c) of Section 11 of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710). The costs associated with the conduct of technology transfer through the ORTA including activities associated with obtaining, maintaining, licensing,

and assigning Intellectual Property rights, increasing the potential for the transfer of technology, and the widespread notice of technology transfer opportunities, shall be deemed allowable provided that such costs meet the other requirements of the allowable costs provisions of this Contract. In addition to any separately designated funds, these costs in any fiscal year shall not exceed an amount equal to 0.5 percent of the operating funds included in the Federal research and development budget (including Work For Others) of the Laboratory for that fiscal year without written approval of the contracting officer.

(2) The Contractor's participation in litigation to enforce or defend Intellectual Property claims incurred in its technology transfer efforts shall be as provided in the clause entitled "Insurance -- Litigation and Claims" of this contract.

(d) *Conflicts of Interest -- Technology Transfer.* The Contractor shall have implementing procedures that seek to avoid employee and organizational conflicts of interest, or the appearance of conflicts of interest, in the conduct of its technology transfer activities. These procedures shall apply to other persons participating in Laboratory research or related technology transfer activities. Such implementing procedures shall be provided to the contracting officer for review and approval within sixty (60) days after execution of this contract. The contracting officer shall have thirty (30) days thereafter to approve or require specific changes to such procedures. Such implementing procedures shall include procedures to:

(1) Inform employees of and require conformance with standards of conduct and integrity in connection with research involving nonfederal sponsors and for CRADA activity in accordance with the provisions of paragraph (n)(5) of this clause;

(2) Review and approve employee activities so as to avoid conflicts of interest arising from commercial utilization activities relating to Contractor-developed Intellectual Property;

(3) Conduct work performed using royalties so as to avoid interference with or adverse effects on ongoing DOE projects and programs;

(4) Conduct activities relating to commercial utilization of Contractor-developed Intellectual Property so as to avoid interference with or adverse effects on user facility or WFO activities of the Contractor;

(5) Conduct DOE-funded projects and programs so as to avoid the appearance of conflicts of interest or actual conflicts of interest with non-Government funded work;

(6) Notify the contracting officer with respect to any new work to be performed or proposed to be performed under the Contract for DOE or other Federal agencies where the new work or proposal involves Intellectual Property in which the Contractor has obtained or intends to request or elect title;

(7) Except as provided elsewhere in this Contract, obtain the approval of the contracting officer for any licensing of or assignment of title to Intellectual Property rights by the Contractor to any business or corporate affiliate of the Contractor;

(8) Obtain the approval of the contracting officer prior to any assignment, exclusive licensing, or option for exclusive licensing, of Intellectual Property to any individual who has been a Laboratory employee within the previous two years or to the company in which the individual is a principal;

(9) Notify non-Federal sponsors of WFO activities, or non-Federal users of user facilities, of any relevant Intellectual Property interest of the Contractor prior to execution of WFOs or user agreements; and

(10) Notify DOE prior to the Contractor's evaluating a technical proposal for funding by a third party or a DOE Program, when the subject matter of the proposal involves an elected or waived subject invention under this contract or one in which the Contractor intends to elect to retain title under this contract.

(e) *Fairness of Opportunity.* In conducting its technology transfer activities, the Contractor shall prepare procedures and take all reasonable measures to ensure widespread notice of availability of technologies suited for transfer and opportunities for exclusive licensing and joint research arrangements. The requirement to widely disseminate the availability of technology transfer opportunities does not apply to a specific application originated outside of the Laboratory and by entities other than the Contractor.

(f) *U.S. Industrial Competitiveness for Licensing and Assignments of Intellectual Property.*

(1) In the interest of enhancing U.S. Industrial Competitiveness in its licensing and assignments of Intellectual Property, the Contractor shall give preference in such a manner as to enhance the accrual of economic and technological benefits to the U.S. domestic economy. The Contractor shall consider the following factors in all of its decisions involving licensing and assignment of Laboratory intellectual property where the Laboratory obtains rights during the course of the Contractor's operation of the Laboratory under this contract:

(i) whether any resulting design and development will be performed in the United States and whether resulting products, embodying parts, including components thereof, will be substantially manufactured in the United States; or

(ii) (A) whether a proposed licensee or an assignee has a business unit located in the United States and whether significant economic and technical benefits will flow to the United States as a result of the license or assignment agreement;

(B) in licensing or assigning any entity subject to the control of a foreign company or government, whether such foreign government permits United States agencies, organizations or other persons to enter into cooperative research and development agreements and licensing agreements, and has policies to protect United States Intellectual Property rights; and

(C) if the proposed licensee, assignee, or parent of either type of entity is subject to the control of a foreign company or government, the Contractor, with the assistance of the Contracting Officer, in considering the factors set forth in paragraph (B) herein, may rely upon the following information; (1) U.S. Trade Representative Inventory of Foreign Trade Barriers, (2) U.S. Trade Representative Special 301 Report, and, (3) such other relevant information available to the contracting officer. The Contractor should review the U.S. Trade Representative web site at: <http://www.ustr.gov> for the most current versions of these reports and other relevant information. The Contractor is encouraged to utilize other available resources, as necessary, to allow for a complete and informed decision.

(2) If the Contractor determines that neither of the conditions in paragraphs (f)(1)(i) or (ii) of this clause is likely to be fulfilled, the Contractor, prior to entering into such an agreement, must obtain the approval of the contracting officer. The contracting officer shall act on any such requests for approval within thirty (30) days.

(3) The Contractor agrees to be bound by the provisions of 35 U.S.C. 204 (Preference for United States industry).

(g) *Indemnity -- Product Liability.* In entering into written technology transfer

agreements, including but not limited to, research and development agreements, licenses, assignments and CRADAs, the Contractor agrees to include in such agreements a requirement that the U.S. Government and the Contractor, except for any negligent acts or omissions of the Contractor, be indemnified for all damages, costs, and expenses, including attorneys' fees, arising from personal injury or property damage occurring as a result of the making, using or selling of a product, process or service by or on behalf of the Participant, its assignees or licensees which was derived from the work performed under the agreement. The Contractor shall identify and obtain the approval of the contracting officer for any proposed exceptions to this requirement such as where State or local law expressly prohibit the Participant from providing indemnification or where the research results will be placed in the public domain.

(h) *Disposition of Income.*

(1) Royalties or other income earned or retained by the Contractor as a result of performance of authorized technology transfer activities herein shall be used by the Contractor for scientific research, development, technology transfer, and education at the Laboratory, consistent with the research and development mission and objectives of the Laboratory and subject to Section 12(b)(5) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(b)(5)) and Chapter 38 of the Patent Laws (35 U.S.C. 200 et seq.) as amended through the effective date of this contract award or modification. If the net amounts of such royalties and income received from patent licensing after payment of patenting costs, licensing costs, payments to inventors and other expenses incidental to the administration of Subject Inventions during any fiscal year exceed 5 percent of the Laboratory's budget for that fiscal year, 75 percent of such excess amounts shall be paid to the Treasury of the United States, and the remaining amount of such excess shall be used by the Contractor for the purposes as described above in this paragraph. Any inventions arising out of such scientific research and development activities shall be deemed to be Subject Inventions under the Contract.

(2) The Contractor shall include as a part of its annual Laboratory Institutional Plan or other such annual document a plan setting out those uses to which royalties and other income received as a result of performance of authorized technology transfer activities herein will be applied at the Laboratory, and at the end of the year, provide a separate accounting for how the funds were actually used. Under no circumstances shall these royalties and income be used for an illegal augmentation of funds furnished by the U.S. Government.

(3) The Contractor shall establish subject to the approval of the contracting officer a policy for making awards or sharing of royalties with Contractor

employees, other coinventors and coauthors, including Federal employee coinventors when deemed appropriate by the contracting officer.

(i) *Transfer to Successor Contractor.* In the event of termination or upon the expiration of this Contract, any unexpended balance of income received for use at the Laboratory shall be transferred, at the contracting officer's request, to a successor contractor, or in the absence of a successor contractor, to such other entity as designated by the contracting officer. The Contractor shall transfer title, as one package, to the extent the Contractor retains title, in all patents and patent applications, licenses, accounts containing royalty revenues from such license agreements, including equity positions in third party entities, and other Intellectual Property rights which arose at the Laboratory, to the successor contractor or to the Government as directed by the contracting officer.

(j) *Technology Transfer Affecting the National Security.* (1) The Contractor shall notify and obtain the approval of the contracting officer, prior to entering into any technology transfer arrangement, when such technology or any part of such technology is classified or sensitive under Section 148 of the Atomic Energy Act (42 U.S.C. 2168). Such notification shall include sufficient information to enable DOE to determine the extent that commercialization of such technology would enhance or diminish security interests of the United States, or diminish communications within DOE's nuclear weapon production complex. DOE shall use its best efforts to complete its determination within sixty (60) days of the Contractor's notification, and provision of any supporting information, and DOE shall promptly notify the Contractor as to whether the technology is transferable.

(2) The Contractor shall include in all of its technology transfer agreements with third parties, including, but not limited to, CRADAs, licensing agreements and assignments, notice to such third parties that the export of goods and/or Technical Data from the United States may require some form of export control license or other authority from the U.S. Government and that failure to obtain such export control license may result in criminal liability under U.S. laws.

(3) For other than fundamental research as defined in National Security Decision Directive 189, the Contractor is responsible to conduct internal export control reviews and assure that technology is transferred in accordance with applicable law.

(k) *Records.* The Contractor shall maintain records of its technology transfer activities in a manner and to the extent satisfactory to the DOE and specifically including, but not limited to, the licensing agreements, assignments and the records required to implement the requirements of paragraphs (e), (f), and (h) of this clause and shall provide reports to the contracting officer to enable DOE to maintain the reporting requirements of Section 12(c)(6) of the Stevenson-Wydler

Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(c)(6)). Such reports shall be made annually in a format to be agreed upon between the Contractor and DOE and in such a format which will serve to adequately inform DOE of the Contractor's technology transfer activities while protecting any data not subject to disclosure under the Rights in Technical Data clause and paragraph (n) of this clause. Such records shall be made available in accordance with the clauses of this Contract pertaining to inspection, audit and examination of records.

(l) *Reports to Congress.* To facilitate DOE's reporting to Congress, the Contractor is required to submit annually to DOE a technology transfer plan for conducting its technology transfer function for the upcoming year, including plans for securing Intellectual Property rights in Laboratory innovations with commercial promise and plans for managing such innovations so as to benefit the competitiveness of United States industry. This plan shall be provided to the contracting officer on or before October 1st of each year.

(m) *Oversight and Appraisal.* The Contractor is responsible for developing and implementing effective internal controls for all technology transfer activities consistent with the audit and record requirements of this Contract. Laboratory Contractor performance in implementing the technology transfer mission and the effectiveness of the Contractor's procedures will be evaluated by the contracting officer as part of the annual appraisal process, with input from the cognizant Secretarial Officer or program office.

(n) *Technology Transfer through Cooperative Research and Development Agreements.* Upon approval of the contracting officer and as provided in a DOE approved Joint Work Statement (JWS), the Laboratory Director, or designee, may enter into CRADAs on behalf of the DOE subject to the requirements set forth in this paragraph.

(1) Rev*iew and Approval of CRADAs.*

(i) Except as otherwise directed in writing by the contracting officer, each JWS shall be submitted to the contracting officer for approval. The Contractor's Laboratory Director or designee shall provide a program mission impact statement and shall include an impact statement regarding related Intellectual Property rights known by the Contractor to be owned by the Government to assist the contracting officer in the approval determination.

(ii) The Contractor shall also include (specific to the proposed CRADA), a statement of compliance with the Fairness of Opportunity requirements of paragraph (e) of this clause.

(iii) Within thirty (30) days after submission of a JWS or proposed CRADA, the contracting officer shall approve, disapprove or request modification to the JWS or CRADA. The contracting officer shall provide a written explanation to the Contractor's Laboratory Director or designee of any disapproval or requirement for modification of a JWS or proposed CRADA.

(iv) Except as otherwise directed in writing by the contracting officer, the Contractor shall not enter into, or begin work under, a CRADA until approval of the CRADA has been granted by the contracting officer. The Contractor may submit its proposed CRADA to the contracting officer at the time of submitting its proposed JWS or any time thereafter.

(2) *Selection of Participants.* The Contractor's Laboratory Director or designee in deciding what CRADA to enter into shall:

(i) Give special consideration to small business firms, and consortia involving small business firms;

(ii) Give preference to business units located in the United States which agree that products or processes embodying Intellectual Property will be substantially manufactured or practiced in the United States and, in the case of any industrial organization or other person subject to the control of a foreign company or government, take into consideration whether or not such foreign government permits United States agencies, organizations, or other persons to enter into cooperative research and development agreements and licensing agreements;

(iii) Provide Fairness of Opportunity in accordance with the requirements of paragraph (e) of this clause; and

(iv) Give consideration to the Conflicts of Interest requirements of paragraph (d) of this clause.

(3) *Withholding of Data.*

(i) Data that is first produced as a result of research and development activities conducted under a CRADA and that would be a trade secret or commercial or financial data that would be privileged or confidential, if such data had been obtained from a non-Federal third party, may be protected from disclosure under the Freedom of Information Act as provided in the Stevenson-Wydler Technology

Innovation Act of 1980, as amended (15 U.S.C. 3710a(c)(7)) for a period as agreed in the CRADA of up to five (5)years from the time the data is first produced. The DOE shall cooperate with the Contractor in protecting such data.

(ii) Unless otherwise expressly approved by the contracting officer in advance for a specific CRADA, the Contractor agrees, at the request of the contracting officer, to transmit such data to other DOE facilities for use by DOE or its Contractors by or on behalf of the Government. When data protected pursuant to paragraph (n)(3)(i) of this clause is so transferred, the Contractor shall clearly mark the data with a legend setting out the restrictions against private use and further dissemination, along with the expiration date of such restrictions.

(iii) In addition to its authority to license Intellectual Property, the Contractor may enter into licensing agreements with third parties for data developed by the Contractor under a CRADA subject to other provisions of this Contract. However, the Contractor shall neither use the protection against dissemination nor the licensing of data as an alternative to the submittal of invention disclosures which include data protected pursuant to paragraph (n)(3)(i) of this clause.

(4) *Work for Others and User Facility Programs.*

(i) Work for Others (WFO) and User Facility Agreements (UFAs) are not CRADAs and will be available for use by the Contractor in addition to CRADAs for achieving utilization of employee expertise and unique facilities for maximizing technology transfer. The Contractor agrees to inform prospective CRADA participants, which are intending to substantially pay full cost recovery for the effort under a proposed CRADA, of the availability of alternative forms of agreements, i.e., WFO and UFA, and of the Class Patent Waiver provisions associated therewith.

(ii) Where the Contractor believes that the transfer of technology to the U.S. domestic economy will benefit from, or other equity considerations dictate, an arrangement other than the Class Waiver of patent rights to the sponsor in WFO and UFAs, a request may be made to the contracting officer for an exception to the Class Waivers.

(iii) Rights to inventions made under agreements other than funding agreements with third parties shall be governed by the appropriate provisions incorporated, with DOE approval, in such agreements,

and the provisions in such agreements take precedence over any disposition of rights contained in this Contract. Disposition of rights under any such agreement shall be in accordance with any DOE class waiver (including Work for Others and User Class Waivers) or individually negotiated waiver which applies to the agreement.

(5) *Conflicts of Interest.*

(i) Except as provided in paragraph (n)(5)(iii) of this clause, the Contractor shall assure that no employee of the Contractor shall have a substantial role (including an advisory role) in the preparation, negotiation, or approval of a CRADA, if, to such employee's knowledge:

(A) Such employee, or the spouse, child, parent, sibling, or partner of such employee, or an organization (other than the Contractor) in which such employee serves as an officer, director, trustee, partner, or employee –

(1) holds financial interest in any entity, other than the Contractor, that has a substantial interest in the preparation, negotiation, or approval of the CRADA;

(2) receives a gift or gratuity from any entity, other than the Contractor, that has a substantial interest in the preparation, negotiation, or approval of the CRADA; or

(B) A financial interest in any entity, other than the Contractor, that has a substantial interest in the preparation, negotiation, or approval of the CRADA, is held by any person or organization with whom such employee is negotiating or has any arrangement concerning prospective employment.

(ii) The Contractor shall require that each employee of the Contractor who has a substantial role (including an advisory role) in the preparation, negotiation, or approval of a CRADA certify through the Contractor to the contracting officer that the circumstances described in paragraph (n)(5)(i) of this clause do not apply to that employee.

(iii) The requirements of paragraphs (n)(5)(i) and (n)(5)(ii) of this clause shall not apply in a case where the contracting officer is advised by the Contractor in advance of the participation of an employee described in those paragraphs in the preparation, negotiation or approval of a CRADA of the nature of and extent of any financial

interest described in paragraph (n)(5)(i) of this clause, and the contracting officer determines that such financial interest is not so substantial as to be considered likely to affect the integrity of the Contractor employee's participation in the process of preparing, negotiating, or approving the CRADA.

(o) *Technology Transfer in Other Cost-Sharing Agreements.* In conducting research and development activities in cost-shared agreements not covered by paragraph (n) of this clause, the Contractor, with prior written permission of the contracting officer, may provide for the withholding of data produced thereunder in accordance with the applicable provisions of paragraph (n)(3) of this clause.

(p) *Technology Partnership Ombudsman.*

(1) The Contractor agrees to establish a position to be known as "Technology Partnership Ombudsman," to help resolve complaints from outside organizations regarding the policies and actions of the contractor with respect to technology partnerships (including CRADAs), patents owned by the contractor for inventions made at the laboratory, and technology licensing.

(2) The Ombudsman shall be a senior official of the Contactor's laboratory staff, who is not involved in day-to-day technology partnerships, patents or technology licensing, or, if appointed from outside the laboratory or facility, shall function as such senior official.

(3) The duties of the Technology Partnership Ombudsman shall include:

(i) Serving as the focal point for assisting the public and industry in resolving complaints and disputes with the laboratory or facility regarding technology partnerships, patents, and technology licensing;

(ii) Promoting the use of collaborative alternative dispute resolution techniques such as mediation to facilitate the speedy and low cost resolution of complaints and disputes, when appropriate; and

(iii) Submitting a quarterly report, in a format provided by DOE, to the Secretary of Energy, the Administrator for Nuclear Security, the Director of the DOE Office of Dispute Resolution, and the Contracting Officer concerning the number and nature of complaints and disputes raised, along with the Ombudsman's assessment of their resolution, consistent with the protection of confidential and sensitive information.

(q) *Inapplicability of Provisions to Privately Funded Technology Transfer Activities.* Nothing in paragraphs (c) Allowable Costs, (e) Fairness of Opportunity, (f) U.S. Industrial Competitiveness, (g) Indemnity -- Product Liability, (h) Disposition of Income, and (i) Transfer to Successor Contractor of this clause are intended to apply to the contractor's privately funded technology transfer activities if such privately funded activities are addressed elsewhere in the contract.

## CLAUSE I.128 - DEAR 970.5227-4 AUTHORIZATION AND CONSENT (AUG 2002)

(a) The Government authorizes and consents to all use and manufacture of any invention described in and covered by a United States patent in the performance of this contract or any subcontract at any tier.

(b) If the Contractor is sued for copyright infringement or anticipates the filing of such a lawsuit, the Contractor may request authorization and consent to copy a copyrighted work from the contracting officer. Programmatic necessity is a major consideration for DOE in determining whether to grant such request.

(c) (1) The Contractor agrees to include, and require inclusion of, the Authorization and Consent clause at 52.227-1, without Alternate 1, but suitably modified to identify the parties, in all subcontracts expected to exceed $100,000 at any tier for supplies or services, including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services.

(2) The Contractor agrees to include, and require inclusion of, paragraph (a) of this Authorization and Consent clause, suitably modified to identify the parties, in all subcontracts at any tier for research and development activities expected to exceed $100,000.

(3) Omission of an authorization and consent clause from any subcontract, including those valued less than $100,000 does not affect this authorization and consent.

## CLAUSE I.129 - DEAR 970.5227-5 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 2002)

(a) The Contractor shall report to the Contracting Officer promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) If any person files a claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this

contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Except where the Contractor has agreed to indemnify the Government, the Contractor shall furnish such evidence and information at the expense of the Government.

(c) The Contractor agrees to include, and require inclusion of, this clause suitably modified to identify the parties, in all subcontracts at any tier expected to exceed $100,000.

## CLAUSE I.130 - DEAR 970.5227-6 PATENT INDEMNITY - SUBCONTRACTS (DEC 2000)

Except as otherwise authorized by the Contracting Officer, the Contractor shall obtain indemnification of the Government and its officers, agents, and employees against liability, including costs, for infringement of any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a secrecy order by the Government) from Contractor's subcontractors for any contract work subcontracted in accordance with FAR 48 CFR 52.227-3.

## CLAUSE I.131 - DEAR 970.5227-8 REFUND OF ROYALTIES (AUG 2002)

(a) During performance of this Contract, if any royalties are proposed to be charged to the Government as costs under this Contract, the Contractor agrees to submit for approval of the Contracting Officer, prior to the execution of any license, the following information relating to each separate item of royalty:

(1) Name and address of licensor;

(2) Patent numbers, patent application serial numbers, or other basis on which the royalty is payable;

(3) Brief description, including any part or model numbers of each contract item or component on which the royalty is payable;

(4) Percentage or dollar rate of royalty per unit;

(5) Unit price of contract item;

(6) Number of units;

(7) Total dollar amount of royalties; and

(8) A copy of the proposed license agreement.

(b) If specifically requested by the Contracting Officer, the Contractor shall furnish a copy of any license agreement entered into prior to the effective date of this clause and an identification of applicable claims of specific patents or other basis upon which royalties are payable.

(c) The term “royalties” as used in this clause refers to any costs or charges in the nature of royalties, license fees, patent or license amortization costs, or the like, for the use of or for rights in patents and patent applications that are used in the performance of this contract or any subcontract hereunder.

(d) The Contractor shall furnish to the Contracting Officer, annually upon request, a statement of royalties paid or required to be paid in connection with performing this Contract and subcontracts hereunder.

(e) For royalty payments under licenses entered into after the effective date of this Contract, costs incurred for royalties proposed under this paragraph shall be allowable only to the extent that such royalties are approved by the Contracting Officer. If the Contracting Officer determines that existing or proposed royalty payments are inappropriate, any payments subsequent to such determination shall be allowable only to the extent approved by the Contracting Officer.

(f) Regardless of prior DOE approval of any individual payments or royalties, DOE may contest at any time the enforceability, validity, scope of, or title to a patent for which Contractor makes a royalty or other payment.

(g) If at any time within 3 years after final payment under this contract, the Contractor for any reason is relieved in whole or in part from the payment of any royalties to which this clause applies, the Contractor shall promptly notify the Contracting Officer of that fact and shall promptly reimburse the Government for any refunds received or royalties paid after having received notice of such relief.

(h) The Contractor agrees to include, and require inclusion of, this clause, including this paragraph (h), suitably modified to identify the parties in any subcontract at any tier in which the amount of royalties reported during negotiation of the subcontract exceeds $250.

**CLAUSE I.132 - DEAR 970.5227-10 PATENT RIGHTS - MANAGEMENT AND OPERATING CONTRACTS, NONPROFIT ORGANIZATION OR SMALL BUSINESS FIRM CONTRACTOR (AUG 2002)**

(a) DEFINITIONS.

(1) *DOE licensing regulations* means the Department of Energy patent licensing regulations at 10 CFR Part 781.

(2) *Exceptional circumstance subject invention* means any subject invention in a technical field or related to a task determined by the Department of Energy to be subject to an exceptional circumstance under 35 U.S.C. 202(a)(ii) and in accordance with 37 CFR Part 401.3(e).

(3) *Invention* means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321 *et seq*.).

(4) *Made* when used in relation to any invention means the conception or first actual reduction to practice of such invention.

(5) *Nonprofit organization* means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

(6) *Patent Counsel* means the Department of Energy (DOE) Patent Counsel assisting the DOE contracting activity.

(7) *Practical application* means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

(8) *Small business firm* means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, are used.

(9) *Subject Invention* means any invention of the contractor conceived or first actually reduced to practice in the performance of work under this contract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) shall also occur during the period of contract performance.

(b) ALLOCATION OF PRINCIPAL RIGHTS.

(1) *Retention of title by the Contractor*. Except for exceptional circumstance subject inventions, the contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the Contractor retains title, the Federal government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

(2) *Exceptional circumstance subject inventions.* Except to the extent that rights are retained by the Contractor in a determination of exceptional circumstances or granted to a contractor through a determination of greater rights in accordance with subparagraph (b)(4) of this clause, the Contractor does not have a right to retain title to any exceptional circumstance subject inventions and agrees to assign to the Government the entire right, title, and interest, throughout the world, in and to any exceptional circumstance subject inventions.

(i) Inventions within or relating to the following fields of technology are exceptional circumstance subject inventions:

(A) uranium enrichment technology;

(B) storage and disposal of civilian high-level nuclear waste and spent fuel technology; and

(C) national security technologies classified or sensitive under Section 148 of the Atomic Energy Act (42 U.S.C. 2168).

(ii) Inventions made under any agreement, contract or subcontract related to the following are exceptional circumstance subject inventions:

(A) DOE Steel Initiative and Metals Initiative;

(B) U.S. Advanced Battery Consortium; and

(C) any funding agreement which is funded in part by the Electric Power Research Institute (EPRI) or the Gas Research Institute (GRI).

(iii) DOE reserves the right to unilaterally amend this contract to modify, by deletion or insertion, technical fields, tasks, or other classifications for the purpose of determining DOE exceptional circumstance subject inventions.

(3) *Treaties and international agreements.* Any rights acquired by the Contractor in subject inventions are subject to any disposition of right, title, or interest in or to subject inventions provided for in treaties or international agreements identified at Appendix J to this contract. DOE reserves the right to unilaterally amend this contract to identify specific treaties or international agreements entered into or to be entered into by the Government after the effective date of this contract and to effectuate those license or other rights which are necessary for the Government to meet its obligations to foreign governments, their nationals and international organizations under such treaties or international agreements with respect to subject inventions made after the date of the amendment.

(4) *Contractor request for greater rights in exceptional circumstance subject inventions.* The Contractor may request rights greater than allowed by the exceptional circumstance determination in an exceptional circumstance subject invention by submitting such a request in writing to Patent Counsel at the time the exceptional circumstance subject invention is disclosed to DOE or within eight (8) months after conception or first actual reduction to practice of the exceptional circumstance subject invention, whichever occurs first, unless a longer period is authorized in writing by the Patent Counsel for good cause shown in writing by the Contractor. DOE may, in its discretion, grant or refuse to grant such a request by the Contractor.

(5) *Contractor employee-inventor rights*. If the Contractor does not elect to retain title to a subject invention or does not request greater rights in an exceptional circumstance subject invention, a Contractor employee-inventor, after consultation with the Contractor and with written authorization from the Contractor in accordance with 10 CFR 784.9(b)(4), may request greater rights, including title, in the subject invention or the exceptional circumstance invention from DOE, and DOE may, in its discretion, grant or refuse to grant such a request by the Contractor employee-inventor.

(6) *Government assignment of rights in Government employees' subject inventions.* If a Government employee is a joint inventor of a subject

invention or of an exceptional circumstance subject invention to which the Contractor has rights, the Government may assign or refuse to assign to the Contractor any rights in the subject invention or exceptional circumstance subject invention acquired by the Government from the Government employee, in accordance with 48 CFR 27.304-1(d). The rights assigned to the Contractor are subject to any provision of this clause that is applicable to subject inventions in which the Contractor retains title, including reservation by the Government of a nonexclusive, nontransferable, irrevocable, paid-up license, except that the Contractor shall file its initial patent application claiming the subject invention or exceptional circumstance invention within one (1) year after the assignment of such rights. The Contractor shall share royalties collected for the manufacture, use or sale of the subject invention with the Government employee.

(c) SUBJECT INVENTION DISCLOSURE, ELECTION OF TITLE AND FILING OF PATENT APPLICATION BY CONTRACTOR.

(1) *Subject invention disclosure*. The contractor will disclose each subject invention to the Patent Counsel within two months after the inventor discloses it in writing to contractor personnel responsible for patent matters. The disclosure to the agency shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s) and all sources of funding by B&R code for the invention. It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. The disclosure shall include a written statement as to whether the invention falls within an exceptional circumstance field. DOE will make a determination and advise the Contractor within 30 days of receipt of an invention disclosure as to whether the invention is an exceptional circumstance subject invention. In addition, after disclosure to the Patent Counsel, the Contractor will promptly notify the agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the contractor. The Contractor shall obtain approval from Patent Counsel prior to any release or publication of information concerning any nonelectable subject invention such as an exceptional circumstance subject invention or any subject invention related to a treaty or international agreement.

(2) *Election by the Contractor*. Except as provided in paragraph (b)(2) of this clause, the Contractor will elect in writing whether or not to retain title to any such invention by notifying the Federal agency within two years of disclosure to the Federal agency. However, in any case where publication, on sale or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.

(3) *Filing of patent applications by the Contractor*. The Contractor will file its initial patent application on a subject invention to which it elects to retain title within one year after election of title or, if earlier, or prior to the end of any 1-year statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Contractor will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application or six months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) *Contractor's request for an extension of time*. Requests for an extension of the time for disclosure, election, and filing under subparagraphs (c)(1), (2) and (3) may, at the discretion of Patent Counsel, be granted.

(5) *Publication Approval*. During the course of the work under this contract, the Contractor or its employees may desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interest of DOE or the Contractor, approval for release or publication shall be secured from the Contractor personnel responsible for patent matters prior to any such release or publication. Where DOE's approval of publication is requested, DOE's response to such requests for approval shall normally be provided within 90 days except in circumstances in which a domestic patent application must be filed in order to protect foreign rights. In the case involving foreign patent rights, DOE shall be granted an additional 180 days with which to respond to the request for approval, unless extended by mutual agreement.

(d) <u>CONDITIONS WHEN THE GOVERNMENT MAY OBTAIN TITLE</u>.

The Contractor will convey to the DOE, upon written request, title to any subject invention --

(1) If the Contractor fails to disclose or elect title to the subject invention within

the times specified in paragraph (c) of this clause, or elects not to retain title; provided, that DOE may only request title within sixty (60) days after learning of the failure of the Contractor to disclose or to elect within the specified times.

(2) In those countries in which the Contractor fails to file a patent application within the times specified in subparagraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in subparagraph (c) above, but prior to its receipt of the written request of the DOE, the Contractor shall continue to retain title in that country.

(3) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.

(4) If the Contractor requests that DOE acquire title or rights from the Contractor in a subject invention to which the Contractor had initially retained title or rights, or in an exceptional circumstance subject invention to which the Contractor was granted greater rights, DOE may acquire such title or rights from the Contractor, or DOE may decide against acquiring such title or rights from the Contractor, at DOE's sole discretion.

(e) MINIMUM RIGHTS OF THE CONTRACTOR AND PROTECTION OF THE CONTRACTOR'S RIGHT TO FILE.

(1) *Request for a Contractor license*. The Contractor may request the right to reserve a revocable, nonexclusive, royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. DOE may grant or refuse to grant such a request by the Contractor. When DOE approves such reservation, the Contractor's license will normally extend to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the contractor's business to which the invention pertains.

(2) *Revocation or modification of a Contractor license*. The Contractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in

accordance with applicable provisions at 37 CFR Part 404 and DOE licensing regulations at 10 CFR Part 781. This license will not be revoked in the field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the subject invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Contractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application of the subject invention in that foreign country.

(3) *Notice of revocation of modification of a Contractor license*. Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed thirty days (or such other time as may be authorized by DOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable regulations in 37 CFR part 404 and DOE licensing regulations at 10 CFR part 781 concerning the licensing of Government owned inventions, any decision concerning the revocation or modification of the license.

(f) CONTRACTOR ACTION TO PROTECT THE GOVERNMENT'S INTEREST.

(1) *Execution of delivery of title or license instruments*. The Contractor agrees to execute or to have executed, and promptly deliver to the Patent Counsel all instruments necessary to accomplish the following actions:

(i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the Contractor elects to retain title, and

(ii) convey title to DOE when requested under subparagraphs (b) or paragraph (d) of this clause and to enable the Government to obtain patent protection throughout the world in that subject invention.

(2) *Contractor employee agreements*. The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to Contractor personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor, each subject invention made under this contract in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph

(c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) *Notification of discontinuation of patent protection*. The contractor will notify the Patent Counsel of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than thirty days before the expiration of the response period required by the relevant patent office.

(4) *Notification of Government rights*. The contractor agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering a subject invention, the following statement, “This invention was made with government support under (identify the contract) awarded by (identify the Federal agency). The government has certain rights in the invention.”

(5) *Invention Identification Procedures*. The Contractor shall establish and maintain active and effective procedures to ensure that subject inventions are promptly identified and timely disclosed and shall submit a written description of such procedures to the Contracting Officer so that the Contracting Officer may evaluate and determine their effectiveness.

(6) *Invention Filing Documentation*. If the Contractor files a domestic or foreign patent application claiming a subject invention, the Contractor shall promptly submit to Patent Counsel, upon request, the following information and documents:

(i) the filing date, serial number, title, and a copy of the patent application (including an English-language version if filed in a language other than English);

(ii) an executed and approved instrument fully confirmatory of all Government rights in the subject invention; and

(iii) the patent number, issue date, and a copy of any issued patent claiming the subject invention.

(7) *Duplication and disclosure of documents*. The Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause; provided, however, that any such duplication or disclosure by the Government is

subject to the confidentiality provision at 35 U.S.C. 205 and 37 CFR Part 40.

(g) SUBCONTRACTS.

(1) *Subcontractor subject inventions.* The Contractor shall not obtain rights in the subcontractor's subject inventions as part of the consideration for awarding a subcontract.

(2) *Inclusion of patent rights clause - non-profit organization or small business firm subcontractors.* Unless otherwise authorized or directed by the Contracting Officer, the Contractor shall include the patent rights clause at 48 CFR 952.227-11, suitably modified to identify the parties, in all subcontracts, at any tier, for experimental, developmental, demonstration or research work to be performed by a small business firm or domestic nonprofit organization, except subcontracts which are subject to exceptional circumstances in accordance with 35 U.S.C. 202 and subparagraph (b)(2) of this clause. The subcontractor retains all rights provided for the contractor in the patent rights clause at 48 CFR 952.227-11.

(3) *Inclusion of patent rights clause - subcontractors other than non-profit organizations and small business firms.* Except for the subcontracts described in subparagraph (g)(2) of this clause, the Contractor shall include the patent rights clause at 48 CFR 952.227-13, suitably modified to identify the parties, in any contract for experimental, developmental, demonstration or research work. For subcontracts subject to exceptional circumstances, the contractor must consult with DOE patent counsel with respect to the appropriate patent clause.

(4) *DOE and subcontractor contract.* With respect to subcontracts at any tier, DOE, the subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (j) of this clause.

(5) *Subcontractor refusal to accept terms of patent clause.* If a prospective subcontractor refuses to accept the terms of a patent rights clause, the Contractor shall promptly submit a written notice to the Contracting Officer stating the subcontractor's reasons for such a refusal, including any relevant information for expediting disposition of the matter, and the Contractor shall not proceed with the subcontract without the written authorization of the Contracting Officer.

(6) *Notification of award of subcontract*. Upon the award of any subcontract at any tier containing a patent rights clause, the Contractor shall promptly notify the Contracting Officer in writing and identify the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Contractor shall furnish a copy of a subcontract.

(7) *Identification of subcontractor subject inventions.* If the Contractor in the performance of this contract becomes aware of a subject invention made under a subcontract, the Contractor shall promptly notify Patent Counsel and identify the subject invention.

(h) REPORTING ON UTILIZATION OF SUBJECT INVENTIONS.

The Contractor agrees to submit to DOE on request, periodic reports, no more frequently than annually, on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceeding undertaken by DOE in accordance with paragraph (j) of this clause. As required by 35 U.S.C. 202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without permission of the Contractor.

(i) PREFERENCE FOR UNITED STATES INDUSTRY.

Notwithstanding any other provision of this clause, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any product embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) MARCH-IN RIGHTS.

The Contractor agrees that, with respect to any subject invention in which it has acquired title, DOE has the right in accordance with the procedures in 37 CFR 401.6 and any DOE supplemental regulations to require the Contractor, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and, if the Contractor, assignee or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that --

(1) Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;

(2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee, or their licensees;

(3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or

(4) Such action is necessary because the agreement required by paragraph (i) of this clause has not been obtained or waived, or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(k) SPECIAL PROVISIONS FOR CONTRACTS WITH NONPROFIT ORGANIZATIONS.

If the Contractor is a nonprofit organization, it agrees that --

(1) *DOE approval of assignment of rights*. Rights to a subject invention in the United States may not be assigned by the Contractor without the approval of DOE, except where such assignment is made to an organization which has as one of its primary functions the management of inventions; provided, that such assignee will be subject to the same provisions of this clause as the Contractor.

(2) *Small business firm licensees*. It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms, and that it will give a preference to a small business firm when licensing a subject invention if the Contractor determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the Contractor is also satisfied that the small

business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor. However, the Contractor agrees that the Secretary of Commerce may review the Contractor's licensing program and decisions regarding small business firm applicants, and the Contractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when that Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of this subparagraph (k)(2).

(3) *Contractor licensing of subject inventions.* To the extent that it provides the most effective technology transfer, licensing of subject inventions shall be administered by Contractor employees on location at the facility.

(l) COMMUNICATIONS.

The Contractor shall direct any notification, disclosure or request provided for in this clause to the Patent Counsel assisting the DOE contracting activity.

(m) REPORTS.

(1) *Interim reports.* Upon DOE's request, the Contractor shall submit to DOE, no more frequently than annually, a list of subject inventions disclosed to DOE during a specified period, or a statement that no subject inventions were made during the specified period; and a list of subcontracts containing a patent clause and awarded by the Contractor during a specified period, or a statement that no such subcontracts were awarded during the specified period.

(2) *Final reports.* Upon DOE's request, the Contractor shall submit to DOE, prior to closeout of the contract, a list of all subject inventions disclosed during the performance period of the contract, or a statement that no subject inventions were made during the contract performance period; and a list of all subcontracts containing a patent clause and awarded by the Contractor during the contract performance period, or a statement that no such subcontracts were awarded during the contract performance period.

(n) EXAMINATION OF RECORDS RELATING TO SUBJECT INVENTIONS.

(1) *Contractor compliance.* Until the expiration of three (3) years after final payment under this contract, the Contracting Officer or any authorized representative may examine any books (including laboratory notebooks), records, documents, and other supporting data of the Contractor, which the Contracting Officer or authorized representative deems reasonably pertinent to the discovery or identification of subject inventions, including

exceptional circumstance subject inventions, or to determine Contractor compliance with any requirement of this clause.

(2) *Unreported inventions.* If the Contracting Officer is aware of an invention that is not disclosed by the Contractor to DOE, and the Contracting Officer believes the unreported invention may be a subject invention, including exceptional circumstance subject inventions, DOE may require the Contractor to submit to DOE a disclosure of the invention for a determination of ownership rights.

(3) *Confidentiality.* Any examination of records under this paragraph is subject to appropriate conditions to protect the confidentiality of the information involved.

(4) *Power of inspection.* With respect to a subject invention for which the Contractor has responsibility for patent prosecution, the Contractor shall furnish the Government, upon request by DOE, an irrevocable power to inspect and make copies of a prosecution file for any patent application claiming the subject invention.

(o) FACILITIES LICENSE.

In addition to the rights of the parties with respect to inventions or discoveries conceived or first actually reduced to practice in the course of or under this contract, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice or acquired by the Contractor at any time through completion of this contract and which are incorporated or embodied in the construction of the facility or which are utilized in the operation of the facility or which cover articles, materials, or product manufactured at the facility (1) to practice or have practiced by or for the Government at the facility, and (2) to transfer such license with the transfer of that facility. Notwithstanding the acceptance or exercise by the Government of these rights, the Government may contest at any time the enforceability, validity or scope of, or title to, any rights or patents herein licensed.

(p) ATOMIC ENERGY.

(1) *Pecuniary awards.* No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, may be asserted with respect to any invention or discovery made or conceived in the course of or under this contract.

(2) *Patent agreements.* Except as otherwise authorized in writing by the Contracting Officer, the Contractor shall obtain patent agreements to

effectuate the provisions of subparagraph (p)(1) of this clause from all persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

(q) CLASSIFIED INVENTIONS.

(1) *Approval for filing a foreign patent application*. The Contractor shall not file or cause to be filed an application or registration for a patent disclosing a subject invention related to classified subject matter in any country other than the United States without first obtaining the written approval of the Contracting Officer.

(2) *Transmission of classified subject matter*. If in accordance with this clause the Contractor files a patent application in the United States disclosing a subject invention that is classified for reasons of security, the Contractor shall observe all applicable security regulations covering the transmission of classified subject matter. If the Contractor transmits a patent application disclosing a classified subject invention to the United States Patent and Trademark Office (USPTO), the Contractor shall submit a separate letter to the USPTO identifying the contract or contracts by agency and agreement number that require security classification markings to be placed on the patent application.

(3) Inclusion of clause in subcontracts. The Contractor agrees to include the substance of this clause in subcontracts at any tier that cover or are likely to cover subject matter classified for reasons of security.

(r) PATENT FUNCTIONS.

Upon the written request of the Contracting Officer or Patent Counsel, the Contractor agrees to make reasonable efforts to support DOE in accomplishing patent-related functions for work arising out of the contract, including, but not limited to, the prosecution of patent applications, and the determination of questions of novelty, patentability, and inventorship.

(s) EDUCATIONAL AWARDS SUBJECT TO 35 U.S.C. 212.

The Contractor shall notify the Contracting Officer prior to the placement of any person subject to 35 U.S.C. 212 in an area of technology or task (1) related to exceptional circumstance technology or (2) which is subject to treaties or international agreements as set forth in paragraph (b)(3) of this clause or agreements other than funding agreements. The Contracting Officer may disapprove of any such placement.

(t) ANNUAL APPRAISAL BY PATENT COUNSEL.

Patent Counsel may conduct an annual appraisal to evaluate the Contractor's effectiveness in identifying and protecting subject inventions in accordance with DOE policy.

**CLAUSE I.133 -DEAR 970.5228-1 INSURANCE--LITIGATION AND CLAIMS (JUL 2013)**

(a) The contractor must comply with 10 CFR part 719, Contractor Legal Management Requirements, if applicable.

(b)

(1) Except as provided in paragraph (b)(2) of this clause, the contractor shall procure and maintain such bonds and insurance as required by law or approved in writing by the Contracting Officer.

(2) The contractor may, with the approval of the Contracting Officer, maintain a self-insurance program in accordance with FAR 28.308; provided that, with respect to workers' compensation, the contractor is qualified pursuant to statutory authority.

(3) All bonds and insurance required by this clause shall be in a form and amount and for those periods as the Contracting Officer may require or approve and with sureties and insurers approved by the Contracting Officer.

(c) The contractor agrees to submit for the Contracting Officer's approval, to the extent and in the manner required by the Contracting Officer, any other bonds and insurance that are maintained by the contractor in connection with the performance of this contract and for which the contractor seeks reimbursement. If an insurance cost (whether a premium for commercial insurance or related to self-insurance) includes a portion covering costs made unallowable elsewhere in the contract, and the share of the cost for coverage for the unallowable cost is determinable, the portion of the cost that is otherwise an allowable cost under this contract is reimbursable to the extent determined by the Contracting Officer.

(d) Except as provided in paragraph (f) of this clause, or specifically disallowed elsewhere in this contract, the contractor shall be reimbursed—

(1) For that portion of the reasonable cost of bonds and insurance allocable to this contract required in accordance with contract terms or approved under this clause, and

(2) For liabilities (and reasonable expenses incidental to such liabilities, including litigation costs) to third persons not compensated by insurance without regard to the clause of this contract entitled “Obligation of Funds.”

(e) The Government's liability under paragraph (d) of this clause is subject to the availability of appropriated funds. Nothing in this contract shall be construed as implying that the Congress will, at a later date, appropriate funds sufficient to meet deficiencies.

(f)

(1) Notwithstanding any other provision of this contract, the contractor shall not be reimbursed for liabilities to third parties, including contractor employees, and directly associated costs which may include but are not limited to litigation costs, counsel fees, judgments and settlements—

(i) Which are otherwise unallowable by law or the provisions of this contract, including the cost reimbursement limitations contained in 48 CFR part 31, as supplemented by 48 CFR 970.31;

(ii) For which the contractor has failed to insure or to maintain insurance as required by law, this contract, or by the written direction of the Contracting Officer; or

(iii) Which were caused by contractor managerial personnel’s—

(A) Willful misconduct;

(B) Lack of good faith; or

(C) Failure to exercise prudent business judgment, which means failure to act in the same manner as a prudent person in the conduct of competitive business; or, in the case of a non-profit educational institution, failure to act in the manner that a prudent person would under the circumstances prevailing at the time the decision to incur the cost is made.

(2) The term “contractor’s managerial personnel” is defined in the Property clause in this contract.

(g)

(1) All litigation costs, including counsel fees, judgments and settlements shall be segregated and accounted for by the contractor separately. If the Contracting Officer provisionally disallows such costs, then the contractor may not use funds advanced by DOE under the contract to finance the litigation.

(2) Punitive damages are not allowable unless the act or failure to act which gave rise to the liability resulted from compliance with specific terms and conditions of the contract or written instructions from the Contracting Officer.

(3) The portion of the cost of insurance obtained by the contractor that is allocable to coverage of liabilities referred to in paragraph (f) of this clause is not allowable.

(h) The contractor may at its own expense and not as an allowable cost procure for its own protection insurance to compensate the contractor for any unallowable or non-reimbursable costs incurred in connection with contract performance.

**CLAUSE I.134 - DEAR 970.5229-1 STATE AND LOCAL TAXES (DEC 2000)**

(a) The contractor agrees to notify the contracting officer of any State or local tax, fee, or charge levied or purported to be levied on or collected from the contractor with respect to the contract work, any transaction thereunder, or property in the custody or control of the contractor and constituting an allowable item of cost if due and payable, but which the contractor has reason to believe, or the contracting officer has advised the contractor, is or may be inapplicable or invalid; and the contractor further agrees to refrain from paying any such tax, fee, or charge unless authorized in writing by the contracting officer. Any State or local tax, fee, or charge paid with the approval of the contracting officer or on the basis of advice from the contracting officer that such tax, fee, or charge is applicable and valid, and which would otherwise be an allowable item of cost, shall not be disallowed as an item of cost by reason of any subsequent ruling or determination that such tax, fee, or charge was in fact inapplicable or invalid.

(b) The contractor agrees to take such action as may be required or approved by the contracting officer to cause any State or local tax, fee, or charge which would be an allowable cost to be paid under protest; and to take such action as may be required or approved by the contracting officer to seek recovery of any payments made, including assignment to the Government or its designee of all rights to an abatement or refund thereof, and granting permission for the Government to join with the contractor in any proceedings for the recovery thereof or to sue for recovery in the name of the contractor. If the contracting officer directs the contractor to institute litigation to enjoin the collection of or to recover payment of any such tax, fee, or charge referred to above, or if a claim or suit is filed against the contractor for a tax, fee, or charge it has refrained from paying in accordance with this clause, the procedures and requirements of the clause entitled "Insurance-Litigation and Claims" shall apply and the costs and expenses incurred by the contractor shall be allowable items of costs, as provided in this contract, together with the amount of any judgment rendered against the contractor.

(c) The Government shall hold the contractor harmless from penalties and interest incurred through compliance with this clause. All recoveries or credits in respect of the foregoing taxes, fees, and charges (including interest) shall inure to and be for the sole benefit of the Government.

**CLAUSE I.135 - DEAR 970.5231-4 PREEXISTING CONDITIONS (DEC 2000) (DEVIATION)**

(a) The Department of Energy agrees to reimburse the contractor, and the contractor shall not be held responsible, for any liability (including without limitation, a claim involving strict or absolute liability and any civil fine or penalty), expense, or remediation cost, but limited to those of a civil nature, which may be incurred by, imposed on, or asserted against the contractor arising out of any condition, act, or failure to act which occurred before the contractor assumed responsibility as of 12:01 a.m. on March 1, 1998. To the extent the acts or omissions of the contractor cause or add to any liability, expense or remediation cost resulting from conditions in existence prior to 12:01 a.m. on March 1, 1998, the contractor shall be responsible in accordance with the terms and conditions of this contract.

(b) The obligations of the Department of Energy under this clause are subject to the availability of appropriated funds.

**CLAUSE I.136 - DEAR 970.5232-1 REDUCTION OR SUSPENSION OF ADVANCE, PARTIAL, OR PROGRESS PAYMENTS (DEC 2000)**

(a) The contracting officer may reduce or suspend further advance, partial, or progress payments to the contractor upon a written determination by the Senior Procurement Executive that substantial evidence exists that the Contractor's request for advance, partial, or progress payment is based on fraud.

(b) The Contractor shall be afforded a reasonable opportunity to respond in writing.

**CLAUSE I.137 - DEAR 970.5232-2 PAYMENTS AND ADVANCES (DEC 2000) (ALTERNATES II AND III) (DEC 2000) (DEVIATION)**

(a) *Payment of Total available fee: Base Fee and Performance Fee*. The base fee amount, if any, is payable in equal monthly installments. Total available fee amount earned is payable following the Government's Determination of Total Available Fee Amount Earned in accordance with the clause of this contract entitled "Total Available Fee: Base Fee Amount and Performance Fee Amount." Base fee amount and total available fee amount earned payments shall be made

by direct payment or withdrawn from funds advanced or available under this contract, as determined by the contracting officer. The contracting officer may offset against any such fee payment the amounts owed to the Government by the contractor, including any amounts owed for disallowed costs under this contract. No base fee amount or total available fee amount earned payment may be withdrawn against the payments cleared financing arrangement without the prior written approval of the contracting officer. Notwithstanding the above, the Contractor is authorized to provisionally withdraw, on the last working day of each month, against the payments cleared financing arrangement, one-twelfth (1/12) of ninety percent (90%) of the amount of performance fee earned for the last fiscal year for which the Government has made a fee determination. Following the Government's Determination of Total Available Fee Amount Earned, the Contractor is authorized to withdraw any amount of earned fee over the amount previously paid on a provisional basis from the payments cleared financing arrangement. In the event the Government's Determination of Total Available Fee Amount Earned results in an overpayment to the Contractor, such overpayment shall be redeposited to the payments cleared financing arrangement within 30 days, or otherwise used as directed by the Contracting Officer.

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

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

contractor shall promptly make such disposition of the excess as the contracting officer may direct.

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

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

(1) Compliance by the contractor with DOE's patent clearance requirements, and

(2) The furnishing by the contractor of:

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

(ii) A closing financial statement;

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

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

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

(B) Claims, together with reasonable expenses incidental thereto, based upon liabilities of the contractor to third parties arising out of the performance of this contract; provided that such claims are not known to the contractor on the date of the

execution of the release; and provided further that the contractor gives notice of such claims in writing to the contracting officer promptly, but not more than one (1) year after the contractor's right of action first accrues. In addition, the contractor shall provide prompt notice to the contracting officer of all potential claims under this clause, whether in litigation or not (see also Contract Clause I.98, DEAR 970.5228-1, "Insurance--Litigation and Claims");

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

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

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

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

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

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

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

(h) *Collections*. All collections accruing to the contractor in connection with the work under this contract, except for the contractor's fee and royalties or other income accruing to the contractor from technology transfer activities in accordance with this contract, shall be Government property and shall be processed and accounted for in accordance with applicable requirements imposed by the contracting officer pursuant to the Laws, regulations, and DOE directives clause

of this contract and, to the extent consistent with those requirements, shall be deposited in the special financial institution account or otherwise made available for payment of allowable costs under this contract, unless otherwise directed by the contracting officer.

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

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

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

## CLAUSE I.138 - DEAR 970.5232-3 – ACCOUNTS, RECORDS AND INSPECTION (DEC 2010)

(a) Accounts. The Contractor shall maintain a separate and distinct set of accounts, records, documents, and other evidence showing and supporting: all allowable costs incurred; collections accruing to the Contractor in connection with the work under this contract, other applicable credits, negotiated fixed amounts, and fee accruals under this contract; and the receipt, use, and disposition of all Government property coming into the possession of the Contractor under this contract. The system of accounts employed by the Contractor shall be satisfactory to DOE and in accordance with generally accepted accounting principles consistently applied.

(b) Inspection and audit of accounts and records. All books of account and records relating to this contract shall be subject to inspection and audit by DOE or its designees in accordance with the provisions of Clause, Access to and ownership of records, at all reasonable times, before and during the period of retention provided for in paragraph (d) of this clause, and the Contractor shall afford DOE proper facilities for such inspection and audit.

(c) Audit of subcontractors' records. The Contractor also agrees, with respect to any subcontracts (including fixed-price or unit-price subcontracts or purchase orders) where, under the terms of the subcontract, costs incurred are a factor in determining the amount payable to the subcontractor of any tier, to either conduct an audit of the subcontractor's costs or arrange for such an audit to be performed by the cognizant government audit agency through the Contracting Officer.

(d) Disposition of records. Except as agreed upon by the Government and the Contractor, all financial and cost reports, books of account and supporting documents, system files, data bases, and other data evidencing costs allowable, collections accruing to the Contractor in connection with the work under this contract, other applicable credits, and fee accruals under this contract, shall be the property of the Government, and shall be delivered to the Government or otherwise disposed of by the Contractor either as the Contracting Officer may from time to time direct during the progress of the work or, in any event, as the Contracting Officer shall direct upon completion or termination of this contract and final audit of accounts hereunder. Except as otherwise provided in this contract, including provisions of Clause 970.5204-3, Access to and Ownership of Records, all other records in the possession of the Contractor relating to this contract shall be preserved by the Contractor for a period of three years after final payment under this contract or otherwise disposed of in such manner as may be agreed upon by the Government and the Contractor.

(e) Reports. The Contractor shall furnish such progress reports and schedules, financial and cost reports, and other reports concerning the work under this contract as the Contracting Officer may from time to time require.

(f) Inspections. The DOE shall have the right to inspect the work and activities of the Contractor under this contract at such time and in such manner as it shall deem appropriate.

(g) Subcontracts. The Contractor further agrees to require the inclusion of provisions similar to those in paragraphs (a) through (g) and paragraph (h) of this clause in all subcontracts (including fixed-price or unit-price subcontracts or purchase orders) of any tier entered into hereunder where, under the terms of the subcontract, costs incurred are a factor in determining the amount payable to the subcontractor.

(h) Comptroller General.

(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the contractor's or subcontractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder and to interview any employee regarding such transactions.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(3) Nothing in this contract shall be deemed to preclude an audit by the Government Accountability Office of any transaction under this contract.

(i) Internal audit. The Contractor agrees to design and maintain an internal audit plan and an internal audit organization.

(1) Upon contract award, the exercise of any contract option, or the extension of the contract, the Contractor must submit to the Contracting Officer for approval an Internal Audit Implementation Design to include the overall strategy for internal audits. The Audit Implementation Design must describe—

(i) The internal audit organization's placement within the contractor's organization and its reporting requirements;

(ii) The audit organization's size and the experience and educational standards of its staff;

(iii) The audit organization's relationship to the corporate entities of the Contractor;

(iv) The standards to be used in conducting the internal audits;

(v) The overall internal audit strategy of this contract, considering particularly the method of auditing costs incurred in the performance of the contract;

(vi) The intended use of external audit resources;

(vii) The plan for audit of subcontracts, both pre-award and post-award; and

(viii) The schedule for peer review of internal audits by other contractor internal audit organizations, or other independent third party audit entities approved by the DOE Contracting Officer.

(2) By each January 31 of the contract performance period, the Contractor must submit an annual audit report, providing a summary of the audit activities undertaken during the previous fiscal year. That report shall reflect the results of the internal audits during the previous fiscal year and the actions to be taken to resolve weaknesses identified in the contractor's system of business, financial, or management controls.

(3) By each June 30 of the contract performance period, the Contractor must submit to the Contracting Officer an annual audit plan for the activities to be undertaken by the internal audit organization during the next fiscal year that is designed to test the costs incurred and contractor management systems described in the internal audit design.

(4) The Contracting Officer may require revisions to documents submitted under paragraphs (i)(1), (i)(2), and (i)(3) of this clause, including the design plan for the internal audits, the annual report, and the annual internal audits.

(j) Remedies. If at any time during contract performance, the Contracting Officer determines that unallowable costs were claimed by the Contractor to the extent of making the contractor's management controls suspect, or the contractor's management systems that validate costs incurred and claimed suspect, the Contracting Officer may, in his or her sole discretion, require the Contractor to cease using the special financial institution account in whole or with regard to specified accounts, requiring reimbursable costs to be claimed by periodic vouchering. In addition, the Contracting Officer, where he or she deems it appropriate, may: Impose a penalty under 48 CFR 970.5242-1, Penalties for Unallowable Costs; require a refund; reduce the contractor's otherwise earned fee; and take such other action as authorized in law, regulation, or this contract.

## CLAUSE I.139 - DEAR 970.5232-4 OBLIGATION OF FUNDS (DEC 2000)

(a) Obligation of funds. The amount presently obligated by the Government with respect to this contract is $9,075,736,966.97. Such amount may be increased unilaterally by DOE by written notice to the contractor and may be increased or decreased by written agreement of the parties (whether or not by formal modification of this contract). Estimated collections from others for work and services to be performed under this contract are not included in the amount presently obligated. Such collections, to the extent actually received by the contractor, shall be processed and accounted for in accordance with applicable requirements imposed by the contracting officer pursuant to the Laws, regulations, and DOE directives clause of this contract. Nothing in this paragraph is to be

construed as authorizing the contractor to exceed limitations stated in financial plans established by DOE and furnished to the contractor from time to time under this contract.

(b) Limitation on payment by the Government. Except as otherwise provided in this contract and except for costs which may be incurred by the contractor pursuant to the Termination clause of this contract or costs of claims allowable under the contract occurring after completion or termination and not released by the contractor at the time of financial settlement of the contract in accordance with the clause entitled “Payments and Advances,” payment by the Government under this contract on account of allowable costs shall not, in the aggregate, exceed the amount obligated with respect to this contract, less the contractor's fee and any negotiated fixed amount. Unless expressly negated in this contract, payment on account of those costs excepted in the preceding sentence which are in excess of the amount obligated with respect to this contract shall be subject to the availability of:

(1) Collections accruing to the contractor in connection with the work under this contract and processed and accounted for in accordance with applicable requirements imposed by the contracting officer pursuant to the Laws, regulations, and DOE directives clause of this contract, and

(2) Other funds which DOE may legally use for such purpose, provided DOE will use its best efforts to obtain the appropriation of funds for this purpose if not otherwise available.

(c) Notices--Contractor excused from further performance. The contractor shall notify DOE in writing whenever the unexpended balance of available funds (including collections available under paragraph (a) of this clause), plus the contractor's best estimate of collections to be received and available during the 45 day period hereinafter specified, is in the contractor's best judgment sufficient to continue contract operations at the programmed rate for only 45 days and to cover the contractor's unpaid fee and any negotiated fixed amounts, and outstanding encumbrances and liabilities on account of costs allowable under the contract at the end of such period. Whenever the unexpended balance of available funds (including collections available under paragraph (a) of this clause), less the amount of the contractor's fee then earned but not paid and any negotiated fixed amounts, is in the contractor's best judgment sufficient only to liquidate outstanding encumbrances and liabilities on account of costs allowable under this contract, the contractor shall immediately notify DOE and shall make no further encumbrances or expenditures (except to liquidate existing encumbrances and liabilities), and, unless the parties otherwise agree, the contractor shall be excused from further performance (except such performance as may become necessary in connection with termination by the Government) and the performance of all work hereunder will be deemed to have been

terminated for the convenience of the Government in accordance with the provisions of the Termination clause of this contract.

(d) Financial plans; cost and encumbrance limitations. In addition to the limitations provided for elsewhere in this contract, DOE may, through financial plans, such as Approved Funding Programs, or other directives issued to the contractor, establish controls on the costs to be incurred and encumbrances to be made in the performance of the contract work. Such plans and directives may be amended or supplemented from time to time by DOE. The contractor agrees

(1) to comply with the specific limitations (ceilings) on costs and encumbrances set forth in such plans and directives,

(2) to comply with other requirements of such plans and directives, and

(3) to notify DOE promptly, in writing, whenever it has reason to believe that any limitation on costs and encumbrances will be exceeded or substantially underrun.

(e) Government's right to terminate not affected. The giving of any notice under this clause shall not be construed to waive or impair any right of the Government to terminate the contract under the provisions of the Termination clause of this contract.

## CLAUSE I.140 - DEAR 970.5232-5 LIABILITY WITH RESPECT TO COST ACCOUNTING STANDARDS (DEC 2000)

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

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

## CLAUSE I.141 - DEAR 970.5232-6 WORK FOR OTHERS FUNDING AUTHORIZATION (DEC 2000)

Any uncollectible receivables resulting from the contractor utilizing contractor corporate funding for reimbursable work shall be the responsibility of the contractor, and the United States Government shall have no liability to the contractor for the contractor's uncollected receivables. The contractor is permitted to provide advance payment utilizing contractor corporate funds for reimbursable work to be performed by the contractor for a non-Federal entity in instances where advance payment from that entity is required under the Laws, regulations, and DOE directives clause of this contract and such advance cannot be obtained. The contractor is also permitted to provide advance payment utilizing contractor corporate funds to continue reimbursable work to be performed by the contractor for a Federal entity when the term or the funds on a Federal interagency agreement required under the Laws, regulations, and DOE directives clause of this contract have elapsed. The contractor's utilization of contractor corporate funds does not relieve the contractor of its responsibility to comply with all requirements for Work for Others applicable to this contract.

## CLAUSE I.142 - DEAR 970.5232-7 FINANCIAL MANAGEMENT SYSTEM (DEC 2000)

The contractor shall maintain and administer a financial management system that is suitable to provide proper accounting in accordance with DOE requirements for assets, liabilities, collections accruing to the contractor in connection with the work under this contract, expenditures, costs, and encumbrances; permits the preparation of accounts and accurate, reliable financial and statistical reports; and assures that accountability for the assets can be maintained. The contractor shall submit to DOE for written approval an annual plan for new financial management systems and/or subsystems and major enhancements and/or upgrades to the currently existing financial systems and/or subsystems. The contractor shall notify DOE thirty (30) days in advance of any planned implementation of any substantial deviation from this plan and, as requested by the contracting officer, shall submit any such deviation to DOE for written approval before implementation.

## CLAUSE I.143 - DEAR 970.5232-8 INTEGRATED ACCOUNTING (DEC 2000)

Integrated accounting procedures are required for use under this contract. The contractor's financial management system shall include an integrated accounting system that is linked to DOE's accounts through the use of reciprocal accounts and that has electronic capability to transmit monthly and year-end self-balancing trial balances to the Department's Primary Accounting System for reporting financial activity under this

contract in accordance with requirements imposed by the contracting officer pursuant to the Laws, regulations, and DOE directives clause of this contract.

CLAUSE I.144 - DEAR 970.5235-1 – FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER SPONSORING AGREEMENT (DEC 2010)

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

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

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

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

**CLAUSE I.145 - DEAR 970.5236-1 GOVERNMENT FACILITY SUBCONTRACT APPROVAL (DEC 2000) (DEVIATION)**

Upon request of the contracting officer and acceptance thereof by the contractor, the contractor shall procure, by subcontract, the construction of new facilities or the alteration or repair of Government-owned facilities at the plant. Any subcontract entered into under this paragraph shall be subject to the written approval of the contracting officer, in accordance with the provisions of Appendix G, and shall contain the provisions relative to labor and wages required by law to be included in contracts for the construction, alteration, and/or repair, including painting and decorating, of a public building or public work.

## CLAUSE I.146 - DEAR 970.5242-1 PENALTIES FOR UNALLOWABLE COSTS (AUG 2009)

(a) Contractors which include unallowable cost in a submission for settlement for cost incurred, may be subject to penalties.

(b) If, during the review of a submission for settlement of cost incurred, the Contracting Officer determines that the submission contains an expressly unallowable cost or a cost determined to be unallowable prior to the submission, the Contracting Officer shall assess a penalty.

(c) Unallowable costs are either expressly unallowable or determined unallowable.

(1) An expressly unallowable cost is a particular item or type of cost which, under the express provisions of an applicable law, regulation, or this contract, is specifically named and stated to be unallowable.

(2) A cost determined unallowable is one which, for that Contractor—

(i) Was subject to a Contracting Officer's final decision and not appealed;

(ii) The Civilian Board of Contract Appeals or a court has previously ruled as unallowable; or

(iii) Was mutually agreed to be unallowable.

(d) If the Contracting Officer determines that a cost submitted by the Contractor in its submission for settlement of cost incurred is—

(1) Expressly unallowable, then the Contracting Officer shall assess a penalty in an amount equal to the disallowed cost allocated to this contract plus interest on the paid portion of the disallowed cost. Interest shall be computed from the date of overpayment to the date of repayment using the interest rate specified by the Secretary of the Treasury pursuant to Pub. L. 92-41 (85 Stat. 97); or

(2) Determined unallowable, then the Contracting Officer shall assess a penalty in an amount equal to two times the amount of the disallowed cost allocated to this contract.

(e) The Contracting Officer may waive the penalty provisions when—

(1) The Contractor withdraws the submission before the formal initiation of an audit of the submission and submits a revised submission;

(2) The amount of the unallowable costs allocated to covered contracts is $10,000 or less; or

(3) The Contractor demonstrates to the Contracting Officer's satisfaction that—

(i) It has established appropriate policies, personnel training, and an internal control and review system that provides assurances that unallowable costs subject to penalties are precluded from the Contractor's submission for settlement of costs; and

(ii) The unallowable costs subject to the penalty were inadvertently incorporated into the submission.

## CLAUSE I.147 - DEAR 970.5243-1 CHANGES (DEC 2000)

(a) Changes and adjustment of fee. The contracting officer may at any time and without notice to the sureties, if any, issue written directions within the general scope of this contract requiring additional work or directing the omission of, or variation in, work covered by this contract. If any such direction results in a material change in the amount or character of the work described in the "Statement of Work," an equitable adjustment of the fee, if any, shall be made in accordance with the agreement of the parties and the contract shall be modified in writing accordingly. Any claim by the contractor for an adjustment under this clause must be asserted in writing within 30 days from the date of receipt by the contractor of the notification of change; provided, however, that the contracting officer, if it is determined that the facts justify such action, may receive and act upon any such claim asserted at any time prior to final payment under this contract. A failure to agree on an equitable adjustment under this clause shall be deemed to be a dispute within the meaning of the clause entitled "Disputes."

(b) Work to continue. Nothing contained in this clause shall excuse the contractor from proceeding with the prosecution of the work in accordance with the requirements of any direction hereunder.

## CLAUSE I.148 - DEAR 970.5244-1 CONTRACTOR PURCHASING SYSTEM (AUG 2009) (DEVIATION AUG 2011 - *POLICY FLASH 2011-98*) (DEVIATION JUN 2013 – *AL 2013-10)*

(a) *General.* The Contractor shall develop, implement, and maintain formal policies, practices, and procedures to be used in the award of subcontracts consistent with this clause and 48 CFR subpart 970.44. The Contractor's purchasing system and methods shall be fully documented, consistently applied, and acceptable to the

Department of Energy (DOE) in accordance with 48 CFR 970.4401-1. The Contractor shall maintain file documentation which is appropriate to the value of the purchase and is adequate to establish the propriety of the transaction and the price paid. The Contractor's purchasing performance will be evaluated against such performance criteria and measures as may be set forth elsewhere in this contract. DOE reserves the right at any time to require that the Contractor submit for approval any or all purchases under this contract. The Contractor shall not purchase any item or service, the purchase of which is expressly prohibited by the written direction of DOE, and shall use such special and directed sources as may be expressly required by the DOE Contracting Officer. DOE will conduct periodic appraisals of the Contractor's management of all facets of the purchasing function, including the Contractor's compliance with its approved system and methods. Such appraisals will be performed through the conduct of Contractor Purchasing System Reviews in accordance with 48 CFR subpart 44.3, or, when approved by the Contracting Officer, through the Contractor's participation in the conduct of the Balanced Scorecard performance measurement and performance management system. The Contractor's approved purchasing system and methods shall include the requirements set forth in paragraphs (b) through (y) of this clause.

(b) *Acquisition of utility services.* Utility services shall be acquired in accordance with the requirements of subpart 970.41.

(c) *Acquisition of Real Property.* Real property shall be acquired in accordance with 48 CFR subpart 917.74.

(d) *Advance Notice of Proposed Subcontract Awards.* Advance notice shall be provided in accordance with 48 CFR 970.4401-3.

(e) *Audit of Subcontractors.*

(1) The Contractor shall provide for—

(i) Periodic post-award audit of cost-reimbursement subcontractors at all tiers; and

(ii) Audits, where necessary, to provide a valid basis for pre-award or cost or price analysis.

(2) Responsibility for determining the costs allowable under each cost-reimbursement subcontract remains with the contractor or next higher-tier subcontractor. The Contractor shall provide, in appropriate cases, for the timely involvement of the Contractor and the DOE Contracting Officer in resolution of subcontract cost allowability.

(3) Where audits of subcontractors at any tier are required, arrangements may be made to have the cognizant Federal agency perform the audit of the subcontract. These arrangements shall be made administratively between

DOE and the other agency involved and shall provide for the cognizant agency to audit in an appropriate manner in light of the magnitude and nature of the subcontract. In no case, however, shall these arrangements preclude determination by the DOE Contracting Officer of the allowability or unallowability of subcontractor costs claimed for reimbursement by the Contractor.

(4) Allowable costs for cost reimbursable subcontracts are to be determined in accordance with the cost principles of 48 CFR part 31, appropriate for the type of organization to which the subcontract is to be awarded, as supplemented by 48 CFR part 931. Allowable costs in the purchase or transfer from contractor-affiliated sources shall be determined in accordance with 48 CFR 970.4402-3 and 48 CFR 31.205-26(e).

(f) *Bonds and Insurance.*

(1) The Contractor shall require performance bonds in penal amounts as set forth in 48 CFR 28.102-2(a) for all fixed-priced and unit-priced construction subcontracts in excess of $100,000. The Contractor shall consider the use of performance bonds in fixed-price non-construction subcontracts, where appropriate.

(2) For fixed-price, unit-priced and cost reimbursement construction subcontracts in excess of $100,000, a payment bond shall be obtained on Standard Form 25A modified to name the Contractor as well as the United States of America as obligees. The penal amounts shall be determined in accordance with 48 CFR 28.102-2(b).

(3) For fixed-price, unit-priced and cost-reimbursement construction subcontracts greater than $25,000, but not greater than $100,000, the Contractor shall select two or more of the payment protections at 48 CFR 28.102-1(b), giving particular consideration to the inclusion of an irrevocable letter of credit as one of the selected alternatives.

(4) A subcontractor may have more than one acceptable surety in both construction and other subcontracts, provided that in no case will the liability of any one surety exceed the maximum penal sum for which it is qualified for any one obligation. For subcontracts other than construction, a co-surety (two or more sureties together) may reinsure amounts in excess of their individual capacity, with each surety having the required underwriting capacity that appears on the list of acceptable corporate sureties.

(g) *Buy American.* The Contractor shall comply with the provisions of the Buy American Act as reflected in 48 CFR 52.225-1 and 48 CFR 52.225-9. The Contractor shall forward determinations of non-availability of individual items to the DOE Contracting Officer for approval. Items in excess of $500,000 require the

prior concurrence of the Head of Contracting Activity. If, however, the Contractor has an approved purchasing system, the Head of the Contracting Activity may authorize the Contractor to make determinations of non-availability for individual items valued at $500,000 or less.

(h) *Construction and Architect-Engineer Subcontracts*.

(1) *Independent Estimates.* A detailed, independent estimate of costs shall be prepared for all construction work to be subcontracted.

(2) *Specifications.* Specifications for construction shall be prepared in accordance with the DOE publication entitled "General Design Criteria Manual."

(3) *Prevention of Conflict of Interest.*

(i) The Contractor shall not award a subcontract for construction to the architect-engineer firm or an affiliate that prepared the design. This prohibition does not preclude the award of a "turnkey" subcontract so long as the subcontractor assumes all liability for defects in design and construction and consequential damages.

(ii) The Contractor shall not award both a cost-reimbursement subcontract and a fixed-price subcontract for construction or architect-engineer services or any combination thereof to the same firm where those subcontracts will be performed at the same site.

(iii) The Contractor shall not employ the construction subcontractor or an affiliate to inspect the firm's work. The contractor shall assure that the working relationships of the construction subcontractor and the subcontractor inspecting its work and the authority of the inspector are clearly defined.

(i) *Contractor-Affiliated Sources.* Equipment, materials, supplies, or services from a contractor-affiliated source shall be purchased or transferred in accordance with 48 CFR 970.4402-3.

(j) *Contractor-Subcontractor Relationship.* The obligations of the Contractor under paragraph (a) of this clause, including the development of the purchasing system and methods, and purchases made pursuant thereto, shall not relieve the Contractor of any obligation under this contract (including, among other things, the obligation to properly supervise, administer, and coordinate the work of subcontractors). Subcontracts shall be in the name of the Contractor, and shall not bind or purport to bind the Government.

(k) *Government Property.* Identification, inspection, maintenance, protection, and disposition of Government Property shall conform with the policies and principles

of 48 CFR part 45, 48 CFR part 945, the Federal Property Management Regulations, 41 CFR chapter 101, the DOE Property Management Regulations, 41 CFR chapter 109, and their contracts.

(l) *Indemnification.* Except for Price-Anderson Nuclear Hazards Indemnity, no subcontractor may be indemnified except with the prior approval of the Senior Procurement Executive.

(m) *Leasing of Motor Vehicles.* Contractors shall comply with 48 CFR subpart 8.11 and 48 CFR subpart 908.11.

(n) [Reserved]

[71 FR 16241, Mar. 31, 2006]

(o) *Management, Acquisition and Use of Information Resources.* Requirements for automatic data processing resources and telecommunications facilities, services, and equipment, shall be reviewed and approved in accordance with applicable DOE Orders and regulations regarding information resources.

(p) *Priorities, Allocations and Allotments.* Priorities, allocations and allotments shall be extended to appropriate subcontracts in accordance with the clause or clauses of this contract dealing with priorities and allocations.

(q) *Purchase of Special Items.* Purchase of the following items shall be in accordance with the following provisions of 48 CFR subpart 8.5, 48 CFR subpart 908.71, Federal Management Regulation 41 CFR part 102, and the Federal Property Management Regulation 41 CFR chapter 101:

(1) Motor vehicles—48 CFR 908.7101

(2) Aircraft—48 CFR 908.7102

(3) Security Cabinets—48 CFR 908.7106

(4) Alcohol—48 CFR 908.7107

(5) Helium—48 CFR subpart 8.5

(6) Fuels and packaged petroleum products—48 CFR 908.7109

(7) Coal—48 CFR 908.7110

(8) Arms and Ammunition—48 CFR 908.7111

(9) Heavy Water—48 CFR 908.7121(a)

(10) Precious Metals—48 CFR 908.7121(b)

(11) Lithium—48 CFR 908.7121(c)

(12) Products and services of the blind and severely handicapped—41 CFR 101-26.701

(r) *Purchase versus Lease Determinations.* Contractors shall determine whether required equipment and property should be purchased or leased, and establish appropriate thresholds for application of lease versus purchase determinations. Such determinations shall be made—

(1) At time of original acquisition;

(2) When lease renewals are being considered; and

(3) At other times as circumstances warrant.

(s) *Quality Assurance.* Contractors shall provide no less protection for the Government in its subcontracts than is provided in the prime contract.

(t) *Setoff of Assigned Subcontractor Proceeds.* Where a subcontractor has been permitted to assign payments to a financial institution, the assignment shall treat any right of setoff in accordance with 48 CFR 932.803.

(u) *Strategic and Critical Materials.* The Contractor may use strategic and critical materials in the National Defense Stockpile.

(v) *Termination.* When subcontracts are terminated as a result of the termination of all or a portion of this contract, the Contractor shall settle with subcontractors in conformity with the policies and principles relating to settlement of prime contracts in 48 CFR subparts 49.1, 49.2 and 49.3. When subcontracts are terminated for reasons other than termination of this contract, the Contractor shall settle such subcontracts in general conformity with the policies and principles in 48 CFR subparts 49.1, 49.2, 49.3 and 49.4. Each such termination shall be documented and consistent with the terms of this contract. Terminations which require approval by the Government shall be supported by accounting data and other information as may be directed by the Contracting Officer.

(w) *Unclassified Controlled Nuclear Information.* Subcontracts involving unclassified uncontrolled nuclear information shall be treated in accordance with 10 CFR part 1017.

(x) *Subcontract Flowdown Requirements.* In addition to terms and conditions that are included in the prime contract which direct application of such terms and conditions in appropriate subcontracts, the Contractor shall include the following clauses in subcontracts, as applicable:

(1) Davis-Bacon clauses prescribed in 48 CFR 22.407.

(2) Foreign Travel clause prescribed in 48 CFR 952.247-70.

(3) Counterintelligence clause prescribed in 48 CFR 970.0404-4(a).

(4) Service Contract Act clauses prescribed in 48 CFR 22.1006.

(5) State and local taxes clause prescribed in 48 CFR 970.2904-1.

(6) Cost or pricing data clauses prescribed in 48 CFR 970.1504-3-1(b).

(7) Non displacement of Qualified Workers clause prescribed in 48 CFR 22.1207.

(y) *Legal Services.* Contractor purchases of litigation and other legal services are subject to the requirements in 10 CFR part 719 and the requirements of this clause.

**CLAUSE I.149 - DEAR 970.5245-1 PROPERTY (JAN 2013) (ALTERNATE I)**

(a) Furnishing of Government property. The Government reserves the right to furnish any property or services required for the performance of the work under this contract.

(b) Title to property. Except as otherwise provided by the Contracting Officer, title to all materials, equipment, supplies, and tangible personal property of every kind and description purchased by the Contractor, for the cost of which the Contractor is entitled to be reimbursed as a direct item of cost under this contract, shall pass directly from the vendor to the Government. The Government reserves the right to inspect, and to accept or reject, any item of such property. The Contractor shall make such disposition of rejected items as the Contracting Officer shall direct. Title to other property, the cost of which is reimbursable to the Contractor under this contract, shall pass to and vest in the Government upon (1) issuance for use of such property in the performance of this contract, or (2) commencement of processing or use of such property in the performance of this contract, or (3) reimbursement of the cost thereof by the Government, whichever first occurs. Property furnished by the Government and property purchased or furnished by the Contractor, title to which vests in the Government, under this paragraph are hereinafter referred to as Government property. Title to Government property shall not be affected by the incorporation of the property into or the attachment of it to any property not owned by the Government, nor shall such Government property or any part thereof, be or become a fixture or lose its identity as personality by reason of affixation to any realty.

(c) Identification. To the extent directed by the Contracting Officer, the Contractor shall identify Government property coming into the Contractor's possession or custody, by marking and segregating in such a way, satisfactory to the Contracting Officer, as shall indicate its ownership by the Government.

(d) Disposition. The Contractor shall make such disposition of Government property which has come into the possession or custody of the Contractor under this

contract as the Contracting Officer may direct during the progress of the work or upon completion or termination of this contract. The Contractor may, upon such terms and conditions as the Contracting Officer may approve, sell, or exchange such property, or acquire such property at a price agreed upon by the Contracting Officer and the Contractor as the fair value thereof. The amount received by the Contractor as the result of any disposition, or the agreed fair value of any such property acquired by the Contractor, shall be applied in reduction of costs allowable under this contract or shall be otherwise credited to account to the Government, as the Contracting Officer may direct. Upon completion of the work or the termination of this contract, the Contractor shall render an accounting, as prescribed by the Contracting Officer, of all government property which had come into the possession or custody of the Contractor under this contract.

(e) Protection of government property-management of high-risk property and classified materials.

(1) The Contractor shall take all reasonable precautions, and such other actions as may be directed by the Contracting Officer, or in the absence of such direction, in accordance with sound business practice, to safeguard and protect government property in the Contractor's possession or custody.

(2) In addition, the Contractor shall ensure that adequate safeguards are in place, and adhered to, for the handling, control and disposition of high-risk property and classified materials throughout the life cycle of the property and materials consistent with the policies, practices and procedures for property management contained in the Federal Property Management Regulations (41 CFR chapter 101), the Department of Energy (DOE) Property Management Regulations (41 CFR chapter 109), and other applicable Regulations.

(3) High-risk property is property, the loss, destruction, damage to, or the unintended or premature transfer of which could pose risks to the public, the environment, or the national security interests of the United States. High-risk property includes proliferation sensitive, nuclear related dual use, export controlled, chemically or radioactively contaminated, hazardous, and specially designed and prepared property, including property on the militarily critical technologies list.

(f) Risk of loss of Government property.

(1)

(i) The Contractor shall not be liable for the loss or destruction of, or damage to, Government property unless such loss, destruction, or damage was caused by any of the following—

(A) Willful misconduct or lack of good faith on the part of the Contractor's managerial personnel;

(B) Failure of the Contractor's managerial personnel to take all reasonable steps to comply with any appropriate written direction of the Contracting Officer to safeguard such property under paragraph (e) of this clause; or

(C) Failure of contractor managerial personnel to establish, administer, or properly maintain an approved property management system in accordance with paragraph (i)(1) of this clause.

(ii) If, after an initial review of the facts, the Contracting Officer informs the Contractor that there is reason to believe that the loss, destruction of, or damage to the government property results from conduct falling within one of the categories set forth above, the burden of proof shall be upon the Contractor to show that the Contractor should not be required to compensate the government for the loss, destruction, or damage.

(2) In the event that the Contractor is determined liable for the loss, destruction or damage to Government property in accordance with (f)(1) of this clause, the Contractor's compensation to the Government shall be determined as follows:

(i) For damaged property, the compensation shall be the cost of repairing such damaged property, plus any costs incurred for temporary replacement of the damaged property. However, the value of repair costs shall not exceed the fair market value of the damaged property. If a fair market value of the property does not exist, the Contracting Officer shall determine the value of such property, consistent with all relevant facts and circumstances.

(ii) For destroyed or lost property, the compensation shall be the fair market value of such property at the time of such loss or destruction, plus any costs incurred for temporary replacement and costs associated with the disposition of destroyed property. If a fair market value of the property does not exist, the Contracting Officer shall determine the value of such property, consistent with all relevant facts and circumstances.

(3) The portion of the cost of insurance obtained by the Contractor that is allocable to coverage of risks of loss referred to in paragraph (f)(1) of this

clause is not allowable.

(g) Steps to be taken in event of loss. In the event of any damage, destruction, or loss to Government property in the possession or custody of the Contractor with a value above the threshold set out in the Contractor's approved property management system, the Contractor—

(1) Shall immediately inform the Contracting Officer of the occasion and extent thereof,

(2) Shall take all reasonable steps to protect the property remaining, and

(3) Shall repair or replace the damaged, destroyed, or lost property in accordance with the written direction of the Contracting Officer. The Contractor shall take no action prejudicial to the right of the Government to recover therefore, and shall furnish to the Government, on request, all reasonable assistance in obtaining recovery.

(h) Government property for Government use only. Government property shall be used only for the performance of this contract.

(i) Property Management.

(1) Property Management System.

(i) The Contractor shall establish, administer, and properly maintain an approved property management system of accounting for and control, utilization, maintenance, repair, protection, preservation, and disposition of Government property in its possession under the contract. The Contractor's property management system shall be submitted to the Contracting Officer for approval and shall be maintained and administered in accordance with sound business practice, applicable Federal Property Management Regulations and Department of Energy Property Management Regulations, and such directives or instructions which the Contracting Officer may from time to time prescribe.

(ii) In order for a property management system to be approved, it must provide for—

(A) Comprehensive coverage of property from the requirement identification, through its life cycle, to final disposition;

(B) [Reserved];

(C) Full integration with the Contractor's other administrative and financial systems; and

(D) A method for continuously improving property management practices through the identification of best practices established by "best in class" performers.

(iii) Approval of the Contractor's property management system shall be contingent upon the completion of the baseline inventory as provided in subparagraph (i)(2) of this clause.

(2) Property Inventory.

(i) Unless otherwise directed by the Contracting Officer, the Contractor shall within six months after execution of the contract provide a baseline inventory covering all items of Government property.

(ii) If the Contractor is succeeding another contractor in the performance of this contract, the Contractor shall conduct a joint reconciliation of the property inventory with the predecessor contractor. The Contractor agrees to participate in a joint reconciliation of the property inventory at the completion of this contract. This information will be used to provide a baseline for the succeeding contract as well as information for closeout of the predecessor contract.

(j) The term "contractor's managerial personnel" as used in this clause means the Contractor's directors, officers and any of its managers, superintendents, or other equivalent representatives who have supervision or direction of all or substantially all of—

(1) The Contractor's business; or

(2) The Contractor's operations at any one facility or separate location at which this contract is being performed; or

(3) The Contractor's Government property system and/or a Major System Acquisition or Major Project as defined in DOE Order 4700.1 (Version in effect on effective date of contract).

(k) The Contractor shall include this clause in all cost reimbursable subcontracts.

## CLAUSE I.150 - FAR 52.222-54 – EMPLOYMENT ELIGIBILITY VERIFICATION (AUG 2013)

(a) *Definitions*. As used in this clause—

"Commercially available off-the-shelf (COTS) item"—

(1) Means any item of supply that is—

(i) A commercial item (as defined in paragraph (1) of the definition at 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4) such as agricultural products and petroleum products. Per 46 CFR 525.1(c)(2), "bulk cargo" means cargo that is loaded and carried in bulk onboard ship without mark or count, in a loose unpackaged form, having homogenous characteristics. Bulk cargo loaded into intermodal equipment, except LASH or Seabee barges, is subject to mark and count and, therefore, ceases to be bulk cargo.

"Employee assigned to the contract" means an employee who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), who is directly performing work, in the United States, under a contract that is required to include the clause prescribed at 22.1803. An employee is not considered to be directly performing work under a contract if the employee—

(1) Normally performs support work, such as indirect or overhead functions; and

(2) Does not perform any substantial duties applicable to the contract.

"Subcontract" means any contract, as defined in 2.101, entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

"Subcontractor" means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

"United States," as defined in 8 U.S.C. 1101(a)(38), means the 50 States, the District of Columbia, Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands.

(b) *Enrollment and verification requirements.*

(1) If the Contractor is not enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall—

(i) *Enroll*. Enroll as a Federal Contractor in the E-Verify program within 30 calendar days of contract award;

(ii) *Verify all new employees*. Within 90 calendar days of enrollment in the E-Verify program, begin to use E-Verify to initiate verification of employment eligibility of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); and

(iii) *Verify employees assigned to the contract.* For each employee assigned to the contract, initiate verification within 90 calendar days after date of enrollment or within 30 calendar days of the employee's assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(2) If the Contractor is enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall use E-Verify to initiate verification of employment eligibility of—

(i) *All new employees*.

(A) *Enrolled 90 calendar days or more*. The Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(B) *Enrolled less than 90 calendar days*. Within 90 calendar days after enrollment as a Federal Contractor in E-Verify, the Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section ); or

(ii) *Employees assigned to the contract*. For each employee assigned to the contract, the Contractor shall initiate verification within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(3) If the Contractor is an institution of higher education (as defined at 20 U.S.C. 1001(a)); a State or local government or the government of a Federally recognized Indian tribe; or a surety performing under a takeover agreement entered into with a Federal agency pursuant to a performance bond, the Contractor may choose to verify only employees assigned to the contract, whether existing employees or new hires. The Contractor shall follow the applicable verification requirements at (b)(1) or (b)(2), respectively, except that any requirement for verification of new employees applies only t new employees assigned to the contract.

(4) *Option to verify employment eligibility of all employees*. The Contractor may elect to verify all existing employees hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), rather than just those employees assigned to the contract. The Contractor shall initiate verification for each existing employee working in the United States who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), within 180 calendar days of—

(i) Enrollment in the E-Verify program; or

(ii) Notification to E-Verify Operations of the Contractor’s decision to exercise this option, using the contact information provided in the E-Verify program Memorandum of Understanding (MOU).

(5) The Contractor shall comply, for the period of performance of this contract, with the requirement of the E-Verify program MOU.

(i) The Department of Homeland Security (DHS) or the Social Security Administration (SSA) may terminate the Contractor's MOU and deny access to the E-Verify system in accordance with the terms of the MOU. In such case, the Contractor will be referred to a suspension or debarment official.

(ii) During the period between termination of the MOU and a decision by the suspension or debarment official whether to suspend or debar, the Contractor is excused from its obligations under paragraph (b) of this clause. If the suspension or debarment official determines not to suspend or debar the Contractor, then the Contractor must reenroll in E-Verify.

(c) *Web site*. Information on registration for and use of the E-Verify program can be obtained via the Internet at the Department of Homeland Security Web site: http://www.dhs.gov/E-Verify.

(d) *Individuals previously verified*. The Contractor is not required by this clause to perform additional employment verification using E-Verify for any employee—

(1) Whose employment eligibility was previously verified by the Contractor through the E-Verify program;

(2) Who has been granted and holds an active U.S. Government security clearance for access to confidential, secret, or top secret information in accordance with the National Industrial Security Program Operating Manual; or

(3) Who has undergone a completed background investigation and been issued credentials pursuant to Homeland Security Presidential Directive (HSPD) -12, Policy for a Common Identification Standard for Federal Employees and Contractors.

(e) *Subcontracts*. The contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for identification of the parties), in each subcontract that—

(1) *Is for*—

(i) Commercial or noncommercial services (except for commercial services that are part of the purchase of a COTS item (or an item that would be a COTS item, but for minor modifications), performed by the COTS provider, and are normally provided for that COTS item); or

(ii) Construction;

(2) Has a value of more than $3,000; and

(3) Includes work performed in the United States.

## CLAUSE I.151 -FAR 52.204-10 REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS (JUL 2013)

(a) *Definitions.* As used in this clause:

"Executive" means officers, managing partners, or any other employees in management positions.

"First-tier subcontract" means a subcontract awarded directly by the Contractor for the purpose of acquiring supplies or services (including construction) for performance of a prime contract. It does not include the Contractor's supplier agreements with vendors, such as long-term arrangements for materials or supplies that would benefit multiple contracts and/or the costs of which are normally applied to a Contractor's general and administrative expenses or indirect cost.

"Month of award" means the month in which a contract is signed by the Contracting Officer or the month in which a first-tier subcontract is signed by the Contractor.

"Total compensation" means the cash and noncash dollar value earned by the executive during the Contractor's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

(1) Salary and bonus.

(2) Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Financial Accounting Standards Board's Accounting Standards Codification (FASB ASC) 718, Compensation-Stock Compensation.

(3) Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans

that do not discriminate in favor of executives, and are available generally to all salaried employees.

(4) Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.

(5) Above-market earnings on deferred compensation which is not tax-qualified.

(6) Other compensation, if the aggregate value of all such other compensation (*e.g.*, severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds $10,000.

(b) Section 2(d)(2) of the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. No. 109-282), as amended by section 6202 of the Government Funding Transparency Act of 2008 (Pub. L. 110-252), requires the Contractor to report information on subcontract awards. The law requires all reported information be made public, therefore, the Contractor is responsible for notifying its subcontractors that the required information will be made public.

(c) Nothing in this clause required the disclosure of classified information.

(d)

(1) Executive compensation of the prime contractor. As a part of its annual registration requirement in the System for Award Management (SAM) database (FAR provision 52.204-7), the Contractor shall report the names and total compensation of each of the five most highly compensated executives for its preceding completed fiscal year, if—

(i) In the Contractor's preceding fiscal year, the Contractor received—

(A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(B) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S.

Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.)

(2) First-tier subcontract information. Unless otherwise directed by the contracting officer, or as provided in paragraph (g) of this clause, by the end of the month following the month of award of a first-tier subcontract with a value of $25,000 or more, the Contractor shall report the following information at http://www.fsrs.gov for that first tier subcontract. (The Contractor shall follow the instruction at http://www.fsrs.gov to report the data.)

(i) Unique identifier (DUNS Number) for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has a parent company.

(ii) Name of the subcontractor.

(iii) Amount of the subcontract award.

(iv) Date of the subcontract award.

(v) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.

(vi) Subcontract number (the subcontract number assigned by the Contractor).

(vii) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district.

(viii) Subcontractor's primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district.

(ix) The prime contract number, and order number if applicable.

(x) Awarding agency name and code.

(xi) Funding agency name and code.

(xii) Government contracting office code.

(xiii) Treasury account symbol (TAS) as reported in FPDS.

(xiv) The applicable North American Industry Classification System code (NAICS).

(3) Executive compensation of the first-tier subcontractor. Unless otherwise directed by the Contracting Officer, by the end of the month following the month of award of a first-tier subcontract with a value of $25,000 or more, and annually thereafter (calculated from the prime contract award date), the Contractor shall report the names and total compensation of each of the five most highly compensated executives for that first-tier subcontractor for the first-tier subcontractor's preceding completed fiscal year at https://www.fsrs.gov , if—

(i) In the subcontractor's preceding fiscal year, the subcontractor received—

(A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements, and other forms of Federal financial assistance; and

(B) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), cooperative agreements and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.)

(e) The Contractor shall not split or break down first-tier subcontract awards to a value less than $25,000 to avoid the reporting requirements in paragraph (d).

(f) The Contractor is required to report information on a first-tier subcontract covered by paragraph (d) when the subcontract is awarded. Continued reporting on the same subcontract is not required unless one of the reported data elements changes during the performance of the subcontract. The Contractor is not required to make further reports after the first-tier subcontract expires.

(g)

(1) If the Contractor in the previous tax year had gross income, from all sources, under $300,000, the Contractor is exempt from the requirement to report subcontractor awards.

(2) If a subcontractor in the previous tax year had gross income from all sources under $300,000, the Contractor does not need to report awards for that subcontractor

(h) The FSRS database at http://www.fsrs.gov will be prepopulated with some information from SAM and FPDS databases. If FPDS information is incorrect, the contractor should notify the contracting officer. If the SAM database information is incorrect, the contractor is responsible for correcting this information.

## CLAUSE I.152 - FAR 52.209-9 UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS (JUL 2013)

(a) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the System for Award Management database via https://www.acquisition.gov.

(b) As required by section 3010 of the Supplemental Appropriations Act, 2010 (Pub. L. 111-212), all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available. FAPIIS consist of two segments—

(1) The non-public segment, into which Government officials and the Contractor post information, which can only be viewed by—

(i) Government personnel and authorized users performing business on behalf of the Government; or

(ii) The Contractor, when viewing data on itself; and

(2) The publicly-available segment, to which all data in the non-public segment of FAPIIS is automatically transferred after a waiting period of 14 calendar days, except for--

(i) Past performance reviews required by subpart 42.15;

(ii) Information that was entered prior to April 15, 2011; or

(iii) Information that is withdrawn during the 14-calendar-day waiting period by the Government official who posted it in accordance with paragraph (c)(1) of this clause.

(c) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(1) If the Contractor asserts in writing within 7 calendar days, to the Government official who posted the information, that some of the information posted to the

non-public segment of FAPIIS is covered by a disclosure exemption under the Freedom of Information Act, the Government official who posted the information must within 7 calendar days remove the posting from FAPIIS and resolve the issue in accordance with agency Freedom of Information procedures, prior to reposting the releasable information. The contractor must cite 52.209-9 and request removal within 7 calendar days of the posting to FAPIIS.

(2) The Contractor will also have an opportunity to post comments regarding information that has been posted by the Government. The comments will be retained as long as the associated information is retained, i.e., for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3) As required by section 3010 of Pub. L. 111-212, all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available.

(d) Public requests for system information posted prior to April 15, 2011, will be handled under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600.

## CLAUSE I.153 - FAR 52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (AUG 2011)

(a) *Definitions*. As used in this clause—

*"Driving"*–

(1) Means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.

(2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.

"Text messaging" means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.

(b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving, dated October 1, 2009.

(c) The Contractor is encouraged to—

(1) Adopt and enforce policies that ban text messaging while driving—

(i) Company-owned or -rented vehicles or Government-owned vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) Conduct initiatives in a manner commensurate with the size of the business, such as—

(i) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

(ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(d) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts that exceed the micro-purchase threshold.

**CLAUSE I.154 - DEAR 970.5223-6 – EXECUTIVE ORDER 13423, STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY, AND TRANSPORTATION MANAGEMENT (OCT 2010)**

Since this contract involves Contractor operation of Government-owned facilities and/or motor vehicles, the provisions of Executive Order 13423 are applicable to the Contractor to the same extent they would be applicable if the Government were operating the facilities or motor vehicles. Information on the requirements of the Executive Order may be found at http://www.archives.gov/federal-register/executive-orders/

## CLAUSE I.155 - DEAR 970.5223-7 – SUSTAINABLE ACQUISITION PROGRAM (OCT 2010)

(a) Pursuant to Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance, the Department of Energy (DOE) is committed to managing its facilities in an environmentally preferable and sustainable manner that will promote the natural environment and protect the health and well being of its Federal employees and contractor service providers. In the performance of work under this contract, the Contractor shall provide its services in a manner that promotes the natural environment, reduces greenhouse gas emissions and protects the health and well being of Federal employees, contract service providers and visitors using the facility.

(b) Green purchasing or sustainable acquisition has several interacting initiatives. The Contractor must comply with initiatives that are current as of the contract award date. DOE may require compliance with revised initiatives from time to time. The Contractor may request an equitable adjustment to the terms of its contract using the procedures at 48 CFR 970.5243-1 Changes. The initiatives important to these Orders are explained on the following Government or Industry Internet Sites:

(1) Recycled Content Products are described at http://epa.gov/cpg

(1) Biobased Products are described at http://www.biopreferred.gov/

(2) Energy efficient products are at http://energystar.gov/products for Energy Star products

(3) Energy efficient products are at http://www.femp.energy.gov/procurement for FEMP designated products

(4) Environmentally preferable and energy efficient electronics including desktop computers, laptops and monitors are at http://www.epeat.net the Electronic Products Environmental Assessment Tool (EPEAT) the Green Electronics Council site

(5) Green house gas emission inventories are required, including Scope 3 emissions which include contractor emissions. These are discussed at Section 13 of Executive Order 13514 which can be found at http://www.archives.gov/federal-register/executive-orders/disposition.html

(6) Non-Ozone Depleting Alternative Products are at http://www.epa.gov/ozone/strathome.html

(7) Water efficient plumbing products are at http://epa.gov/watersense

(c) The clauses at FAR 52.223-2, Affirmative Procurement of Biobased Products under Service and Construction Contracts, 52.223-15, Energy Efficiency in Energy Consuming Products, and 52.223-17 Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts, require the use of products that have biobased content, are energy efficient, or have recycled content. To the extent that the services provided by the Contractor require provision of any of the above types of products, the Contractor must provide the energy efficient and environmentally sustainable type of product unless that type of product—

(1) Is not available;

(2) Is not life cycle cost effective (or does not exceed 110% of the price of alternative items if life cycle cost data is unavailable), EPEAT is an example of lifecycle costs that have been analyzed by DOE and found to be acceptable at the silver and gold level;

(3) Does not meet performance needs; or,

(4) Cannot be delivered in time to meet a critical need.

(d) In the performance of this contract, the Contractor shall comply with the requirements of Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, (http://www.epa.gov/greeningepa/practices/eo13423.htm) and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance (http://www.archives.gov/federal-register/executive-orders/disposition.html). The Contractor shall also consider the best practices within the DOE Acquisition Guide, Chapter 23, *Acquisition Considerations Regarding Federal Leadership in Environmental, Energy, and Economic Performance.* This guide includes information concerning recycled content products, biobased products, energy efficient products, water efficient products, alternative fuels and vehicles, non ozone depleting substances and other environmentally preferable products and services. This guide is available on the Internet at: http://management.energy.gov/documents/AcqGuide23pt0Rev1.pdf.

(e) Contractors must establish and maintain a documented energy management program which includes requirements for energy and water efficient equipment, EnergyStar or WaterSense, as applicable and procedures for verification of purchases, following the criteria in DOE Order 430.2B, Departmental Energy, Renewable Energy, and Transportation Management, Attachment 1, or its successor. This requirement should not be flowed down to subcontractors.

(f) In complying with the requirements of paragraph (c) of this clause, the Contractor shall coordinate its activities with and submit required reports through the Environmental Sustainability Coordinator or equivalent position.

(g) The Contractor shall prepare and submit performance reports using prescribed DOE formats, at the end of the Federal fiscal year, on matters related to the acquisition of environmentally preferable and sustainable products and services. This is a material delivery under the contract. Failure to perform this requirement may be considered a failure that endangers performance of this contract and may result in termination for default [see FAR 52.249-6, Termination (Cost Reimbursement)].

(h) These provisions shall be flowed down only to first tier subcontracts exceeding the simplified acquisition threshold that support operation of the DOE facility and offer significant subcontracting opportunities for energy efficient or environmentally sustainable products or services. The Subcontractor will comply with the procedures in paragraphs (c) through (f) of this clause regarding the collection of all data necessary to generate the reports required under paragraphs (c) through (f) of this clause, and submit the reports directly to the Prime Contractor's Environmental Sustainability Coordinator at the supported facility. The Subcontractor will advise the Contractor if it is unable to procure energy efficient and environmentally sustainable items and cite which of the reasons in paragraph (c) of this clause apply. The reports may be submitted at the conclusion of the subcontract term provided that the subcontract delivery term is not multi-year in nature. If the delivery term is multi-year, the Subcontractor shall report its accomplishments for each Federal fiscal year in a manner and at a time or times acceptable to both parties. Failure to comply with these reporting requirements may be considered a breach of contract with attendant consequences.

(i) When this clause is used in a subcontract, the word "Contractor" will be understood to mean "Subcontractor."

## CLAUSE I.156 - FAR 52.223-19 COMPLIANCE WITH ENVIRONMENTAL MANAGEMENT SYSTEMS (MAY 2011)

The Contractor's work under this contract shall conform with all operational controls identified in the applicable agency or facility Environmental Management Systems and provide monitoring and measurement information necessary for the Government to address environmental performance relative to the goals of the Environmental Management Systems.

## CLAUSE I.157 – FAR 52.232-39 UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS (JUN 2013)

(a) Except as stated in paragraph (b) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:

(1) Any such clause is unenforceable against the Government.

(2) Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or agreement is invoked through an “I agree” click box or other comparable mechanism (e.g., “click-wrap” or “browse-wrap” agreements), execution does not bind the Government or any Government authorized end user to such clause.

(3) Any such clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or agreement.

(b) Paragraph (a) of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulation and procedures.

## CLAUSE I.158 – FAR 52.232-40 PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS (DEC 2013)

(a) Upon receipt of accelerated payments from the Government, the Contractor shall make accelerated payments to its small business subcontractors under this contract, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable contract or subcontract, after receipt of a proper invoice and all other required documentation from the small business subcontractor.

(b) The acceleration of payments under this clause does not provide any new rights under the Prompt Payment Act.

(c) Include the substance of this clause, including this paragraph (c), in all subcontracts with small business concerns, including subcontracts with small business concerns for the acquisition of commercial items.

## CLAUSE I.160 – FAR 52.203-17 CONTACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (APR 2014)

(a) This contract and employees working on this contract will be subject to the whistleblower rights and remedies in the pilot program on Contractor employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub. L. 112-239) and FAR 3.908.

(b) The Contractor shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712, as described in section 3.908 of the Federal Acquisition Regulation.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in all subcontracts over the simplified acquisition threshold.

## CLAUSE I.161 - FAR 52.223-13 Acquisition of EPEAT® – Registered Imaging Equipment (JUN 2014)

(a) *Definitions.* As used in this clause –

"Imaging equipment" means the following products:

(1) *Copier* – A commercially available imaging product with a sole function of the production of hard copy duplicates from graphic hard-copy originals. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as copiers or upgradeable digital copiers (UDCs).

(2) *Digital duplicator* – A commercially available imaging product that is sold in the market as a fully automated duplicator system through the method of stencil duplicating with digital reproduction functionality. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as digital duplicators.

(3) *Facsimile machine (fax machine)* –A commercially available imaging product whose primary functions are scanning hard-copy originals for electronic transmission to remote units and receiving similar electronic

transmissions to produce hard-copy output. Electronic transmission is primarily over a public telephone system but also may be via computer network or the Internet. The product also may be capable of producing hard copy duplicates. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as fax machines.

(4) *Mailing machine* – A commercially available imaging product that serves to print postage onto mail pieces. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as mailing machines.

(5) *Multifunction device (MFD)* – A commercially available imaging product, which is a physically integrated device or a combination of functionally integrated components, that performs two or more of the core functions of copying, printing, scanning, or faxing. The copy functionality as addressed in this definition is considered to be distinct from single-sheet convenience copying offered by fax machines. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as MFDs or multifunction products.

(6) *Printer* – A commercially available imaging product that serves as a hard-copy output device and is capable of receiving information from single-user or networked computers, or other input devices (e.g., digital cameras). The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as printers, including printers that can be upgraded into MFDs in the field.

(7) *Scanner* – A commercially available imaging product that functions as an electro-optical device for converting information into electronic images that can be stored, edited, converted, or transmitted, primarily in a personal computing environment. The unit is capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as scanners.

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for Contractor use at a Federally controlled facility, only imaging equipment that, at the time of submission of proposals and at the time of award, was EPEAT® bronze-registered or higher.

(c) For information about EPEAT®, see *www.epa.gov/epeat*

**CLAUSE I.162 - FAR 52.223-14 Acquisition of EPEAT® – Registered Televisions (JUN 2014)**

(a) *Definitions.* As used in this clause –

"Television" or "TV" means a commercially available electronic product designed primarily for the reception and display of audiovisual signals received from terrestrial, cable, satellite, Internet Protocol TV (IPTV), or other digital or analog sources. A TV consists of a tuner/receiver and a display encased in a single enclosure. The product usually relies upon a cathode-ray tube (CRT), liquid crystal display (LCD), plasma display, or other display technology. Televisions with computer capability (e.g., computer input port) may be considered to be a TV as long as they are marketed and sold to consumers primarily as televisions.

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for Contractor use at a Federally controlled facility, only televisions that, at the time of submission of proposals and at the time of award, were EPEAT® bronze-registered or higher.

(c) For information about EPEAT®, see *www.epa.gov/epeat*.

**CLAUSE I.163 - FAR 52.237-11 Accepting and Dispensing of $1 COIN (SEPT 2008)**

(a) This clause applies to service contracts that involve business operations conducted in U.S. coin and currency, including vending machines, on any premises owned by the United States or under the control of any agency or instrumentality of the United States. All such business operations must be compliant with the requirements in paragraphs (b) and (c) of this clause on and after January 1, 2008.

(b) All business operations conducted under this contract that involve coins or currency, including vending machines, shall be fully capable of –

(1) Accepting $1 coins in connection with such operations; and

(2) Dispensing $1 coins in connection with such operations, unless the vending machine does not receive currency denominations greater than $1.

(c) The Contractor shall ensure that signs and notices are displayed denoting the capability of accepting and dispensing $1 coins with business operations on all premises where coins or currency are accepted or dispensed, including on each vending machine.

# ATTACHMENT J.1

# APPENDIX A

# ADVANCE UNDERSTANDINGS ON HUMAN RESOURCES

**Applicable to the Operation of**
**BROOKHAVEN NATIONAL LABORATORY**

**Contract No. DE-AC02-98CH10886**

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## SECTION I - INTRODUCTION

(a) This Advance Understanding is intended to document the principles and measures for evaluation of the Contractor's Human Resources Management (CHRM) programs and other items of allowable personnel costs and related expenses not specifically addressed elsewhere under this contract. BNL CHRM policies, practices, and plans are located in the BNL Standards-Based Management System (SBMS).

(b) The Contractor shall select, manage, and direct its work force and apply its human resource policies in general conformity with its private operations and/or industrial practices insofar as they are consistent with this Contract. Any changes to the personnel policies or practices in place as of the effective date of this contract which would increase costs, is subject to approval in advance by the Contracting Officer. Any programs or policies initiated for corporate application, permanently or for a finite period, that will impact staffing levels or compensation costs (i.e., furloughs or salary cuts) will not be applicable to Laboratory employees or employees otherwise funded through this contract, without prior approval of the Contracting Officer.

(c) The Laboratory's programs will comply with the Federal Acquisition Regulation (FAR) cost principles and FAR contract clauses, as supplemented by the Department of Energy Acquisition Regulation (DEAR), for all Human Resources programs. The Contractor shall use effective management review procedures and internal controls to assure compliance with the FAR and DEAR as well as to ensure that the cost limitation set forth herein are not exceeded, and that areas which require prior approval of the DOE Contracting Officer or designated representative are reviewed and approved prior to incurrence of costs.

(d) This Appendix A may be modified from time to time by agreement of the Parties. Either Party may, at any time, request that this Appendix A be revised, and the Parties hereto agree to negotiate in good faith concerning any requested revision. Revisions to this Appendix A shall be accomplished by executing modification to the prime contract.

(e) The Laboratory Director may make exceptions to the provisions of Appendix A when such exceptions are in the best interest of contract operations or will facilitate or enhance contract performance and are approved in advance by the Contracting Officer.

(f) The Contractor, or designated representative, shall promptly furnish all reports and information required or otherwise indicated in this Advance Understanding to the Contracting Officer. The Contractor recognizes that the Contracting Officer

or designated representative may make other data requests from time to time and the Contractor agrees to cooperate in meeting requests.

(g) It is understood that no provision of this Appendix can affect any right guaranteed to a bargaining unit employee by the terms of a Collective Bargaining Agreement.

## SECTION II - HUMAN RESOURCES STRATEGY, BUSINESS PLANNING AND PERFORMANCE MANAGEMENT

The Laboratory Business Plan highlights areas important to DOE and aligns with critical contract vision components. The HR Business Plan, which is subordinate to the Laboratory Business Plan, will be reviewed with DOE representatives at least annually. The human resource business practices will be maintained in the Laboratory's SBMS. Any significant changes to the HR business practices shall be submitted to the DOE Contracting Officer for approval. Contract performance metrics and measures will be developed in partnership with DOE and are detailed in the Appendix B.

CHRM performance objectives and targets will align with, and facilitate the achievement of the Laboratory mission; be limited in number; focus on strategic results, systems-based measures, and assessment against industry best practices; be developed annually and mutually agreed upon by the Contractor and DOE in accordance with Appendix B; be reviewed periodically to target key strategic objectives and results; and include outcomes that result in cost effective management of laboratory human resources to support accomplishment of DOE and Laboratory mission, strategy and objectives.

## SECTION III - COMPENSATION

(a) Salary increases.

(1) Any combination of salary increases for an individual in a single fiscal year, including merit increases and those resulting from reclassification and promotion, which result in a salary that is 25% greater than the employee's salary prior to the increase shall require prior approval by the Laboratory Director. Salary increases that exceed 15% shall be reported annually to the Contracting Officer.

(2) An administrative stipend may be paid to an employee who is temporarily assigned responsibilities of a higher level position or other significant duties not part of the employee's regular position. The sum of stipend and

base salary shall not exceed the maximum salary of the higher level position. The Deputy Laboratory Director's approval, at least, is required for all stipends. The Laboratory Director must authorize administrative stipends that exceed 15% of the appointee's annual base salary. The entire amount of the stipend shall be removed when the employee reverts back to their original position. All stipends shall be reported annually to the Contracting Officer.

(3) Notwithstanding any other term or condition set forth in this Contract, the Contracting Officer's approval of compensation actions pursuant to H.22 will consider:

A. relative alignment of proposed salaries with subordinate levels;

B. available market data, comparing total-cash compensation;

C. total compensation relative to the Executive Compensation Benchmark Amount established periodically by the Office of Federal Procurement Policy (OFPP).

(b) Compensation Increase Plan (CIP).

(1) The Contractor shall submit the CIP proposal not later than 60 days prior to the start of the new salary cycle.

(2) In order to pay "on-market-on-average," in the calculation of market position, Laboratory salary data shall be matched to survey data as of the midpoint of the salary cycle (i.e., April 1 for a 10/1-9/30 salary cycle).

(3) The CIP shall be expressed as a percentage of the reimbursed base payroll for the end of the preceding salary cycle (i.e., the base payroll for 9/30 for a 10/1-9/30 salary cycle)

(4) The Contractor is authorized a Promotion/Adjustment fund of up to 1% of base reimbursed payroll. Additional funding for promotions/adjustments shall be included in the CIP request as a discrete line item.

(c) Payment of Joint Appointees and Seconded Individuals. Joint Appointees and Seconded Individuals shall be paid at the salary and fringe benefit rates established by the home institution, for the percentage of time worked at the host institution.

## SECTION IV - ANCILLARY PAY COMPONENTS

(a) Premium Pay.
The Contractor is authorized to provide shift differentials and other premium pay, reporting allowances, meal allowances, and hazardous duty pay, as approved by the Contracting Officer.

(b) Extended work week.
When deemed essential to the performance of work under this contract, an extended work week may be established at the Laboratory or any portion thereof.

(c) Medical evacuation services/insurance.
Employees required to perform official travel to foreign countries where local care is substandard (according to U.S. standards) may have coverage that pays for evacuation services to an acceptable medical facility in a proximal location on an urgent or emergency basis. The policy shall cover evacuation, expatriation of remains, and ancillary costs associated with the incident. Costs for such coverage for eligible employees are allowable.

(d) Foreign Travel.
Allowances payable for official travel in foreign areas will be at rates established by the Secretary of State.

## SECTION V - PAYMENTS ON TERMINATION OF EMPLOYMENT

(a) Sick leave. The payment of accumulated sick leave upon termination is unallowable.

(b) Vacation. The Contractor is authorized to pay for accumulated vacation upon termination at the rate in effect as of the date of termination, including any shift differential.

(c) Termination for Administrative Convenience.
An employee dismissed for the administrative convenience of the Laboratory may in appropriate circumstances be given a termination payment of one month's pay at his/her regular base rate in the case of a monthly employee and of two weeks' pay in the case of a weekly employee.

An individual employee may be considered for other termination pay for other administrative reasons with the approval of the Director and the Contracting Officer.

(d) Termination at Retirement.

Each weekly wage employee with a minimum of five years' service retiring on or after his/her 55th birthday and whose combination of age and service equal 70, may be given up to two weeks' pay at his/her regular base rate.

## SECTION VI - LABOR RELATIONS

(a) Collective Bargaining.

Costs of fringe benefits and wages paid to employees under collective bargaining agreements are allowable. All other reasonable costs and expenses, such as expenses relating to the grievance process, arbitration and arbitration awards, and other costs and expenses incurred pursuant to applicable collective bargaining agreements and revisions thereto, are also allowable.

(b) Collective Bargaining Agreements.
The Contractor shall provide copies of collective bargaining agreements to the Contracting Officer as they are ratified or modified.

(c) Bargaining Unit Activity.
Pay for absences from work by employees acting in the capacity of union officers, union stewards and committee members for time spent in handling grievances, negotiating with the Laboratory, and serving on labor management (Laboratory) committees, are allowable.

## SECTION VII – STAFF SETTLEMENT COSTS

(a) Staff Settlement Costs - The Contractor is authorized to resolve claims settlements up to $25,000 without the advance approval of the CO. Workers' compensation claims settlements shall be in accordance with H.26.

## SECTION VIII – PROGRAMS INVOLVING EMPLOYEE ABSENCE FROM THE WORKPLACE

(a) Paid Leave.

The Laboratory will provide a reasonable and cost effective paid leave program. Paid leave includes vacation, holiday, sick, jury, bereavement, voting and personal leave according to approved Laboratory schedules. Only leave categories included in the Benefit Value Study shall be allowable.

(b) Sabbaticals/Temporary Assignments of Laboratory Employees to Other Institutions for Teaching And Research.

The Contractor shall be reimbursed for expenditures consistent with Laboratory policy arising out of an approved employee assignment to another institution for teaching and/or research if the assignment does not exceed one year. However, DOE requires thirty (30) calendar days prior written notice.

(c) Military Leave.

Military leave and associated pay is authorized in accordance with Contractor policies, and/or State or Federal law.

(d) Security Leave.

Wages or salaries paid to employees when access authorization is suspended by DOE will be allowable costs under the following conditions:

If a position which does not require access authorization is not available, the Laboratory Director or designee may place the employee on leave with pay at his or her base compensation until final disposition of the case. Leave with pay requires the Contracting Officer's concurrence that no position is available to which the employee might reasonably be transferred.

## SECTION IX – EMPLOYEE TRAINING, EDUCATION AND DEVELOPMENT

(a) The Laboratory Director or designee shall send an annual report to the Contracting Officer providing the number of employees participating in training, education and development programs and the dollars spent.

(b) The Laboratory shall establish training, education and development programs that are consistent with DOE requirements and guidance, industry standards,

and other Federal, State and local regulations. These programs shall ensure that employees are well-qualified and competent to manage facilities and meet mission requirements through administrative, professional and technical excellence.

(1) Training.

The Laboratory may permit selected employees to attend training classes while receiving full pay in order to enable them to acquire the needed skills to qualify them for more responsible jobs and maintain competence in their field.

(2) Education.

(A) The Laboratory may approve and support educational courses taken by employees which serve to improve efficiency and productivity of Laboratory operations, increase needed skills, or prepare employees for increased responsibilities.

(B) An employee or third party on behalf of an employee may be paid for tuition, required textbooks and fees for courses approved in advance by the Laboratory.

(3) Development.

The Contractor shall be reimbursed for the cost of development programs, including but not limited to, apprenticeship training, supervisory training, management development, career updating and redirection, and work-study and other programs supporting the development of staff in fields of interest to the Laboratory.

## SECTION X - EMPLOYEE PROGRAMS

(a) The contractor may expend an amount not to exceed 1.5% (0.015) of the Laboratory's base payroll for the awards identified under (1) and (2) and (3) below:

(1) Service/Retirement/Non-Performance awards.
The Contractor is authorized to provide monetary or non-monetary recognition for achievements not based on performance. Awards may include, for example, Length of Service/Retirement Recognition; Safety Awards; Patent Awards; Suggestion Program.

(2) Performance award programs.

The Contractor may recognize employees or groups of employees who have distinguished themselves by their significant contributions and outstanding performance in the course of their work. Awards may be provided to employees or groups of employees in the form of cash. Additionally, noteworthy achievements and special efforts may be recognized by the presentation of plaques, certificates, and memorabilia.

(3) Senior Management Incentive Program.

The Contractor may recognize a senior manager for his/her performance. The Program provides for a 20-30% non-base incentive for senior managers based on their performance, Performance Evaluation Management Plan score and achievement of incentive plan goals. DOE agrees to reimburse up to $400,000 annually (provided the combination of (1) and (2) above and this paragraph remain within the 1.5% base payroll fund, as indicated in (a) above). The contractor will match an equal amount and payouts will be split equally between the contractor and DOE. Contracting Officer approval is required prior to annual disbursement of the aforementioned incentive payouts. Additionally, if the contractor deviates from approved program parameters, the contractor shall seek prior approval from the Contracting Officer.

Annually the Contractor shall provide the Contracting Officer with reports on the individual award program expenditures.

(b) Non-Base Cash Compensation

The contractor may expend non-base cash compensation amounts in payments to employees in accord with programs submitted to and approved by DOE Contracting Officer, including, but not limited to, project incentives, strategic skill stipends, and lump sum amounts in lieu of salary increases. Amount expended under such approved programs will not be counted towards the limits for awards in section b. DOE will be provided a listing, on an annual basis, of the programs utilized and the respective amounts expended.

(c) Cost of Health Services.

The Contractor shall be reimbursed for the costs of operating a Health Unit for Laboratory employees, including but not limited to the following: Pre-employment physicals and other medical examinations required to meet Laboratory employment requirements, medical care for occupational injuries and to provide

relief for minor physical complaints of employees while at the Laboratory, and health examinations provided as a health service for employees.

(d) Other.

(1) The Contractor may develop, administer and support a variety of employee programs. These programs may include athletic, cultural, and family activities. Participant fees may be collected to partially offset the cost of some or all of these activities. Profits from group buying services operated for the benefit of all employees may be used to assist in the support of the recreation program. Appropriate facilities, utilities, and maintenance may be provided by the Laboratory. Entertainment costs, including costs of amusement, diversions, and social activities are unallowable, as well as directly related costs such as tickets, meals, alcohol, lodging, rentals, transportation and gratuities.

(2) Wellness program. Costs of a Wellness Program to promote employee health and fitness are allowable. This program shall be limited to activities related to stress management, smoking cessation, exercise, nutrition, and weight loss.

(3) Employee Assistance Program. The Contractor shall (1) maintain a program of preventive services, education, short-term counseling, coordination with and referrals to outside agencies, and follow-up upon return to work that conforms to the requirements of 10 CFR 707.6, Employee Assistance, Education, and Training; (2) Submit for approval by the Contracting Officer any changes to the employee assistance program implementation plan; (3) Prepare and submit information to DOE concerning Employee Assistance Program services as requested by the Contracting Officer. Such reports shall not include individual identifiers

(4) Employee Communications. The costs incurred in the publication, printing and distribution of a newsletter, handbooks and other employee communication media designed to effectuate better employee relations and understanding of Appendix A and current employment regulations shall be reimbursed and managed in a cost effective manner.

(5) Distinguished Lectureship Program

The Laboratory maintains a Distinguished Lectureship Program under which distinguished scientists are invited to the Laboratory to deliver at least one lecture a week on scientific subjects related to the research program, and to be available to members of the scientific staff for discussion of such subjects.

The Distinguished Lectureship Program restricts the number of appointments to a maximum of 10 in each fiscal year. Appointments are to be made by the Director of the Laboratory only.

The Laboratory may pay each lecturer a stipend of up to $2,500 a week, not to exceed three weeks. In addition, the lecturer may be paid actual travel expenses and be given, without charge, the use of an on-site apartment.

The Laboratory shall notify the Department of Energy of each appointment to be made under the Distinguished Lectureship Program and the amount of the proposed honorarium.

## SECTION XI - COSTS OF RECRUITING PERSONNEL

(a) On an annual basis, the Laboratory will conduct workforce planning, documented in the form of a plan, and submit it to the Contracting Officer for review and approval. The Plan will identify critical skills necessary to meet mission and contract requirements, provide an updated gap analysis, and outline that year's strategy for the recruitment and retention of those skills, as well as for any necessary restructuring.

(b) The Contractor may incur costs for the recruitment of personnel, as follows:

(1) Costs of advertising and agency and consultant fees.

(2) Recruiting Expenses - The Laboratory may reimburse, consistent with other provisions of this contract, employees traveling for recruiting purposes, the actual cost incurred for the following expenses: transportation, lodging, and meals for prospective employees and, when approved, for spouses or representatives of academic institutions, professional societies and other scientific organizations and incidental expenses incurred in recruiting.

(3) New or prospective employees who have been offered and have accepted a position, and who are required to take a pre-placement physical examination, shall be reimbursed for costs of the physical examination.

(4) Costs associated with pre-employment screening shall be allowable.

(c) Recruitment/Retention Tools.

(1) The Contractor may pay a sign-on bonus of up to $20,000, to recruit employees with critical skills.

(2) An annual retention bonus of up to 20% of an employee's base salary is authorized to retain employees with critical skills. The retention incentive shall not exceed 30% of the employee's salary when combined with other variable pay components in a year. Contracting Officer approval is required for retention bonuses exceeding a period of 5 years.

(3) The Contractor is authorized to provide service credit of up to 10 years to critical skill new-hires for previous relevant experience at another DOE facility or external organization. Credited service may be used to establish eligibility for, or determine accrual of, service-based benefits (i.e., vacation accruals, vesting, or severance – unless severance has been paid for prior service as indicated in Clause H.22), in accordance with the contractor's policies.

(4) Costs associated with an Employee Referral Award Program (ERAP). The ERAP program was instituted in order to reward employees who refer successful candidates for employment. For certain specified jobs, BNL employees may recommend applicants to the HR Division and subsequently receive a monetary award if the referral is hired. An award of $1,000 will be made for referral and hire for an exempt level position; $500 for referral for a non-exempt hire. Payment will be made after the referred candidate has completed 90 days of employment. Referring employee must still be at the Laboratory to be eligible.

(5) Exceptional Recruitment Allowance.

Relocating new employees not eligible for closing costs or costs incidental to the purchase of a new home under FAR 31.205-35., may be paid an Exceptional Recruitment Allowance to reimburse them for actual costs related to relocation, up to a maximum of ten thousand dollars ($10,000).

(6) Housing for Temporary Appointees.

(A) Temporary Appointees

When suitable on-site housing is not available for them, the Laboratory may reimburse persons who receive temporary appointments to the Scientific Staff during the months of June, July, August and September, as well as Research Collaborators spending extended periods of time at the

Laboratory during the summer months, for excess rentals in accordance with the following conditions:

(i) The excess rental to be reimbursed is the difference between the rental for a Laboratory apartment of the size which would normally be assigned to a summer appointee and the actual cost of reasonably similar accommodations off the site, if available.

(ii) The excess rental for which reimbursement is provided will not exceed $400 per month.

(iii) Authorization for reimbursement of excess rental is, in every case, approved by the Director of the Laboratory or his designee.

Because Research Collaborators receive no salary for their work at the Laboratory, the deduction equivalent to on-site rental is not made.

(7) Group Travel Accident Insurance.

The Laboratory has in force a Group Travel Accident Insurance Policy covering all employees, trustees, nonsalaried officers, guests, and all other persons with official appointments at the Laboratory who, during their stay, are authorized to travel on Laboratory business. It provides coverage equal to five (5) times annual salary, subject to a $100,000 minimum and a $500,000 maximum, and gives a full 24-hour accident coverage during business travel. No employee contributions are required for this coverage.

## SECTION XII – REDUCTIONS IN CONTRACTOR EMPLOYMENT

Reductions in employment will be conducted in accordance with the contractor's personnel management policies and practices and in accordance with applicable Departmental guidance on workforce restructuring, as revised from time to time.

(a) Work Force Transition.

In implementing the annual workforce plan required in Section X(a), the Laboratory will develop appropriate work force transition strategies consistent with restructuring

objectives contained in the Department's "Planning Guidance for Contractor Work Force Restructuring."

(b) Workforce Restructuring Actions

(1) The Contractor will notify or request approval of workforce restructuring actions in accordance with the following:

| RESTRUCTURING ACTION | #EMPLOYEES POTENTIALLY IMPACTED | ACTION REQUIRED |
|---|---|---|
| Voluntary | 50-99 | CO Notification |
| Voluntary | 100+ | CO Approval |
| Involuntary | 50+ | CO Approval |

(A) Notifications will include a business case outlining the drivers necessitating restructuring activity, an implementation strategy and communication plan.
(B) Actions requiring approval will additionally require a workforce restructuring plan prepared in accordance with DOE policy.
(C) Notifications and Approval actions shall be submitted a minimum of 10 business days prior to announcement to employees.
(D) Waivers or self-select forms that vary from those provided in DOE policy documents are subject to approval by DOE.

(2) Any employee who volunteers for layoff or retirement during a time period in which the Contractor has a DOE approved or Laboratory Management approved active reduction in force plan or action will be eligible for severance pay provided the termination is accepted by Laboratory management and results in the retention of an employee who otherwise would have been laid off. Severance not associated with workforce restructuring is unallowable.

(3) Severance pay benefit

(A) Eligibility. All regular employees who work at least 20 hours per week are eligible on the first day of employment. Term employees are eligible after 6 months of employment.
(B) Severance Pay Benefit. 1 week of base pay for each of the first 10 years of service; 1.5 weeks of base pay for each of the next 5 years of service; and 2 weeks of base pay for years of service above 15 years. For active non-union employees, the maximum severance benefit provided by the Plan is 39 weeks of Base Pay with a cap of $50,000.

(4) Pay in lieu of notice. Any employee who is involuntarily separated due to a work force restructuring may be given pay in lieu of the required minimum written notice of termination. Accumulated vacation credit is also paid.

(5) The Contractor, to the extent practicable, shall provide outplacement services in the forms of skills assessment and resume preparation to those employees who are involuntarily separated due to a layoff.

(c) Displaced Worker Medical Benefit

Contractor employees who separate from employment voluntarily or involuntarily (other than for cause) and who were eligible for medical insurance coverage under the contractor's plan at the time of separation from employment are eligible for medical coverage under the DOE Displaced Workers' Medical Benefits Program, provided they are not eligible for coverage under another plan, e.g. another employer's group health plan, the contractor's Retiree Medical Plan, a spouse's medical plan, or Medicare, based on the following schedule:

(1) First Year: The Contractor's contribution for an active employee
(2) Second Year: One half of the Contractor's Cobra premium
(3) Third and Subsequent Years: Reasonable administrative costs that exceed the two percent administrative fee paid by the displaced worker.

Eligibility is determined in accordance with Departmental guidance on workforce restructuring.

## SECTION XIII – EMPLOYEE BENEFITS

(a) Energy Employees' Occupational Illness Compensation Program Act (EEOICPA).

The Laboratory agrees to comply with requests for information, records, and other program requirements to ensure the orderly administration and adjudication of claims under the EEOICPA.

(b) Dependent Care Facilities.

The Laboratory is authorized to provide a dependent care benefit program consistent with the written directions of the Contracting Officer.

The Contractor shall sub-contract the operation of the dependent care center, unless otherwise approved by the Contracting Officer. Support costs for labor, materials, and supplies expended for the operation of a dependent care facility

shall not be allowable under any circumstances unless the facility is for the exclusive use of Laboratory employees and except for any expense items such as utilities, maintenance, food services, medical services, or supplies already used in support of site operations and readily available. The cost of meals shall not be allowable.

(c) Adoption Assistance

The Laboratory may reimburse employees up to $5,000 for costs associated with the adoption of an unrelated minor child. If both of the adoptive parents are employees, up to $10,000 may be reimbursed. Reimbursable costs may include attorney fees, agency fees, court costs, transportation costs and medical costs.

# U.S. DEPARTMENT OF ENERGY

# AND

# BROOKHAVEN SCIENCE ASSOCIATES, LLC

# ATTACHMENT J.2

# APPENDIX B

# PERFORMANCE EVALUATION AND MEASUREMENT PLAN

# FISCAL YEAR 2013

# BROOKHAVEN NATIONAL LABORATORY

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## INTRODUCTION

This document, the Performance Evaluation and Measurement Plan (PEMP), primarily serves as DOE's Quality Assurance/Surveillance Plan (QASP) for the evaluation of Brookhaven Science Associates (hereafter referred to as "the Contractor") performance regarding the management and operations of the Brookhaven National Laboratory (hereafter referred to as "the Laboratory") for the evaluation period from October 1, 2012, through September 30, 2013. The performance evaluation provides a standard by which to determine whether the Contractor is managerially and operationally in control of the Laboratory and is meeting the mission requirement and performance expectations/objectives of the Department as stipulated within this contract.

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

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

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

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

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

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

The FY 2013 Contractor performance grades for each Goal will be determined based on the weighted sum of the individual scores earned for each of the Objectives described within this document for Science and Technology (S&T) and for Management and Operations (M&O). Each Goal is composed of two or more weighted Objectives. Additionally, a set of notable outcomes has been identified to highlight key aspects/areas of performance deserving special attention by the Contractor for the upcoming fiscal *year*. Each notable outcome is linked to one or more Objectives, and failure to meet expectations against any notable outcome will result in a grade less than B+ for that Objective(s) (i.e., if the contractor fails to meet expectations against a notable outcome tied to an Objective under Goal 1.0, 2.0, or 3.0, the SC program office that assigned the notable outcome shall award a grade less than "B+" for the Objective(s) to which the notable outcome is linked; and if the contractor fails to meet expectations against a notable outcome tied to an Objective under Goal 4.0, 5.0, 6.0, 7.0 or 8.0, SC shall award a grade less than "B+" for the Objective(s) to which the notable outcome is linked). Performance above expectations against a notable outcome will be considered in the context of the Contractor's entire performance with respect to the relevant Objective. The following section describes SC's methodology for determining the Contractor's grades at the Objective level.

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

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

**Figure 1. FY 2013 Contractor Letter Grade Scale**

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

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

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

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

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

| **Letter Grade** | **Numerical Grade** | **Definition** |
|---|---|---|
| A+ | 4.3-4.1 | Significantly exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). Performance is notable for its significant contributions to the management and operations across the SC system of laboratories, and/or has been recognized by external, independent entities as exemplary. |
| A | 4.0-3.8 | Notably exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). Performance is notable for its contributions to the management and operations across the SC system of laboratories, and/or as been recognized by external, independent entities as exemplary. |
| A- | 3.7-3.5 | Exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). |
| B+ | 3.4-3.1 | Meets expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). No performance has, or has the potential to, adversely impact 1) the delivery of the current and/or future DOE/Laboratory mission(s), 2) the DOE and/or the Laboratory's reputation, or does not 3) provide a sustainable performance platform. |
| B | 3.0 -2.8 | Just misses meeting expectations of performance against a few aspects of the Objective in question. In a few minor instances, the Contractor's systems function at a level that does not fully support the Laboratory's current and future science and technology mission, or provide a sustainable performance platform. |
| B- | 2.7-2.5 | Misses meeting expectations of performance against several aspects of the Objective in question. In several areas, the Contractor's systems function at a level that does not fully support the Laboratory's current and future science and technology mission, or provide a sustainable performance platform. |

| Letter Grade | Numerical Grade | Definition |
|---|---|---|
| C+ | 2.4-2.1 | Misses meeting expectations of performance against many aspects of the Objective in question. In several notable areas, the Contractor's systems function at a level that does not fully support the Laboratory's current and future science and technology mission or provide a sustainable performance platform, and/or have affected the reputation of the Laboratory or DOE. |
| C | 2.0-1.8 | Significantly misses meeting expectations of performance against many aspects of the Objective in question. In many notable areas, the Contractor's systems do not support the Laboratory's current and future science and technology mission, nor provide a sustainable performance platform and may affect the reputation of the Laboratory or DOE. |
| C- | 1.7- 1.1 | Significantly misses meeting expectations of performance against most aspects of the Objective in question. In many notable areas, the Contractor's systems demonstrably hinder the Laboratory's ability to deliver on current and future science and technology mission, and have harmed the reputation of the Laboratory or DOE. |
| D | 1.0-0.8 | Most or all expectations of performance against the Objective in question are missed. Performance failures in this area have affected all parts of the Laboratory; DOE leadership engagement is required to deal with the situation and help the Contractor. |
| F | 0.7-0 | All expectations of performance against the Objective in question are missed. Performance failures in this area are not recoverable by the Contractor or DOE. |

**Figure I-1. Letter Grade and Numerical Grade Definitions**

Calculating Individual Goal Scores and Letter Grades:

Each Objective is assigned the earned numerical score by the evaluating office as stated above. The Goal rating is then computed by multiplying the numerical score by the weight of each Objective within a Goal. These values are then added together to develop an overall numerical score for each Goal. For the purpose of determining the final Goal grade, the raw numerical score for each Goal will be rounded to the nearest tenth of a point using the standard rounding convention discussed below and then compared to Figure 2. A set of tables is provided at the end of each Performance Goal section of this document to assist in the calculation of Objective numerical scores to the Goal grade. No overall rollup grade shall be provided.

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

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

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

**Figure 2. Laboratory Report Card**

Determining the Amount of Performance-Based Fee Earned:

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

| **Program** | **Numerical Score** | **Weight[1]** | **Weighted Score** | **Total Score** |
|---|---|---|---|---|
| ASCR | | | | |
| BES | | | | |
| BER | | | | |
| FES | | | | |
| HEP | | | | |
| NP | | | | |
| WDTS | | | | |
| NNSA | | | | |
| DHS | | | | |
| EM | | | | |
| EERE | | | | |
| FE | | | | |
| IN | | | | |
| | | | **Initial S&T Score** | |

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

[1] Weight = Program cost divided by total cost

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

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

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

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

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

The percentage of the available performance-based fee that may be earned by the Contractor shall be determined based on the final score for S&T (see Table C) and then compared to Figure 3, below. The final score for M&O from Table C shall then be utilized to determine the final fee multiplier (see Figure 3), which shall be utilized to determine the overall amount of performance-based fee earned for FY 2013 as calculated within Table D.

| Overall Final Score for either S&T or M&O from Table B. | Percent S&T Fee Earned | M&O Fee Multiplier |
|---|---|---|
| **4.3** | **100%** | **100%** |
| **4.2** | | |
| **4.1** | | |
| **4.0** | **97%** | **100%** |
| **3.9** | | |
| **3.8** | | |
| **3.7** | **94%** | **100%** |
| **3.6** | | |
| **3.5** | | |

| Overall Final Score for either S&T or M&O from Table B. | Percent S&T Fee Earned | M&O Fee Multiplier |
|---|---|---|
| 3.4 | 91% | 100% |
| 3.3 | | |
| 3.2 | | |
| 3.1 | | |
| 3.0 | 88% | 95% |
| 2.9 | | |
| 2.8 | | |
| 2.7 | 85% | 90% |
| 2.6 | | |
| 2.5 | | |
| 2.4 | 75% | 85% |
| 2.3 | | |
| 2.2 | | |
| 2.1 | | |
| 2.0 | 50% | 75% |
| 1.9 | | |
| 1.8 | | |
| 1.7 | 0% | 60% |
| 1.6 | | |
| 1.5 | | |
| 1.4 | | |
| 1.3 | | |
| 1.2 | | |
| 1.1 | | |
| 1.0 to 0.8 | 0% | 0% |
| 0.7 to 0.0 | 0% | 0% |

**Figure 3. Performance-Based Fee Earned Scale**

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

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

| Earned Fee Calculation | |
|---|---|
| Available Fee | |
| Overall Earned Performance -Base Fee (Table E) | X |
| Earned Fee | |

**Table E. Earned Fee Calculation**

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

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

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

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

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

The adjustment of a grade and/or reduction of otherwise earned fee will be determined by the severity of the performance failure and consideration of mitigating factors. DEAR 970.5215-3 Conditional Payment

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

of Fee, Profit, and Other Incentives – Facility Management Contracts is the mechanism used for reduction of fee as it relates to performance failures related to safeguarding of classified information and to adequate protection of environment, health and safety. Its guidance can also serve as an example for reduction of fee in other areas.

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

# II. PERFORMANCE GOALS, OBJECTIVES & NOTABLE OUTCOMES

**Background**

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

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

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

**Performance Goals, Objectives, and Notable Outcomes**

The following sections describe the Performance Goals, their supporting Objectives, and associated notable outcomes for FY 2013.

## GOAL 1.0 Provide for Efficient and Effective Mission Accomplishment

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

The weight of this Goal is TBD%.

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

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science, other cognizant HQ Program Offices, and other customers as identified below. The overall Goal score from each HQ Program Office and/or customer is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 1.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2013.

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

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 1.2, below). The overall score earned is then compared to Table 1.3 to determine the overall letter grade for this Goal. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2013 as compared to the total cost for those remaining HQ Program Offices.

## Objectives

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

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

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

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

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

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

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

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

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

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

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

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

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

| Letter Grade | Definition |
|---|---|
| A- | In addition to satisfying the conditions for B+<br>• Laboratory staff members have *leadership positions* in professional organizations OR *staff has contributing role in National Academy or equivalent panels to discuss further research directions*;<br>• Laboratory staff members have *leadership positions* in DOE sponsored workshops and strategic planning activities.<br>• The Laboratory program consistently submits competitive proposals that challenge convention and open *significant* new avenues for research that are well aligned with DOE mission needs.<br>• Laboratory staff hold *leadership positions* in multi-institutional research collaborations. |
| $B^+$ | The Laboratory has achieved each of the following objectives:<br>• Laboratory staff members are *active participants* in professional organizations, committees, and activities, and take on leadership responsibilities commensurate with experience and expertise.<br>• Laboratory staff members are *active participants* in DOE sponsored workshops and strategic planning activities.<br>• Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE.<br>• The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE mission needs.<br>• Laboratory staff are *active participants* in multi-institutional research collaborations |
| B | • Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE.<br>• The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE mission needs.<br>BUT the Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons:<br>• Although *regular participants* in professional organizations, committees, and activities, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.*<br>• Although *regular participants* in DOE sponsored workshops and strategic planning activities, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.*<br>• Although *active members of* multi-institutional research collaborations, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.* |
| B- | • Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE.<br>BUT the Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons:<br>• The Laboratory program submits competitive proposals *but these either lack innovation or are not well aligned with DOE mission needs*.<br>• Laboratory staff are *infrequent participants* in professional organizations, committees, and activities, and *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.*<br>• Laboratory staff are *infrequent participants* in DOE sponsored workshops and strategic planning activities, and *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.*<br>• Although *active members of* multi-institutional research collaborations, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.* |

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

**Notable Outcomes**

- BES: Deliver impactful science that is distinguishable from core research for the Energy Frontier Research Center: "Center for Emergent Superconductivity," as measured by the FY 2013 annual reports, highlights, and participation in monthly conference calls. (Objective 1.1)
- BER: Deliver a demonstration on the use of the Systems Biology Knowledgebase to provide impactful understanding of plants relevant to bioenergy as part of the on-schedule delivery (Feb. 2013) of the beta release version 1.0 of the Systems Biology Knowledgebase. (Objective 1.1)
- NP: In collaboration with Los Alamos National Laboratory and Oak Ridge National Laboratory develop a production-scale target and chemical process to make Ac-225 (Objective 1.1)
- HEP: Exploit the large dataset from the ATLAS detector to search for beyond the Standard Model physics and begin the understanding of TeV scale physics through the research of the Brookhaven staff and by supporting the research of the entire U.S. ATLAS community. (Objective 1.1)

| Program Office[2] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall ASCR Total | |
| **Office of Basic Energy Sciences** | | | | |

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

| | | | | |
|---|---|---|---|---|
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall BES Total | |
| **Office of Biological and Environmental Research** | | | | |
| 1.1 Impact | | | 60% | |
| 1.2 Leadership | | | 40% | |
| | | | Overall BER Total | |
| **Office of High Energy Physics** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall HEP Total | |
| **Office of Nuclear Physics** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall NP Total | |
| **Office of Workforce Development for Teachers and Scientists** | | | | |
| 1.1 Impact | | | 0% | |
| 1.2 Leadership | | | 0% | |
| | | | Overall WDTS Total | |
| **Office of Defense Nuclear Nonproliferation** | | | | |
| 1.1 Impact | | | 46% | |
| 1.2 Leadership | | | 54% | |
| | | | Overall DNN Total | |
| **Department of Homeland Security** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall DHS Total | |
| **Office of Intelligence** | | | | |
| 1.1 Impact | | | 60% | |
| 1.2 Leadership | | | 40% | |
| | | | Overall IN Total | |
| **Nuclear Regulatory Commission** | | | | |
| 1.1 Impact | | | 50% | |

| | | | | |
|---|---|---|---|---|
| 1.2 Leadership | | | 50% | |
| Overall NRC Total | | | | |

**Table 1.1 – Program Performance Goal 1.0 Score Development**

| Program Office | Letter Grade | Numerical Score | Funding Weight (cost) | Overall Weighted Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | TBD% | |
| **Office of Basic Energy Sciences** | | | TBD% | |
| **Office of Biological and Environmental Research** | | | TBD% | |
| **Office of High Energy Physics** | | | TBD% | |
| **Office of Nuclear Physics** | | | TBD% | |
| **Office of Workforce Development for Teachers and Scientists** | | | TBD% | |
| **Office of Defense Nuclear Nonproliferation** | | | TBD% | |
| **Department of Homeland Security** | | | TBD% | |
| **Office of Intelligence** | | | TBD% | |
| **Nuclear Regulatory Commission** | | | TBD% | |
| **Performance Goal 1.0 Total** | | | | |

**Table 1.2 – Overall Performance Goal 1.0 Score Development**

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

**Table 1.3 – Goal Final Letter Grade**

[1] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2012.

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

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

The weight of this Goal is TBD%.

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

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science Program Office as identified below. The overall Goal score from each Program Office is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 2.1). Final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2013.

- Office of Advanced Scientific Computing Research (ASCR) (TBD%)
- Office of Basic Energy Sciences (BES) (TBD%)
- Office of Biological and Environmental Research (BER) (TBD%)
- Office of High Energy Physics (HEP) (TBD%)
- Office of Nuclear Physics (NP) (TBD%)
- Office of Workforce Development for Teachers and Scientists (WDTS) (TBD%)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 2.2 below). The overall score earned is then compared to Table 2.3 to determine the overall letter grade for this Goal. Individual Program Office weightings for each of the Objectives identified below are provided within Table 2.1. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by DOE HQ Office of Science's (SC) Program Offices for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2013 as compared to the total cost for those remaining HQ Program Offices.

**<u>Objectives</u>**

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

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

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

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

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

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

| Letter Grade | Definition |
|---|---|
| A | In addition to satisfying all conditions for B+, *all* of the following conditions are also met:<br>• The Laboratory is recognized by the research community as a leader for making the science case for the acquisition;<br>• The Laboratory takes the initiative to demonstrate the potential for revolutionary scientific advancement working in partnership with HQ<br>• The Laboratory identifies, analyzes, and champions, to HQ and Site office, novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing. |
| A- | In addition to satisfying all conditions for B+, *all* of the following conditions are also met:<br>• The approaches proposed by the Laboratory are widely regarded as innovative, novel, comprehensive, and potentially cost-effective<br>• Reviews repeatedly confirm potential for scientific discovery in areas that support the Department's mission, and potential to change a discipline or research area's direction. |
| B+ | The Laboratory has achieved each of the following objectives:<br>• The Laboratory displays leadership and commitment in the development of quality analyses, preliminary designs, and related documentation to support the approval of the mission need (CD-0), the alternative selection and cost range (CD-1) and the performance baseline (CD-2).<br>• Documentation requested by the programs is provided in a timely and thorough manner.<br>• The Laboratory keeps DOE appraised of the status, near-term plans and the resolution of problems on a regular basis; anticipates emerging issues that could impact plans and takes the initiative to inform DOE of possible consequences.<br>• The Laboratory solves problems and addresses issues to avoid adverse impacts to the project. |
| B | The Laboratory fails to meet expectations in one of the areas listed under B+. |
| B- | The Laboratory fails to meet expectations in several of the areas listed under B+ |
| C | The Laboratory fails to meet the expectations in several of the areas listed under B+<br>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+<br>AND the approaches proposed by the Laboratory are based on fraudulent assumptions; the science case is weak to non-existent, and the business case is seriously flawed. |

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

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

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

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

## 2.3 Provide Efficient and Effective Operation of Facilities

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

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

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

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

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

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

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

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

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

**Notable Outcomes**

- BES: Continue the construction, installation, testing and commissioning of NSLS-II. Successfully commission the NSLS-II Injector (Linac and Booster) Complex. (Objective 2.2)
- BHSO: Begin the execution of the NSLS to NSLS-II transition plan. (Objective 2.2)

| Program Office[3] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 0% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 0% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 0% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 0% | |
| | | | Overall ASCR Total | |
| **Office of Basic Energy Sciences** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 10% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 50% | |

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

| Program Office[3] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 30% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 10% | |
| | | | Overall BES Total | |
| **Office of Biological and Environmental Research** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 0% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 0% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 90% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 10% | |
| | | | Overall BER Total | |
| **Office of High Energy Physics** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 50% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 30% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 20% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 0% | |
| | | | Overall HEP Total | |
| **Office of Nuclear Physics** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 0% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 0% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 85% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 15% | |
| | | | Overall NP Total | |
| **Office of Workforce Development for Teachers and Scientists** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 0% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 0% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 0% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 0% | |
| | | | Overall WDTS Total | |

**Table 2.1 – Program Performance Goal 2.0 Score Development**

| Program Office | Letter Grade | Numerical Score | Funding Weight (cost) | Overall Weighted Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | TBD% | |
| **Office of Basic Energy Sciences** | | | TBD% | |
| **Office of Biological and Environmental Research** | | | TBD% | |
| **Office of High Energy Physics** | | | TBD% | |
| **Office of Nuclear Physics** | | | TBD% | |
| **Office of Workforce Development for Teachers and Scientists** | | | TBD% | |
| | | | **Performance Goal 2.0 Total** | |

**Table 2.2 – Overall Performance Goal 2.0 Score Development**[4]

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

**Table 2.3 – Goal 2.0 Final Letter Grade**

[4] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2012.

## GOAL 3.0 Provide Effective and Efficient Science and Technology Program Management

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

The weight of this Goal is TBD%.

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

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science, other cognizant HQ Program Offices, and other customers as identified below. The overall Goal score from each HQ Program Office and/or customer is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 3.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2013 provided by the Program Offices listed below.

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

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 3.2 below). The overall score earned is then compared to Table 3.3 to determine the overall letter grade for this Goal. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2013 as compared to the total cost for those remaining HQ Program Offices.

## Objectives

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

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

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

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

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

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

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

| Letter Grade | Definition |
|---|---|
| F | The Laboratory has:<br>• Made limited or ineffective attempts to develop a strategic plan;<br>• Not demonstrated the ability to develop and maintain core competencies, has failed to propose high-risk/high-reward research and has failed to steward mission-critical areas;<br>• Failed to attract even reasonably competent scientists and technical staff. |

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

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

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

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

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

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

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

### 3.3 Provide Efficient and Effective Communications and Responsiveness to Headquarters Needs

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

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

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

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

**Notable Outcomes**

- NP: Complete a "Lessons Learned" Document for the fabrication and development of the PHENIX Si VTX and PHENIX FVTX projects (Objective 3.2)
- HEP: Develop a plan to optimize the lab's HEP research program that is consistent with HEP's funding plan for research in FY 14 & 15 and present it at the HEP annual budget briefings in early 2013. The primary considerations should be preserving the strength of the program and supporting HEP's new initiatives. (Objective 3.2)

| Program Office[5] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 30% | |
| 3.2 Project/Program /Facilities Management | | | 40% | |
| 3.3 Communications and Responsiveness | | | 30% | |
| | | | Overall ASCR Total | |
| **Office of Basic Energy Sciences** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 40% | |
| 3.2 Project/Program /Facilities Management | | | 30% | |

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

| Program Office[5] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| 3.3 Communications and Responsiveness | | | 30% | |
| | | | Overall BES Total | |
| **Office of Biological and Environmental Research** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 20% | |
| 3.2 Project/Program /Facilities Management | | | 30% | |
| 3.3 Communications and Responsiveness | | | 50% | |
| | | | Overall BER Total | |
| **Office of High Energy Physics** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 40% | |
| 3.2 Project/Program /Facilities Management | | | 40% | |
| 3.3 Communications and Responsiveness | | | 20% | |
| | | | Overall HEP Total | |
| **Office of Nuclear Physics** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 40% | |
| 3.2 Project/Program /Facilities Management | | | 35% | |
| 3.3 Communications and Responsiveness | | | 25% | |
| | | | Overall NP Total | |
| **Office of Workforce Development for Teachers and Scientists** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 0% | |
| 3.2 Project/Program /Facilities Management | | | 0% | |
| 3.3 Communications and Responsiveness | | | 0% | |
| | | | Overall WDTS Total | |
| **Office of Defense Nuclear Nonproliferation** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 33% | |
| 3.2 Project/Program /Facilities Management | | | 39% | |
| 3.3 Communications and Responsiveness | | | 28% | |
| | | | Overall DNN Total | |
| **Department of Homeland Security** | | | | |
| 3.1 Effective and Efficient Strategic Planning and | | | 40% | |

| Program Office[5] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| Stewardship | | | | |
| 3.2 Project/Program /Facilities Management | | | 35% | |
| 3.3 Communications and Responsiveness | | | 25% | |
| | | | Overall DHS Total | |
| **Office of Intelligence** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 30% | |
| 3.2 Project/Program /Facilities Management | | | 20% | |
| 3.3 Communications and Responsiveness | | | 50% | |
| | | | Overall IN Total | |
| **Nuclear Regulatory Commission** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 34% | |
| 3.2 Project/Program /Facilities Management | | | 33% | |
| 3.3 Communications and Responsiveness | | | 33% | |
| | | | Overall NRC Total | |

**Table 3.1 – Program Performance Goal 3.0 Score Development**

| HQ Program Office | Letter Grade | Numerical Score | Funding Weight (cost) | Overall Weighted Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | TBD% | |
| **Office of Basic Energy Sciences** | | | TBD% | |
| **Office of Biological and Environmental Research** | | | TBD% | |
| **Office of High Energy Physics** | | | TBD% | |
| **Office of Nuclear Physics** | | | TBD% | |
| **Office of Workforce Development for Teachers and Scientists** | | | TBD% | |
| **Office of Defense Nuclear Nonproliferation** | | | TBD% | |
| **Department of Homeland Security** | | | TBD% | |
| **Office of Intelligence** | | | TBD% | |
| **Nuclear Regulatory Commission** | | | TBD% | |
| | | | **Performance Goal 3.0 Total** | |

**Table 3.2 – Overall Performance Goal 3.0 Score Development[6]**

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

**Table 3.3 – Goal 3.0 Final Letter Grade**

[6] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2012.

**Attachment I**

**Program Office Goal & Objective Weightings**
**Office of Science**

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

## Attachment I

## Program Office Goal & Objective Weightings
## All Other Customers[7]

| | | DNN Weight | DHS Weight | IN Weight | NRC Weight |
|---|---|---|---|---|---|
| **Goal 1.0 Mission Accomplishment** | | | | | |
| | *Goal Weight* | 46% | 60% | 60% | 50% |
| 1.1 Impact | | 46% | 50% | 60% | 50% |
| 1.2 Leadership | | 54% | 50% | 40% | 50% |
| | | | | | |
| **Goal 2.0 Design, Fabrication, Construction and Operation of Facilities** | | | | | |
| | *Goal Weight* | 0% | 0% | 0% | 0% |
| 2.1 Design of Facility (the initiation phase and the definition phase, i.e. activities leading up to CD-2) | | 0% | 0% | 0% | 0% |
| 2.2 Construction of Facility/Fabrication of Components (execution phase, Post CD-2 to CD-4) | | 0% | 0% | 0% | 0% |
| 2.3 Operation of Facility | | 0% | 0% | 0% | 0% |
| 2.4 Utilization of Facility to Grow and Support Lab's Research Base and External User Community | | 0% | 0% | 0% | 0% |
| | | | | | |
| **Goal 3.0 Program Management** | | | | | |
| | *Goal Weight* | 54% | 40% | 40% | 50% |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | 33% | 40% | 30% | 34% |
| 3.2 Project/Program/Facilities Management | | 39% | 35% | 20% | 33% |
| 3.3 Communications and Responsiveness | | 28% | 25% | 50% | 33% |

[7] Final Goal and Objective weightings will be incorporated, as appropriate, once they are determined by each HQ Program Office and provided to the Site Office.

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

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

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

**Objectives:**

### 4.1 Leadership and Stewardship of the Laboratory

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

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

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

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

## 4.2 Management and Operation of the Laboratory

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

- Implement a robust contractor assurance system,

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

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

| | |
|---|---|
| D | The laboratory lacks a contractor assurance system, doesn't understand the drivers of cost at their lab, and is not prioritizing and managing costs. SC HQ must intercede in management decisions. Poor communication between the laboratory and SC headquarters and the Site Office has resulted in more than one significant surprise or embarrassment. |
| F | Lack of management by the laboratory's senior management has put the future of the laboratory at risk, or has significantly hurt the reputation of the Office of Science. |

### 4.3 Contractor Value-added

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

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

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

**Notable Outcomes**

- BHSO: Ensure that there is a robust and large user community ready to go on day one of operations of NSLS-II. (Objective 4.1)
- BHSO: Demonstrate leadership in the science and technology of renewable energy and sustainability in the Northeast U.S. (Objective 4.1)
- BHSO: BSA and Laboratory management will lead significant improvement in safety performance throughout the Laboratory. (Objectives 4.2 and 4.3)

- BHSO: BSA will select and place personnel into key vacancies in a timely fashion, with emphasis on Laboratory Director and Associate Laboratory Director for Nuclear and Particle Physics. (Objective 4.3)

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

**Table 4.1 – Performance Goal 4.0 Score Development**

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

**Table 4.2 – Goal 4.0 Final Letter Grade**

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

The weight of this Goal is 30%.

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

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

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

**Notable Outcomes**

- BHSO: BSA will deliver sustainable improvement in safety performance. (Objective 5.1)

| ELEMENT | Letter Grade | Numerical Score | Objective Weight | Overall Score |
|---|---|---|---|---|
| **Goal 5.0 - Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health, and Environmental Protection.** | | | | |
| 5.1 Provide an Efficient and Effective Worker Health and Safety Program | | | 80% | |
| 5.2 Provide an Efficient and Effective Environmental Management System | | | 20% | |
| **Performance Goal 5.0 Total** | | | | |

**Table 5.1 – Performance Goal 5.0 Score Development**

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

**Table 5.2 – Goal 5.0 Final Letter Grade**

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

The weight of this Goal is 30%.

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

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

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in the development, deployment and integration of foundational program (e.g., Contractor Assurance, Quality, Financial Management, Acquisition Management, Property Management, and Human Resource Management) systems across the Laboratory. This may include, but is not limited to, minimizing the occurrence of management systems support issues; quality of work products; continual improvement driven by the results of audits, reviews, and other performance information; the integration of system performance metrics and trends; the degree of knowledge and appropriate utilization of established system processes/procedures by Contractor management and staff; benchmarking and performance trending analysis. The DOE evaluator(s) shall also consider the stewardship of the pipeline of innovations and resulting intellectual assets at the Laboratory along with impacts and returns created/generated as a result of technology transfer, work for others and intellectual asset deployment activities.

**Notable Outcomes**

- BHSO: BSA will successfully execute all ARRA funded projects and meet all reporting and milestone requirements. (Objective 6.1)
- BHSO: Demonstrate progress toward achieving the 20 by 2020 objective of diversifying BNL's sponsored research portfolio through adding either 4 new customers or increasing work by at least 3% utilizing previously approved Work for Others, CRADA mechanisms and implementation of Agreements to Commercialize Technology (ACT). (Objective 6.5)

| ELEMENT | Letter Grade | Numerical Score | Objective Weight | Overall Score |
|---|---|---|---|---|
| **Goal 6.0 - Deliver Efficient, Effective, and Responsive Business Systems and Resources that Enable the Successful Achievement of the Laboratory Mission(s)** | | | | |
| 6.1 Provide an Efficient, Effective, and Responsive Financial Management System | | | 25% | |
| 6.2 Provide an Efficient, Effective, and Responsive Acquisition Management System and Property Management System | | | 30% | |

| ELEMENT | Letter Grade | Numerical Score | Objective Weight | Overall Score |
|---|---|---|---|---|
| 6.3 Provide an Efficient, Effective, and Responsive Human Resources Management System and Diversity Program | | | 15% | |
| 6.4 Provide Efficient, Effective, and Responsive Contractor Assurance Systems including Internal Audit and Quality | | | 20% | |
| 6.5 Demonstrate Effective Transfer of Technology and Commercialization of Intellectual Assets | | | 10% | |
| **Performance Goal 6.0 Total** | | | | |

**Table 6.1 – Performance Goal 6.0 Score Development**

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

**Table 6.2 – Goal 6.0 Final Letter Grade**

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

The weight of this Goal is 30%.

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

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

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

**Notable Outcomes**

- BHSO: Demonstrate progress towards Site Sustainability Plan FY 2015 goals by accomplishing goals identified for completion in FY2013. (Objective 7.1)
- BHSO: BSA will deliver the mission need statement to DOE for proposed external funded projects such as SGRID3 (facility to support the smart grid management of power and improve energy in the North East) and the portal to discovery (facility to house science and math educational programs) and supporting facilities (Objective 7.2)

| ELEMENT | Letter Grade | Numerical Score | Objective Weight | Overall Score |
|---|---|---|---|---|
| **Goal 7.0 - Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs.** | | | | |
| 7.1 Manage Facilities and Infrastructure in an Efficient and Effective Manner that Optimizes Usage, Minimizes Life Cycle Costs, and Ensures Site Capability to Meet Mission Needs | | | 55% | |
| 7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to support the Continuation and Growth of Laboratory Missions and Programs | | | 45% | |

| | |
|---|---|
| **Performance Goal 7.0 Total** | |

**Table 7.1 – Performance Goal 7.0 Score Development**

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

**Table 7.2 – Goal 7.0 Final Letter Grade**

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

The weight of this Goal is 10%.

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

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

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

**Notable Outcomes**

- BHSO: Develop and execute a site specific implementation plan based on the results of the Physical Security Risk Assessment of Brookhaven National Laboratory recommendations considering both site specific risks and the Baseline Level of Protection. (Objective 8.3)

| ELEMENT | Letter Grade | Numerical Score | Objective Weight | Overall Score |
|---|---|---|---|---|
| **Goal 8.0 - Sustain and Enhance the Effectiveness of Integrated Safeguards and Security management (ISSM) and Emergency Management Systems.** | | | | |
| 8.1 Provide an Efficient and Effective Emergency Management System | | | 30% | |
| 8.2 Provide an Efficient and Effective Cyber-Security System for the Protection of Classified and Unclassified Information | | | 30% | |
| 8.3 Provide an Efficient and Effective Physical Security Program for the Protection of Special Nuclear Materials, Classified Matter, Classified Information, Sensitive Information, and Property | | | 40% | |
| | | | **Performance Goal 8.0 Total** | |

**Table 8.1 – Performance Goal 8.0 Score Development**

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

**Table 8.2 – Goal 8.0 Final Letter Grade**

# U.S. DEPARTMENT OF ENERGY

# AND

# BROOKHAVEN SCIENCE ASSOCIATES, LLC

# ATTACHMENT J.2

# APPENDIX B

# PERFORMANCE EVALUATION AND MEASUREMENT PLAN

# FISCAL YEAR 2014

# BROOKHAVEN NATIONAL LABORATORY

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## INTRODUCTION

This document, the Performance Evaluation and Measurement Plan (PEMP), primarily serves as DOE's Quality Assurance/Surveillance Plan (QASP) for the evaluation of Brookhaven Science Associates (hereafter referred to as "the Contractor") performance regarding the management and operations of the Brookhaven National Laboratory (hereafter referred to as "the Laboratory") for the evaluation period from October 1, 2013, through September 30, 2014. The performance evaluation provides a standard by which to determine whether the Contractor is managerially and operationally in control of the Laboratory and is meeting the mission requirement and performance expectations/objectives of the Department as stipulated within this contract.

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

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

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

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

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

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

The FY 2014 Contractor performance grades for each Goal will be determined based on the weighted sum of the individual scores earned for each of the Objectives described within this document for Science and Technology (S&T) and for Management and Operations (M&O). Each Goal is composed of two or more weighted Objectives. Additionally, a set of notable outcomes has been identified to highlight key aspects/areas of performance deserving special attention by the Contractor for the upcoming fiscal *year*. Each notable outcome is linked to one or more Objectives, and failure to meet expectations against any notable outcome will result in a grade less than B+ for that Objective(s) (i.e., if the contractor fails to meet expectations against a notable outcome tied to an Objective under Goal 1.0, 2.0, or 3.0, the SC program office that assigned the notable outcome shall award a grade less than "B+" for the Objective(s) to which the notable outcome is linked; and if the contractor fails to meet expectations against a notable outcome tied to an Objective under Goal 4.0, 5.0, 6.0, 7.0 or 8.0, SC shall award a grade less than "B+" for the Objective(s) to which the notable outcome is linked). Performance above expectations against a notable outcome will be considered in the context of the Contractor's entire performance with respect to the relevant Objective. The following section describes SC's methodology for determining the Contractor's grades at the Objective level.

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

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

**Figure 1. FY 2014 Contractor Letter Grade Scale**

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

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

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

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

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

| **Letter Grade** | **Numerical Grade** | **Definition** |
|---|---|---|
| A+ | 4.3-4.1 | Significantly exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). Performance is notable for its significant contributions to the management and operations across the SC system of laboratories, and/or has been recognized by external, independent entities as exemplary. |
| A | 4.0-3.8 | Notably exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). Performance is notable for its contributions to the management and operations across the SC system of laboratories, and/or as been recognized by external, independent entities as exemplary. |
| A- | 3.7-3.5 | Exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). |
| B+ | 3.4-3.1 | Meets expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). No performance has, or has the potential to, adversely impact 1) the delivery of the current and/or future DOE/Laboratory mission(s), 2) the DOE and/or the Laboratory's reputation, or does not 3) provide a sustainable performance platform. |
| B | 3.0 -2.8 | Just misses meeting expectations of performance against a few aspects of the Objective in question. In a few minor instances, the Contractor's systems function at a level that does not fully support the Laboratory's current and future science and technology mission, or provide a sustainable performance platform. |
| B- | 2.7-2.5 | Misses meeting expectations of performance against several aspects of the Objective in question. In several areas, the Contractor's systems function at a level that does not fully support the Laboratory's current and future science and technology mission, or provide a sustainable performance platform. |

| Letter Grade | Numerical Grade | Definition |
|---|---|---|
| C+ | 2.4-2.1 | Misses meeting expectations of performance against many aspects of the Objective in question. In several notable areas, the Contractor's systems function at a level that does not fully support the Laboratory's current and future science and technology mission or provide a sustainable performance platform, and/or have affected the reputation of the Laboratory or DOE. |
| C | 2.0-1.8 | Significantly misses meeting expectations of performance against many aspects of the Objective in question. In many notable areas, the Contractor's systems do not support the Laboratory's current and future science and technology mission, nor provide a sustainable performance platform and may affect the reputation of the Laboratory or DOE. |
| C- | 1.7- 1.1 | Significantly misses meeting expectations of performance against most aspects of the Objective in question. In many notable areas, the Contractor's systems demonstrably hinder the Laboratory's ability to deliver on current and future science and technology mission, and have harmed the reputation of the Laboratory or DOE. |
| D | 1.0-0.8 | Most or all expectations of performance against the Objective in question are missed. Performance failures in this area have affected all parts of the Laboratory; DOE leadership engagement is required to deal with the situation and help the Contractor. |
| F | 0.7-0 | All expectations of performance against the Objective in question are missed. Performance failures in this area are not recoverable by the Contractor or DOE. |

**Figure I-1. Letter Grade and Numerical Grade Definitions**

Calculating Individual Goal Scores and Letter Grades:

Each Objective is assigned the earned numerical score by the evaluating office as stated above. The Goal rating is then computed by multiplying the numerical score by the weight of each Objective within a Goal. These values are then added together to develop an overall numerical score for each Goal. For the purpose of determining the final Goal grade, the raw numerical score for each Goal will be rounded to the nearest tenth of a point using the standard rounding convention discussed below and then compared to Figure 2. A set of tables is provided at the end of each Performance Goal section of this document to assist in the calculation of Objective numerical scores to the Goal grade. No overall rollup grade shall be provided.

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

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

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

**Figure 2. Laboratory Report Card**

Determining the Amount of Performance-Based Fee Earned:

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

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

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

[1] For Goals 1.0 and 2.0, the weights are based on fiscal year costs for each program distributed between these two Goals. For Goal 3.0, the weight is set as a fixed percentage for all laboratories.

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

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

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

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

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

The percentage of the available performance-based fee that may be earned by the Contractor shall be determined based on the final score for S&T (see Table C) and then compared to Figure 3, below. The final score for M&O from Table C shall then be utilized to determine the final fee multiplier (see Figure 3), which shall be utilized to determine the overall amount of performance-based fee earned for FY 2014 as calculated within Table D.

| **Overall Final Score for either S&T or M&O from Table B.** | **Percent S&T Fee Earned** | **M&O Fee Multiplier** |
|---|---|---|
| **4.3** | **100%** | **100%** |
| **4.2** | | |
| **4.1** | | |
| **4.0** | **97%** | **100%** |
| **3.9** | | |
| **3.8** | | |
| **3.7** | **94%** | **100%** |
| **3.6** | | |
| **3.5** | | |
| **3.4** | **91%** | **100%** |
| **3.3** | | |
| **3.2** | | |
| **3.1** | | |
| **3.0** | **88%** | **95%** |
| **2.9** | | |
| **2.8** | | |
| **2.7** | **85%** | **90%** |
| **2.6** | | |
| **2.5** | | |
| **2.4** | **75%** | **85%** |

| Overall Final Score for either S&T or M&O from Table B. | Percent S&T Fee Earned | M&O Fee Multiplier |
|---|---|---|
| 2.3 | | |
| 2.2 | | |
| 2.1 | | |
| 2.0 | 50% | 75% |
| 1.9 | | |
| 1.8 | | |
| 1.7 | 0% | 60% |
| 1.6 | | |
| 1.5 | | |
| 1.4 | | |
| 1.3 | | |
| 1.2 | | |
| 1.1 | | |
| 1.0 to 0.8 | 0% | 0% |
| 0.7 to 0.0 | 0% | 0% |

**Figure 3. Performance-Based Fee Earned Scale**

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

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

| Earned Fee Calculation | |
|---|---|
| Available Fee | |
| Overall Earned Performance -Base Fee (Table D) | X |
| Earned Fee | |

**Table E. Earned Fee Calculation**

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

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

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

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

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

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

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

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

performance-based rating and/or fee adjustments made from the otherwise earned rating/fee based on Performance Goal achievements.

# II. PERFORMANCE GOALS, OBJECTIVES & NOTABLE OUTCOMES

**Background**

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

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

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

**Performance Goals, Objectives, and Notable Outcomes**

The following sections describe the Performance Goals, their supporting Objectives, and associated notable outcomes for FY 2014.

## GOAL 1.0 Provide for Efficient and Effective Mission Accomplishment

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

The weight of this Goal is TBD.

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

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science, other cognizant HQ Program Offices, and other customers as identified below. The overall Goal score from each HQ Program Office and/or customer is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 1.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2014.

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

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 1.2, below). The overall score earned is then compared to Table 1.3 to determine the overall letter grade for this Goal. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2014 as compared to the total cost for those remaining HQ Program Offices.

## Objectives

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Notable Outcomes**

- BES Deliver impactful science that is distinguishable from core research for the Energy Frontier Research Center: "Center for Emergent Superconductivity," as measured by the FY 2014 progress report, highlights, and participation in monthly conference calls. (Objective 1.1)
- NP: Provide leadership in the development of Ac-225 production for the Isotope Program by designing and evaluating a thorium target configuration for production of curie quantities of Ac-225, based upon data from foil irradiations. The design must be viable for irradiation at either BNL BLIP or LANL IPF (Objective 1.2).

| Program Office[2] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall ASCR Total | |
| **Office of Basic Energy Sciences** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall BES Total | |
| **Office of Biological and Environmental Research** | | | | |
| 1.1 Impact | | | 60% | |
| 1.2 Leadership | | | 40% | |
| | | | Overall BER Total | |
| **Office of High Energy Physics** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall HEP Total | |
| **Office of Nuclear Physics** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall NP Total | |
| **Office of Defense Nuclear Nonproliferation** | | | | |
| 1.1 Impact | | | 46% | |
| 1.2 Leadership | | | 54% | |
| | | | Overall DNN Total | |
| **Nuclear Regulatory Commission** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall NRC Total | |

**Table 1.1 – Program Performance Goal 1.0 Score Development**

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

| **Program Office** | **Letter Grade** | **Numerical Score** | **Funding Weight (cost)** | **Overall Weighted Score** |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | | |
| **Office of Basic Energy Sciences** | | | | |
| **Office of Biological and Environmental Research** | | | | |
| **Office of High Energy Physics** | | | | |
| **Office of Nuclear Physics** | | | | |
| **Office of Defense Nuclear Nonproliferation** | | | | |
| **Nuclear Regulatory Commission** | | | | |
| **Performance Goal 1.0 Total** | | | | |

**Table 1.2 – Overall Performance Goal 1.0 Score Development**

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

**Table 1.3 – Goal Final Letter Grade**

[1] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2014.

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

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

The weight of this Goal is TBD.

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

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science Program Office as identified below. The overall Goal score from each Program Office is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 2.1). Final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2014.

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

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 2.2 below). The overall score earned is then compared to Table 2.3 to determine the overall letter grade for this Goal. Individual Program Office weightings for each of the Objectives identified below are provided within Table 2.1. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by DOE HQ Office of Science's (SC) Program Offices for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2014 as compared to the total cost for those remaining HQ Program Offices.

## Objectives

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

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

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

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

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

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

| Letter Grade | Definition |
|---|---|
| A | In addition to satisfying all conditions for B+, *all* of the following conditions are also met:<br>• The Laboratory is recognized by the research community as a leader for making the science case for the acquisition;<br>• The Laboratory takes the initiative to demonstrate the potential for revolutionary scientific advancement working in partnership with HQ<br>• The Laboratory identifies, analyzes, and champions, to HQ and Site office, novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing. |
| A- | In addition to satisfying all conditions for B+, *all* of the following conditions are also met:<br>• The approaches proposed by the Laboratory are widely regarded as innovative, novel, comprehensive, and potentially cost-effective<br>• Reviews repeatedly confirm potential for scientific discovery in areas that support the Department's mission, and potential to change a discipline or research area's direction. |
| B+ | The Laboratory has achieved each of the following objectives:<br>• The Laboratory displays leadership and commitment in the development of quality analyses, preliminary designs, and related documentation to support the approval of the mission need (CD-0), the alternative selection and cost range (CD-1) and the performance baseline (CD-2).<br>• Documentation requested by the programs is provided in a timely and thorough manner.<br>• The Laboratory keeps DOE appraised of the status, near-term plans and the resolution of problems on a regular basis; anticipates emerging issues that could impact plans and takes the initiative to inform DOE of possible consequences.<br>• The Laboratory solves problems and addresses issues to avoid adverse impacts to the project. |
| B | The Laboratory fails to meet expectations in one of the areas listed under B+. |
| B- | The Laboratory fails to meet expectations in several of the areas listed under B+ |
| C | The Laboratory fails to meet the expectations in several of the areas listed under B+<br>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+<br>AND the approaches proposed by the Laboratory are based on fraudulent assumptions; the science case is weak to non-existent, and the business case is seriously flawed. |

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

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

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

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

## 2.3 Provide Efficient and Effective Operation of Facilities

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

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

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

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

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

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

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

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

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

**Notable Outcomes**

- BES: Continue the construction, installation, testing and commissioning of NSLS-II. Successfully commission the NSLS-II Storage Ring Complex. (Objective 2.2)
- BES: Execute the NSLS to NSLS-II transition plan. (Objective 2.2)
- NP: According to the base-lined Major Item of Equipment schedule, install and integrate the STAR Heavy Flavor Detector into RHIC to provide for new capabilities to the scientific community (Objective 2.4)

| Program Office[3] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 0% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 0% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 0% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 0% | |
| | | | Overall ASCR Total | |
| **Office of Basic Energy Sciences** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 10% | |

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

| Program Office[3] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 40% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 30% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 20% | |
| | | | Overall BES Total | |
| **Office of Biological and Environmental Research** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 0% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 0% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 90% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 10% | |
| | | | Overall BER Total | |
| **Office of High Energy Physics** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 75% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 5% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 20% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 0% | |
| | | | Overall HEP Total | |
| **Office of Nuclear Physics** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 0% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 0% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 85% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 15% | |
| | | | Overall NP Total | |

**Table 2.1 – Program Performance Goal 2.0 Score Development**

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

**Table 2.2 – Overall Performance Goal 2.0 Score Development**[4]

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

**Table 2.3 – Goal 2.0 Final Letter Grade**

[4] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2014.

## GOAL 3.0 Provide Effective and Efficient Science and Technology Program Management

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

The weight of this Goal is TBD.

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

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science, other cognizant HQ Program Offices, and other customers as identified below. The overall Goal score from each HQ Program Office and/or customer is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 3.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2014 provided by the Program Offices listed below.

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

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 3.2 below). The overall score earned is then compared to Table 3.3 to determine the overall letter grade for this Goal. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2014 as compared to the total cost for those remaining HQ Program Offices.

## Objectives

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

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

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

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

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

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

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

| Letter Grade | Definition |
|---|---|
| F | The Laboratory has:<br>• Made limited or ineffective attempts to develop a strategic plan;<br>• Not demonstrated the ability to develop and maintain core competencies, has failed to propose high-risk/high-reward research and has failed to steward mission-critical areas;<br>• Failed to attract even reasonably competent scientists and technical staff. |

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

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

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

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

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

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

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

### 3.3 Provide Efficient and Effective Communications and Responsiveness to Headquarters Needs

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

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

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

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

**Notable Outcomes**

- BES: Develop and execute a comprehensive plan for developing beamlines at NSLS-II which is based on sound project management principles and contains reportable metrics that track beamline development progress. (Objective 3.1)
- BES: Develop a strategic plan for materials research that will utilize the integrated MBE/ARPES/STM instrumentation. (Objective 3.1)

| Program Office[5] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 30% | |
| 3.2 Project/Program /Facilities Management | | | 40% | |
| 3.3 Communications and Responsiveness | | | 30% | |
| | | | Overall ASCR Total | |
| **Office of Basic Energy Sciences** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 40% | |
| 3.2 Project/Program /Facilities Management | | | 30% | |

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

| Program Office[5] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| 3.3 Communications and Responsiveness | | | 30% | |
| | | | Overall BES Total | |
| **Office of Biological and Environmental Research** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 20% | |
| 3.2 Project/Program /Facilities Management | | | 30% | |
| 3.3 Communications and Responsiveness | | | 50% | |
| | | | Overall BER Total | |
| **Office of High Energy Physics** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 30% | |
| 3.2 Project/Program /Facilities Management | | | 45% | |
| 3.3 Communications and Responsiveness | | | 25% | |
| | | | Overall HEP Total | |
| **Office of Nuclear Physics** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 40% | |
| 3.2 Project/Program /Facilities Management | | | 35% | |
| 3.3 Communications and Responsiveness | | | 25% | |
| | | | Overall NP Total | |
| **Office of Defense Nuclear Nonproliferation** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 34% | |
| 3.2 Project/Program /Facilities Management | | | 37% | |
| 3.3 Communications and Responsiveness | | | 29% | |
| | | | Overall DNN Total | |
| **Nuclear Regulatory Commission** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 34% | |
| 3.2 Project/Program /Facilities Management | | | 33% | |
| 3.3 Communications and Responsiveness | | | 33% | |
| | | | Overall NRC Total | |

**Table 3.1 – Program Performance Goal 3.0 Score Development**

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

**Table 3.2 – Overall Performance Goal 3.0 Score Development**[6]

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

**Table 3.3 – Goal 3.0 Final Letter Grade**

[6] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2014.

**Attachment I**

**Program Office Objective Weightings**
**Office of Science**

| | ASCR | BER | BES | HEP | NP |
|---|---|---|---|---|---|
| | **Weight** | **Weight** | **Weight** | **Weight** | **Weight** |
| **Goal 1.0 Mission Accomplishment** | | | | | |
| | | | | | |
| 1.1 Impact | 50% | 60% | 50% | 50% | 50% |
| 1.2 Leadership | 50% | 40% | 50% | 50% | 50% |
| | | | | | |
| **Goal 2.0 Design, Fabrication, Construction and Operation of Facilities** | | | | | |
| | | | | | |
| 2.1 Design of Facility (the initiation phase and the definition phase, i.e. activities leading up to CD-2) | 0% | 0% | 10% | 75% | 0% |
| 2.2 Construction of Facility / Fabrication of Components (execution phase, Post CD-2 to CD-4) | 0% | 0% | 40% | 5% | 0% |
| 2.3 Operation of Facility | 0% | 90% | 30% | 20% | 85% |
| 2.4 Utilization of Facility to Grow and Support Lab's Research Base and External User Community | 0% | 10% | 20% | 0% | 15% |
| | | | | | |
| **Goal 3.0 Program Management** | | | | | |
| | | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | 30% | 20% | 40% | 30% | 40% |
| 3.2 Project/Program/Facilities Management | 40% | 30% | 30% | 45% | 35% |
| 3.3 Communications and Responsiveness | 30% | 50% | 30% | 25% | 25% |

**Attachment I**

**Program Office Objective Weightings**
**All Other Customers**[7]

| | DNN Weight | NRC Weight |
|---|---|---|
| **Goal 1.0 Mission Accomplishment** | | |
| | | |
| 1.1 Impact | 46% | 50% |
| 1.2 Leadership | 54% | 50% |
| | | |
| **Goal 3.0 Program Management** | | |
| | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | 34% | 34% |
| 3.2 Project/Program/Facilities Management | 37% | 33% |
| 3.3 Communications and Responsiveness | 29% | 33% |

[7] Final Goal and Objective weightings will be incorporated, as appropriate, once they are determined by each HQ Program Office and provided to the Site Office.

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

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

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

**Objectives:**

### 4.1 Leadership and Stewardship of the Laboratory

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

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

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

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

## 4.2 Management and Operation of the Laboratory

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

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

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

| | |
|---|---|
| C | The laboratory lacks a robust and transparent contractor assurance system in place that integrates internal and external (corporate) evaluation processes to evaluate risk. The laboratory cannot demonstrate use of this system in making decisions that are aligned with the laboratory's vision and strategic plan. The laboratory does not fully understand the drivers of cost at their lab, and thus are not prioritizing and managing these costs as well as they should to be commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Communication between the laboratory and SC headquarters and the Site Office is such that there has been at least one significant surprise or embarrassment. |
| D | The laboratory lacks a contractor assurance system, doesn't understand the drivers of cost at their lab, and is not prioritizing and managing costs. SC HQ must intercede in management decisions. Poor communication between the laboratory and SC headquarters and the Site Office has resulted in more than one significant surprise or embarrassment. |
| F | Lack of management by the laboratory's senior management has put the future of the laboratory at risk, or has significantly hurt the reputation of the Office of Science. |

### 4.3 Contractor Value-added

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

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

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

**Notable Outcomes**

- BHSO: BSA management will sustain improvements in safety performance achieved in FY13. (Objective 4.2)
- BHSO: BSA will select and place personnel into key vacancies in a timely fashion, with emphasis on Laboratory Deputy Director for Science & Technology. (Objective 4.3)

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

**Table 4.1 – Performance Goal 4.0 Score Development**

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

**Table 4.2 – Goal 4.0 Final Letter Grade**

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

The weight of this Goal is 30%.

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

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

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

**Notable Outcomes**

- BHSO: BSA will effectively implement the revised LOTO process as described in the new LOTO Subject Area. Effective implementation will be measured by BSA performance against a mutually agreed upon set of expectations and FY2014 milestones. (Objective 5.1)

| ELEMENT | Letter Grade | Numerical Score | Objective Weight | Overall Score |
|---|---|---|---|---|
| **Goal 5.0 - Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health, and Environmental Protection.** | | | | |
| 5.1 Provide an Efficient and Effective Worker Health and Safety Program | | | 80% | |
| 5.2 Provide an Efficient and Effective Environmental Management System | | | 20% | |
| **Performance Goal 5.0 Total** | | | | |

**Table 5.1 – Performance Goal 5.0 Score Development**

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

**Table 5.2 – Goal 5.0 Final Letter Grade**

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

The weight of this Goal is 30%.

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

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

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in the development, deployment and integration of foundational program (e.g., Contractor Assurance, Quality, Financial Management, Acquisition Management, Property Management, and Human Resource Management) systems across the Laboratory. This may include, but is not limited to, minimizing the occurrence of management systems support issues; quality of work products; continual improvement driven by the results of audits, reviews, and other performance information; the integration of system performance metrics and trends; the degree of knowledge and appropriate utilization of established system processes/procedures by Contractor management and staff; benchmarking and performance trending analysis. The DOE evaluator(s) shall also consider the stewardship of the pipeline of innovations and resulting intellectual assets at the Laboratory along with impacts and returns created/generated as a result of technology transfer, work for others and intellectual asset deployment activities.

**Notable Outcomes**

- BHSO: BSA will successfully execute all ARRA funded projects and meet all reporting and milestone requirements. (Objective 6.1)
- BHSO: BSA will demonstrate management effectiveness relative to staff accountability and stewardship of government owned mobile technology (e.g. iPads, laptops, etc) through the development and periodic reporting of relevant performance metrics. (Objective 6.2)

| ELEMENT | Letter Grade | Numerical Score | Objective Weight | Overall Score |
|---|---|---|---|---|
| **Goal 6.0 - Deliver Efficient, Effective, and Responsive Business Systems and Resources that Enable the Successful Achievement of the Laboratory Mission(s)** | | | | |
| 6.1 Provide an Efficient, Effective, and Responsive Financial Management System | | | 25% | |
| 6.2 Provide an Efficient, Effective, and Responsive Acquisition Management System and Property | | | 25% | |

| ELEMENT | Letter Grade | Numerical Score | Objective Weight | Overall Score |
|---|---|---|---|---|
| Management System | | | | |
| 6.3 Provide an Efficient, Effective, and Responsive Human Resources Management System and Diversity Program | | | 15% | |
| 6.4 Provide Efficient, Effective, and Responsive Contractor Assurance Systems including Internal Audit and Quality | | | 20% | |
| 6.5 Demonstrate Effective Transfer of Technology and Commercialization of Intellectual Assets | | | 15% | |
| **Performance Goal 6.0 Total** | | | | |

**Table 6.1 – Performance Goal 6.0 Score Development**

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

**Table 6.2 – Goal 6.0 Final Letter Grade**

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

The weight of this Goal is 30%.

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

7.1 Manage Facilities and Infrastructure in an Efficient and Effective Manner that Optimizes Usage, Addresses Sustainability Goals, Minimizes Life Cycle Costs, and Ensures Site Capability to Meet Mission Needs

7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to Support the Continuation and Growth of Laboratory Missions and Programs

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

**Notable Outcomes**

- BHSO: BSA management will support the UESC project by providing effective leadership of BSA personnel and adequate resources to BHSO during the design, construction, safety enforcement and performance assurance phase of the energy conservation measures scheduled for implementation in 2014. (Objective 7.1)
- BHSO: Implement an effective space utilization and consolidation plan. (Objective 7.1)
- BHSO: BSA will build and commission the research array. (Objective 7.2)

| ELEMENT | Letter Grade | Numerical Score | Objective Weight | Overall Score |
|---|---|---|---|---|
| **Goal 7.0 - Sustain Excellence in Acquiring, Constructing, Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs..** | | | | |
| 7.1 Manage Facilities and Infrastructure in an Efficient and Effective Manner that Optimizes Usage, Addresses Sustainability Goals, Minimizes Life Cycle Costs, and Ensures Site Capability to Meet | | | 60% | |

| | | | | |
|---|---|---|---|---|
| Mission Needs | | | | |
| 7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to support the Continuation and Growth of Laboratory Missions and Programs | | | 40% | |
| **Performance Goal 7.0 Total** | | | | |

**Table 7.1 – Performance Goal 7.0 Score Development**

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

**Table 7.2 – Goal 7.0 Final Letter Grade**

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

The weight of this Goal is 10%.

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

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

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

**Notable Outcomes**

- None

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

**Table 8.1 – Performance Goal 8.0 Score Development**

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

**Table 8.2 – Goal 8.0 Final Letter Grade**

# U.S. DEPARTMENT OF ENERGY

# AND

# BROOKHAVEN SCIENCE ASSOCIATES, LLC

# ATTACHMENT J.2

# APPENDIX B

# PERFORMANCE EVALUATION AND MEASUREMENT PLAN

# FISCAL YEAR 2015

# BROOKHAVEN NATIONAL LABORATORY

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## INTRODUCTION

This document, the Performance Evaluation and Measurement Plan (PEMP), primarily serves as DOE's Quality Assurance/Surveillance Plan (QASP) for the evaluation of Brookhaven Science Associates (hereafter referred to as "the Contractor") performance regarding the management and operations of the Brookhaven National Laboratory (hereafter referred to as "the Laboratory") for the evaluation period from October 1, 2014, through September 30, 2015. The performance evaluation provides a standard by which to determine whether the Contractor is managerially and operationally in control of the Laboratory and is meeting the mission requirement and performance expectations/objectives of the Department as stipulated within this contract.

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

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

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

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

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

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

The FY 2015 Contractor performance grades for each Goal will be determined based on the weighted sum of the individual scores earned for each of the Objectives described within this document for Science and Technology (S&T) and for Management and Operations (M&O). Each Goal is composed of two or more weighted Objectives. Additionally, a set of notable outcomes has been identified to highlight key aspects/areas of performance deserving special attention by the Contractor for the upcoming fiscal year. Each notable outcome is linked to one or more Objectives, and failure to meet expectations against any notable outcome will result in a grade less than B+ for that Objective(s) (i.e., if the contractor fails to meet expectations against a notable outcome tied to an Objective under Goal 1.0, 2.0, or 3.0, the SC program office that assigned the notable outcome shall award a grade less than "B+" for the Objective(s) to which the notable outcome is linked; and if the contractor fails to meet expectations against a notable outcome tied to an Objective under Goal 4.0, 5.0, 6.0, 7.0 or 8.0, SC shall award a grade less than "B+" for the Objective(s) to which the notable outcome is linked). Performance above expectations against a notable outcome will be considered in the context of the Contractor's entire performance with respect to the relevant

Objective. The following section describes SC's methodology for determining the Contractor's grades at the Objective level.

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

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

**Figure 1. FY 2015 Contractor Letter Grade Scale**

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

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

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

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

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

| Letter Grade | Numerical Grade | Definition |
|---|---|---|
| A+ | 4.3-4.1 | Significantly exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). Performance is notable for its significant contributions to the management and operations across the SC system of laboratories, and/or has been recognized by external, independent entities as exemplary. |
| A | 4.0-3.8 | Notably exceeds expectations of performance against all aspects of the Objective in question. The Contractor's systems function at a level that fully supports the Laboratory's current and future science and technology mission(s). Performance is notable for its contributions to the management and operations across the SC system of laboratories, and/or as been recognized |

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

**Figure I-1. Letter Grade and Numerical Grade Definitions**

Calculating Individual Goal Scores and Letter Grades:
Each Objective is assigned the earned numerical score by the evaluating office as stated above. The Goal rating is then computed by multiplying the numerical score by the weight of each Objective within a Goal. These values are then added together to develop an overall numerical score for each Goal. For the purpose of determining the final Goal grade, the raw numerical score for each Goal will be rounded to the nearest tenth of a point using the standard rounding convention discussed below and then compared to Figure 2. A set of tables is provided at the end of each Performance Goal section of this document to assist in the calculation of Objective numerical scores to the Goal grade. No overall rollup grade shall be provided.

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

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

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

**Figure 2. Laboratory Report Card**

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

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

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

[1] For Goals 1.0 and 2.0, the weights are based on fiscal year costs for each program distributed between these Goals 1.0 and 2.0. For Goal 3.0, the weight is set as a fixed percentage for all laboratories.

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

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

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

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

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

The percentage of the available performance-based fee that may be earned by the Contractor shall be determined based on the final score for S&T (see Table C) and then compared to Figure 3, below. The final score for M&O from Table C shall then be utilized to determine the final fee multiplier (see Figure 3), which shall be utilized to determine the overall amount of performance-based fee earned for FY 2015 as calculated within Table D.

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

**Figure 3. Performance-Based Fee Earned Scale**

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

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

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

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

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

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

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

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

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

## II. PERFORMANCE GOALS, OBJECTIVES & NOTABLE OUTCOMES

**Background**

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

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

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

**Performance Goals, Objectives, and Notable Outcomes**

The following sections describe the Performance Goals, their supporting Objectives, and associated notable outcomes for FY 2015.

## GOAL 1.0 Provide for Efficient and Effective Mission Accomplishment

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

The weight of this Goal is TBD%.

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

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science, other cognizant HQ Program Offices, and other customers as identified below. The overall Goal score from each HQ Program Office and/or customer is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 1.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2015.

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

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 1.2, below). The overall score earned is then compared to Table 1.3 to determine the overall letter grade for this Goal. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2015 as compared to the total cost for those remaining HQ Program Offices.

**<u>Objectives</u>**

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

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

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

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

- Impact of publications on the field, as measured primarily by peer review;

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

| **Letter Grade** | **Definition** |
|---|---|
| A+ | In addition to satisfying the conditions for B+<br>• There are *significant research areas for which* the Laboratory *has exceeded the expectations* of the proposed research plans *in significant ways through creative, new, or unconventional methods that allow greater scientific reach than expected*.<br>• S&T conducted at the Laboratory *has resolved one of the most critical questions in the field, or has changed the way the research community thinks about a particular field through paradigm shifting discoveries that would be considered the most influential discovery of the decade for that field*.<br>• S&T conducted at the Laboratory *provided major advances that significantly accelerate* DOE or other customer mission(s). |
| A | In addition to satisfying the conditions for B+<br>• There are *important examples* where the Laboratory *exceeded the expectations* of the proposed research plans *in significant ways through creative, new, or unconventional methods that allow greater scientific reach than expected*.<br>• *All area*s of S&T conducted at the Laboratory are of *exceptional or outstanding* merit and quality.<br>• S&T conducted at the Laboratory has *significant positive impact* to DOE or other customer missions. |
| A- | In addition to satisfying the conditions for B+<br>• There are *important examples* where the Laboratory *exceeded the expectations* of the proposed research plans.<br>• *Significant areas* of S&T conducted at the Laboratory are of *exceptional or outstanding* merit and quality.<br>• S&T conducted at the Laboratory *significantly impact* DOE or other customer missions. |
| B+ | The Laboratory has achieved each of the following objectives:<br>• The Laboratory has successfully executed proposed research plans.<br>• S&T conducted at the Laboratory are of *high* scientific merit and quality<br>• S&T conducted at the Laboratory *advance* DOE or other customer missions. |
| B | • The Laboratory has successfully executed proposed research plans.<br>• S&T conducted at the Laboratory *advance* DOE or other customer missions.<br>BUT the Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons:<br>• S&T conducted at the Laboratory are *not uniformly of high* merit and quality OR *some areas of research, previously supported, have become uncompetitive* OR *the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities*. |
| B- | The Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons:<br>• The Laboratory has *failed to successfully execute* proposed research plans *but contingencies were in place such that no funding was or will be terminated*. OR S&T conducted at the Laboratory *does little to advance* DOE or other customer missions.<br>• *Significant areas of* S&T conducted at the Laboratory are *not of high* merit and quality OR *some areas of research, previously supported, have become uncompetitive* OR *the Laboratory do not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.* |

| **Letter Grade** | **Definition** |
|---|---|
| C | The Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons:<br>• *In several significant aspects*, the Laboratory *failed to deliver* on proposed research plans *using available resources such that some funding was or will be terminated* OR S&T conducted at the Laboratory *failed to contribute to* DOE or other customer missions<br>• *Significant areas of* S&T conducted at the Laboratory are *of poor* merit and quality OR *some areas of research, previously supported, have become uncompetitive* AND *the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities*. |
| D | The Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons:<br>• *Multiple program elements at* the Laboratory *failed to deliver* on proposed research plans *using available resources such that significant funding was or will be terminated*.<br>• *Multiple significant areas of* S&T conducted at the Laboratory are *of poor* merit and quality OR *some areas of research, previously supported, have become uncompetitive* AND *the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities*.<br>• S&T conducted at the Laboratory *failed to contribute to* DOE or other customer missions. |
| F | The Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons:<br>• *Multiple program elements at* the Laboratory *failed to deliver* on proposed research plans *using available resources resulting in total termination of funding*.<br>• *Multiple significant areas of* S&T conducted at the Laboratory are *of poor* merit and quality OR *some areas of research, previously supported, have become uncompetitive* AND *the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities OR the Laboratory has been found to have engaged in gross scientific incompetence and/or scientific fraud*.<br>• S&T conducted at the Laboratory *failed to contribute to* DOE or other customer missions. |

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

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

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

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

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

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

| Letter Grade | Definition |
|---|---|
| A- | In addition to satisfying the conditions for B+<br>• Laboratory staff members have *leadership positions* in professional organizations OR *staff has contributing role in National Academy or equivalent panels to discuss further research directions*;<br>• Laboratory staff members have *leadership positions* in DOE sponsored workshops and strategic planning activities.<br>• The Laboratory program consistently submits competitive proposals that challenge convention and open *significant* new avenues for research that are well aligned with DOE mission needs.<br>• Laboratory staff hold *leadership positions* in multi-institutional research collaborations. |
| $B^+$ | The Laboratory has achieved each of the following objectives:<br>• Laboratory staff members are *active participants* in professional organizations, committees, and activities, and take on leadership responsibilities commensurate with experience and expertise.<br>• Laboratory staff members are *active participants* in DOE sponsored workshops and strategic planning activities.<br>• Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE.<br>• The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE mission needs.<br>• Laboratory staff are *active participants* in multi-institutional research collaborations |
| B | • Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE.<br>• The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE mission needs.<br>BUT the Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons:<br>• Although *regular participants* in professional organizations, committees, and activities, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.*<br>• Although *regular participants* in DOE sponsored workshops and strategic planning activities, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.*<br>• Although *active members of* multi-institutional research collaborations, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.* |
| B- | • Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE.<br>BUT the Laboratory fails to meet the conditions for B+ for *at least one* of the following reasons:<br>• The Laboratory program submits competitive proposals *but these either lack innovation or are not well aligned with DOE mission needs*.<br>• Laboratory staff are *infrequent participants* in professional organizations, committees, and activities, and *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.*<br>• Laboratory staff are *infrequent participants* in DOE sponsored workshops and strategic planning activities, and *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.*<br>• Although *active members of* multi-institutional research collaborations, *the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.* |

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

**Notable Outcomes**

- **BES**: Deliver impactful science from the "Center for Emergent Superconductivity" Energy Frontier Research Center that is clearly distinguished from core BES-MSE research, as measured by the EFRC FY 2015 progress report, research publications and highlights, and participation in periodic conference calls. (Objective 1.1)

- **NP**: Develop a viable plan to provide the beams necessary at the Relativistic Heavy Ion Collider to carry out the Beam Energy Scan II. (Objective 1.1)

| Program Office[2] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall ASCR Total | |
| **Office of Basic Energy Sciences** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall BES Total | |
| **Office of Biological and Environmental Research** | | | | |
| 1.1 Impact | | | 60% | |
| 1.2 Leadership | | | 40% | |
| | | | Overall BER Total | |
| **Office of High Energy Physics** | | | | |
| 1.1 Impact | | | 60% | |
| 1.2 Leadership | | | 40% | |
| | | | Overall HEP Total | |
| **Office of Nuclear Physics** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall NP Total | |
| **Office of Defense Nuclear Nonproliferation** | | | | |
| 1.1 Impact | | | 54% | |
| 1.2 Leadership | | | 46% | |
| | | | Overall DNN Total | |
| **Office of Nuclear Energy** | | | | |
| 1.1 Impact | | | 0% | |
| 1.2 Leadership | | | 0% | |
| | | | Overall NE Total | |
| **Nuclear Regulatory Commission** | | | | |
| 1.1 Impact | | | 50% | |
| 1.2 Leadership | | | 50% | |
| | | | Overall NRC Total | |

**Table 1.1 – Program Performance Goal 1.0 Score Development**

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

| Program Office | Letter Grade | Numerical Score | Funding Weight (cost) | Overall Weighted Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | | |
| **Office of Basic Energy Sciences** | | | | |
| **Office of Biological and Environmental Research** | | | | |
| **Office of High Energy Physics** | | | | |
| **Office of Nuclear Physics** | | | | |
| **Office of Defense Nuclear Nonproliferation** | | | | |
| **Office of Nuclear Energy** | | | | |
| **Nuclear Regulatory Commission** | | | | |
| | | | **Performance Goal 1.0 Total** | |

**Table 1.2 – Overall Performance Goal 1.0 Score Development**

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

**Table 1.3 – Goal 1.0 Final Letter Grade**

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

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

The weight of this Goal is TBD%.

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

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science Program Office as identified below. The overall Goal score from each Program Office is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 2.1). Final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2015.

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

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 2.2 below). The overall score earned is then compared to Table 2.3 to determine the overall letter grade for this Goal. Individual Program Office weightings for each of the Objectives identified below are provided within Table 2.1. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by DOE HQ Office of Science's (SC) Program Offices for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2015 as compared to the total cost for those remaining HQ Program Offices.

**<u>Objectives</u>**

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

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

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

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

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

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

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

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

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

| Letter Grade | Definition |
|---|---|
| A+ | In addition to satisfying all conditions for A,<br>• There is high confidence throughout the execution phase that the project will be completed *significantly* under budget and/or ahead of schedule while meeting or exceeding all performance baselines; |
| A | In addition to satisfying all conditions for B+,<br>• The Laboratory has identified and implemented practices that would allow the project scope to be *significantly expanded* if such were desirable, without impact on baseline cost or schedule;<br>• The Laboratory *always* provides *exemplary* project status reports on time to DOE and takes the initiative to communicate emerging problems or issues.<br>• Reviews identify environment, safety and health practices to be *exemplary*.<br>• There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline; |
| A- | In addition to satisfying all conditions for B+,<br>• The Laboratory has identified practices that would allow for the project scope to be expanded if such were desirable, without impact on baseline cost or schedule;<br>• Problems are identified and corrected by the Laboratory promptly, with no impact on scope, cost or schedule<br>• The Laboratory provides *particularly useful* project status reports on time to DOE and regularly takes the initiative to communicate emerging problems or issues.<br>• Reviews identify environment, safety and health practices to *exceed expectations*.<br>• There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline; |
| B+ | The Laboratory has achieved each of the following objectives<br>• The project meets CD-2 performance measures;<br>• The Laboratory provides sustained leadership and commitment to environment, safety and health;<br>• Reviews regularly recognize the Laboratory for being proactive in the management of the execution phase of the project;<br>• To a large extent, problems are identified and corrected by the Laboratory with little, or no impact on scope, cost or schedule;<br>• DOE is kept informed of project status on a regular basis; reviews regularly indicate project is expected to meet its cost/schedule performance baseline. |
| B | The Laboratory provides sustained leadership and commitment to environment, safety and health BUT<br>• The project fails to meet expectations in *one* of the remaining areas listed under B+. |
| B- | The Laboratory provides sustained leadership and commitment to environment, safety and health BUT<br>• The project fails to meet expectations in *several* of the areas listed under B+ |

| Letter Grade | Definition |
|---|---|
| C | The Laboratory provides sustained leadership and commitment to environment, safety and health BUT<br>The project fails to meet expectations in *several* of the areas listed under B+<br>AND<br>• Reviews indicate project remains at risk of breaching its cost/schedule performance baseline;<br>• Reports to DOE can vary in degree of completeness |
| D | The project fails to meet conditions for B+ in at least one of the following areas:<br>• Reviews indicate project is likely to breach its cost/schedule performance baseline;<br>• Laboratory commitment to environment, safety and health issues is inadequate;<br>• Reports to DOE are largely incomplete; Laboratory commitment to the project has subsided. |
| F | The project fails to meet conditions for B+ in at least one of the following areas:<br>• Laboratory falsifies data during project execution phase;<br>• Shows disdain for executing the project within minimal standards for environment, safety or health,<br>• Fails to keep DOE informed of project status;<br>• Recent reviews indicate that the project is expected to breach its cost/schedule performance baseline. |

### 2.3 Provide Efficient and Effective Operation of Facilities

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

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

| Letter Grade | Definition |
|---|---|
| A+ | In addition to satisfying all conditions for B+; *all* of the following conditions are also met<br>• Performance of the facility *exceeds* expectations as defined before the start of the year in all of these categories: cost of operations, users served, availability, and capability;<br>• The schedule and the costs associated with the ramp-up to steady state operations are *significantly less* than planned and are acknowledged to be 'leadership caliber' by reviews;<br>• Data on environment, safety, and health continues to be exemplary and widely regarded as among the 'best in class'<br>• The Laboratory took extraordinary means to deliver an extraordinary result for the users and the program in the performance/ review period. |
| A | In addition to satisfying all conditions for B+; *all* of the following conditions are also met<br>• Performance of the facility *exceeds* expectations as defined before the start of the year in most of these categories: cost of operations, users served, availability, and capability;<br>• The schedule and the costs associated with the ramp-up to steady state operations are *less* than planned and are acknowledged to be 'leadership caliber' by reviews;<br>• Data on environment, safety, and health continues to be *exemplary* and widely regarded as among the 'best in class.' |
| A- | In addition to satisfying all conditions for B+, *one* of the following conditions is met:<br>• Performance of the facility *exceeds* expectations as defined before the start of the year in any of these categories: cost of operations, users served, availability, and capability;<br>• The schedule and the costs associated with the ramp-up to steady state operations are *less* than planned and are acknowledged to be among the best by reviews; |

| Letter Grade | Definition |
|---|---|
| $B^+$ | The Laboratory has achieved each of the following objectives:<br>• Performance of the facility *meets* expectations as defined before the start of the year in all of these categories: cost of operations, users served, availability, capability (for example, beam delivery, luminosity, peak performance, etc),<br>• The schedule and the costs associated with the ramp-up to steady state operations occur as planned;<br>• Data on environment, safety, and health continues to be very good as compared with other projects in the DOE.<br>• User surveys meet program expectations and reflect that the Laboratory is responsive to user needs. |
| B | The project fails to meet expectations in *one* of the areas listed under B+. |
| B- | The project fails to meet expectations in *more than one* of the areas listed under B+. |
| C | Performance of the facility fails to meet expectations in *many* of the areas listed under B+; for example,<br>• The cost of operations is unexpectedly high and availability of the facility is unexpectedly low, the number of users is unexpectedly low, capability is well below expectations.<br>• The facility operates at steady state, on cost and on schedule, but the reliability of performance is somewhat below planned values, **or** the facility operates at steady state, but the associated schedule and costs exceed planned values.<br>• Commitment to environment, safety, and health is satisfactory. |
| D | Performance of the facility fails to meet expectations in *many* of the areas listed under B+; for example,<br>• The cost of operations is unexpectedly high and availability of the facility is unexpectedly low; capability is well below expectations.<br>• The facility operates somewhat below steady state, on cost and on schedule, and the reliability of performance is somewhat below planned values, **or** the facility operates at steady state, but the associated schedule and costs exceed planned values.<br>• Commitment to environment, safety, and health is inadequate. |
| F | • The facility fails to operate; the facility operates well below steady state **and/or** the reliability of the performance is well below planned values.<br>• Laboratory commitment to environment, safety, and health issues is inadequate. |

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

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

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

| Letter Grade | Definition |
|---|---|
| A+ | In addition to meeting all measures under *A*,<br>• The Laboratory took extraordinary means to deliver an extraordinary result for a new user community. |

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

**Notable Outcomes**

- **BES**: Successfully complete (receive CD-4) by June 2015 and conclude the administrative closeout for the NSLS-II project. (Objective 2.2)
- **BES**: Continue the design, construction, and installation of beamlines currently in progress (NEXT, ABBIX and NxtGen) for NSLS-II within established, acceptable performance goals. (Objective 2.2)
- **BES**: Deliver top-off operation at NSLS-II. (Objective 2.3)
- **HEP**: Submit a revised proposal to create an Office of Science User Facility for Energy Frontier Physics that captures the BNL, LBNL, SLAC, and ANL activities supporting the research using the A Large LHC Toroidal Apparatus (ATLAS). (Objective 2.1)
- **HEP**: Complete all requirements needed to certify the Accelerator Test Facility as Office of Science User Facility for the Accelerator Stewardship subprogram of HEP. (Objective 2.3)
- **HEP**: Achieve CD-3 approval for the LHC ATLAS Detector Upgrade Project. (Objective 2.2)

| Program Office[3] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| **Office of Basic Energy Sciences** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 0% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 25% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 40% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 35% | |
| | | | Overall BES Total | |
| **Office of Biological and Environmental Research** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 0% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 0% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 90% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 10% | |
| | | | Overall BER Total | |
| **Office of High Energy Physics** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 10% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 65% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 25% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 0% | |
| | | | Overall HEP Total | |
| **Office of Nuclear Physics** | | | | |
| 2.1 Provide Effective Facility Design(s) | | | 0% | |
| 2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components | | | 0% | |
| 2.3 Provide Efficient and Effective Operation of Facilities | | | 85% | |
| 2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities | | | 15% | |
| | | | Overall NP Total | |

**Table 2.1 – Program Performance Goal 2.0 Score Development**

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

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

**Table 2.2 – Overall Performance Goal 2.0 Score Development**[4]

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

**Table 2.3 – Goal 2.0 Final Letter Grade**

[4] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2015.

## GOAL 3.0 Provide Effective and Efficient Science and Technology Program Management

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

The weight of this Goal is TBD%.

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

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science, other cognizant HQ Program Offices, and other customers as identified below. The overall Goal score from each HQ Program Office and/or customer is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 3.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2015 provided by the Program Offices listed below.

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

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 3.2 below). The overall score earned is then compared to Table 3.3 to determine the overall letter grade for this Goal. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science, other cognizant HQ Program Offices, and other customers for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of cost for FY 2015 as compared to the total cost for those remaining HQ Program Offices.

**<u>Objectives</u>**

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

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

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

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

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

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

| **Letter Grade** | **Definition** |
|---|---|
| A+ | In addition to satisfying the conditions for B+, the execution of the Laboratory's strategic plan has enabled the Laboratory to achieve each of the following:<br>• *Most* of the Laboratory's core competencies are recognized as world leading;<br>• The Laboratory has attracted and retained world-leading scientists in *most* programs;<br>• There is evidence that previous decisions to pursue high-risk/high-payoff research proved to be correct and are paying off;<br>• The Laboratory has succeeded in developing new core competencies of *outstanding* quality in areas both exploratory, high-risk research and research that is vital to the DOE/SC missions; |
| A | In addition to satisfying the conditions for B+, the execution of the Laboratory's strategic plan has enabled the Laboratory to achieve the following:<br>• *Several* of the Laboratory's core competencies are recognized as world leading;<br>• The Laboratory has attracted and retained world-leading scientists in *several* programs;<br>• There is evidence that previous decisions to pursue high-risk/high-payoff research proved to be correct and are paying off<br>• The Laboratory has succeeded in developing *new* core competencies of *high* quality in areas both exploratory, high-risk research and research that is vital to the DOE/SC missions |
| A- | In addition to satisfying the conditions for B+, the execution of the Laboratory's strategic plan has enabled the Laboratory to achieve at least one of the following:<br>• At least one of the Laboratory's core competencies is recognized as *world-leading*;<br>• The Laboratory has attracted and retained *world-leading* scientists in one or more programs;<br>• The Laboratory has a coherent plan for addressing future workforce challenges. |
| B+ | The execution of the Laboratory's strategic plan has enabled the Laboratory to achieve each of the following objectives:<br>• The Laboratory has articulated a coherent and compelling strategic plan that has been developed with input from external research communities and headquarters guidance, which, where appropriate, includes a coherent plan for building smaller research programs into new core competencies; and reallocates resources away from less effective programs.<br>• The Laboratory has demonstrated the ability to attract and retain professional scientific staff in support of its strategic vision.<br>• The portfolio of Laboratory research balances the needs for both high-risk/ high-payoff research and stewardship of mission-critical research.<br>• The Laboratory's research portfolio takes advantage of unique capabilities at the Laboratory.<br>• The Laboratory's research portfolio includes activities for which the Laboratory is uniquely capable. |

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

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

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

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

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

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

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

| Letter Grade | Definition |
|---|---|
| D | • Project/program/facility plans do not exist for a significant fraction of the Laboratory's major projects/programs/facilities;<br>OR<br>• Significant work at the Laboratory is not in alignment with the project/program/facility plans |
| F | The Laboratory has failed to conduct project/program/facility planning activities. |

### 3.3 Provide Efficient and Effective Communications and Responsiveness to Headquarters Needs

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

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

| Letter Grade | Definition |
|---|---|
| A+ | In addition to meeting the all expectations under A,<br>• The Laboratory's effective communication and extraordinary responsiveness in the face of extreme situations or a national emergency had a materially positive impact on the outcome of the event and/or DOE mission objectives |
| A | In addition to satisfying the conditions for B+, the Laboratory also meets all of the following:<br>• Laboratory management has instilled a culture throughout the lab that emphasizes good communication practices;<br>• Communication channels are well-defined and information is effectively conveyed;<br>• Responses to HQ requests for information from all Laboratory representatives are prompt, thorough, correct and succinct; important or critical information is delivered in real-time;<br>• Laboratory representatives *always* initiate a communication with HQ on emerging Laboratory issues; headquarters is never surprised to learn of emerging Laboratory issues through outside channels. |
| A- | In addition to satisfying the conditions for B+,<br>• Laboratory management has instilled a culture throughout the lab that emphasizes good communication practices; and<br>• Responses to requests for information are prompt, thorough, and economical/succinct at all levels of interaction;<br>• Laboratory representatives *often* initiate communication with HQ on emerging Laboratory issues;<br>• under critical circumstances, essential information is delivered in real-time |
| $B^+$ | The Laboratory has achieved each of the following objectives:<br>• Staff throughout the Laboratory organization engage in good communication practices;<br>• Responses to requests for information are prompt and thorough;<br>• The accuracy and integrity of the information provided is never in doubt;<br>• Up-to-date point-of-contact information is widely available for all programmatic areas;<br>• Headquarters is always and promptly informed of both positive and negative events at the Laboratory |
| B | The Laboratory failed to meet the conditions for B+ *in a few instance*s |

| Letter Grade | Definition |
|---|---|
| B- | The Laboratory fails to meet the conditions for B+ for *one* of the following reasons:<br>• Responses to requests for information do not provide the minimum requirements to meet HQ needs; While the integrity of the information provided is never in doubt, its accuracy sometimes is;<br>• Laboratory representatives do not take the initiative to alert HQ to emerging Laboratory issues. |
| C | The Laboratory fails to meet the conditions for B+ for *one or more* of the following reasons:<br>• Responses to requests for information frequently fail to provide the minimum requirements to meet HQ needs<br>• The Laboratory used outside channels or circumvented HQ in conveying critical information;<br>• The integrity and/or accuracy of information provided is sometimes in doubt;<br>• Laboratory management fails to demonstrate that its employees are held accountable for ensuring effective communication and responsiveness;<br>• Laboratory representatives failed to alert HQ to emerging Laboratory issues. |
| D | The Laboratory fails to meet the conditions for B+ for one of the following reasons:<br>• Laboratory staff are generally well-intentioned in communication but consistently ineffective and/or incompetent;<br>• The Laboratory management fails to emphasize the importance of effective communication and responsiveness |
| F | The Laboratory fails to meet the conditions for B+ for one of the following reasons<br>• Laboratory staff are openly hostile and/or non-responsive to requests for information – emails and phone calls are consistently ignored;<br>• Responses to requests for information are consistently incorrect, inaccurate or fraudulent – information is not organized, is incomplete, or is fabricated. |

**Notable Outcomes**

- **BES**: Develop a comprehensive strategic plan for the materials research portfolio supported by BES-MSE. (Objective 3.1)
- **NP**: Strengthen the BNL Isotope Program Management team to promote more effective operations and communication by filling vacant senior management positions. (Objective 3.2)

| Program Office[5] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| **Office of Advanced Scientific Research** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 30% | |
| 3.2 Project/Program /Facilities Management | | | 40% | |
| 3.3 Communications and Responsiveness | | | 30% | |
| | | | Overall ASCR Total | |
| **Office of Basic Energy Sciences** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 35% | |
| 3.2 Project/Program /Facilities Management | | | 35% | |
| 3.3 Communications and Responsiveness | | | 30% | |
| | | | Overall BES Total | |
| **Office of Biological and Environmental Research** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 20% | |
| 3.2 Project/Program /Facilities Management | | | 30% | |

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

| Program Office[5] | Letter Grade | Numerical Score | Weight | Overall Score |
|---|---|---|---|---|
| 3.3 Communications and Responsiveness | | | 50% | |
| | | | Overall BER Total | |
| **Office of High Energy Physics** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 30% | |
| 3.2 Project/Program /Facilities Management | | | 45% | |
| 3.3 Communications and Responsiveness | | | 25% | |
| | | | Overall HEP Total | |
| **Office of Nuclear Physics** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 40% | |
| 3.2 Project/Program /Facilities Management | | | 35% | |
| 3.3 Communications and Responsiveness | | | 25% | |
| | | | Overall NP Total | |
| **Office of Defense Nuclear Nonproliferation** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 43% | |
| 3.2 Project/Program /Facilities Management | | | 30% | |
| 3.3 Communications and Responsiveness | | | 27% | |
| | | | Overall DNN Total | |
| **Office of Nuclear Energy** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 20% | |
| 3.2 Project/Program /Facilities Management | | | 30% | |
| 3.3 Communications and Responsiveness | | | 50% | |
| | | | Overall Office of Nuclear Energy | |
| **Nuclear Regulatory Commission** | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | | | 34% | |
| 3.2 Project/Program /Facilities Management | | | 33% | |
| 3.3 Communications and Responsiveness | | | 33% | |
| | | | Overall NRC Total | |

**Table 3.1 – Program Performance Goal 3.0 Score Development**

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

**Table 3.2 – Overall Performance Goal 3.0 Score Development**[6]

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

**Table 3.3 – Goal 3.0 Final Letter Grade**

[6] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual cost for FY 2015.

**Attachment I**

**Program Office Goal & Objective Weightings**
**Office of Science**

| | ASCR | BER | BES | HEP | NP |
|---|---|---|---|---|---|
| | **Weight** | **Weight** | **Weight** | **Weight** | **Weight** |
| **Goal 1.0 Mission Accomplishment** | | | | | |
| | | | | | |
| 1.1 Impact | 50% | 60% | 50% | 60% | 50% |
| 1.2 Leadership | 50% | 40% | 50% | 40% | 50% |
| | | | | | |
| **Goal 2.0 Design, Fabrication, Construction and Operation of Facilities** | | | | | |
| | | | | | |
| 2.1 Design of Facility (the initiation phase and the definition phase, i.e. activities leading up to CD-2) | 0% | 0% | 0% | 10% | 0% |
| 2.2 Construction of Facility / Fabrication of Components (execution phase, Post CD-2 to CD-4) | 0% | 0% | 25% | 65% | 0% |
| 2.3 Operation of Facility | 0% | 90% | 40% | 25% | 85% |
| 2.4 Utilization of Facility to Grow and Support Lab's Research Base and External User Community | 0% | 10% | 35% | 0% | 15% |
| | | | | | |
| **Goal 3.0 Program Management** | | | | | |
| | | | | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | 30% | 20% | 35% | 30% | 40% |
| 3.2 Project/Program/Facilities Management | 40% | 30% | 35% | 45% | 35% |
| 3.3 Communications and Responsiveness | 30% | 50% | 30% | 25% | 25% |

**Attachment I**

**Program Office Goal & Objective Weightings**
**All Other Customers**[7]

| | DNN Weight | NRC Weight |
|---|---|---|
| **Goal 1.0 Mission Accomplishment** | | |
| | | |
| 1.1 Impact | 54% | 50% |
| 1.2 Leadership | 46% | 50% |
| | | |
| **Goal 3.0 Program Management** | | |
| | | |
| 3.1 Effective and Efficient Strategic Planning and Stewardship | 43% | 34% |
| 3.2 Project/Program/Facilities Management | 30% | 33% |
| 3.3 Communications and Responsiveness | 27% | 33% |

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

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

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

**Objectives:**

**4.1 Leadership and Stewardship of the Laboratory**

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

- Define an exciting yet realistic scientific vision for the future of the laboratory,
- Make progress in realizing the vision for the laboratory,

[7] Objective weightings indicated for non-science customers are reflective of FY 2015 weightings and will be updated as those customers provide their weightings. Final Objective weightings will be incorporated, as appropriate, once they are determined by each HQ Program Office and provided to the Site Office. Should a HQ Program Office fail to provide final Objective weightings before the end of the first quarter FY 2015 the preliminary weightings provided shall become final.

- Establish and maintain long-term partnerships/relationships that maintain appropriate relations with the scientific and local communities, and
- Develop and leverage appropriate relations with private industry to the benefit of the laboratory and the U.S. taxpayer.

| Letter Grade | Definition |
|---|---|
| A+ | The Senior Leadership of the laboratory has made outstanding progress (on an order of magnitude scale) over the previous year in realizing their vision for the laboratory, and has had a demonstrable impact on the Department and the Nation. Strategic plans are of outstanding quality, have been externally recognized and referenced for their excellence, and have an impact on the vision/plans of other national laboratories. The Senior leadership of the laboratory may have been faced very difficult challenges and plotted, successfully, its own course through the difficulty, with minimal hand-holding by the Department. Partners in the scientific and local communities applaud the laboratory in national fora, and the Department is strengthened by this. |
| A | The Senior Leadership of the laboratory has made significant progress over the previous year in realizing their vision for the laboratory, and has through this has had a demonstrable positive impact on the Office of Science and the Department. Strategic plans are of outstanding quality, and recognize and reflect the vision/plans of other national laboratories. Faced with difficult challenges, actions were taken by the Senior leadership of the laboratory to redirect laboratory activities to enhance the long-term future of the laboratory. Partners in the scientific and local communities applaud the laboratory in national fora, and the Department is strengthened by this. |
| A- | The laboratory senior management performs better than expected (B+ grade) in these areas. |
| B+ | The Senior Leadership of the laboratory has made significant progress over the previous year in realizing their vision for the laboratory. Strategic plans present long range goals that are both exciting and realistic. Decisions and actions taken by the lab leadership align work, facilities, equipment and technical capabilities with the laboratory vision and plan. The Senior leadership of the laboratory faced difficult challenges and successfully plotted its own course through the difficulty, with help from the Department. Partners in the scientific and local communities are supportive of the laboratory. |
| B | The Senior Leadership of the laboratory has made little progress over the previous year in realizing their vision for the laboratory. Strategic plans present long range goals that are exciting and realistic; however DOE is not fully confident that the laboratory is taking the actions necessary for the goals to be achieved. The Laboratory is not fully engaged with its partners/relationships in the scientific and local communities to maximize the potential benefits these relations have for the laboratory. |
| C | The Senior Leadership of the laboratory has made no progress over the previous year in realizing their vision for the laboratory or aligning work, facilities, equipment and technical capabilities with the laboratory vision and plan. Strategic plans present long range goals that are either unexciting or unrealistic. Business plans exist, but they are not linked to the strategic plan and do not inspire DOE's confidence that the strategic goals will be achieved. Partnerships with the scientific and local communities with potential to advance the laboratory exist, but they may not always be consistent with the mission of or vision for the laboratory. Affected communities and stakeholders are mostly supportive of the laboratory and aligned with the management's vision for the laboratory. |
| D | The Senior Leadership of the laboratory has made no progress or has back-slid over the previous year in realizing their vision for the laboratory or in aligning work, facilities, equipment and technical capabilities with the laboratory vision and plan. Strategic plans present long range goals that are neither exciting nor realistic. Partnerships that may advance the Laboratory towards strategic goals are inappropriate, unidentified, or unlikely. Affected communities and stakeholders are not adequately engaged with the laboratory and indicate non-alignment with DOE priorities. |

| Letter Grade | Definition |
|---|---|
| F | The Senior Leadership of the laboratory has made no progress or has back-slid over the previous year in realizing their vision for the laboratory or in or aligning work, facilities, equipment and technical capabilities with the laboratory vision and plan. Strategic plans present long range goals that are not aligned with DOE priorities or the mission of the laboratory. Partnerships that may advance the Laboratory towards strategic goals are inappropriate, unidentified, and unlikely, and/or the senior management team does not demonstrate a concerted effort to develop, leverage, and maintain relations with the scientific and local communities to assist the laboratory in achieving a successful future. Affected communities and stakeholders are openly non-supportive of the laboratory and DOE priorities. |

### 4.2 Management and Operation of the Laboratory

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

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

| Letter Grade | Definition |
|---|---|
| A+ | The laboratory has a nationally or internationally recognized contractor assurance system in place that integrates internal and external (corporate) evaluation processes to evaluate risk, and is working to help others internal and external to the Department establish similarly outstanding practices. The laboratory understands the drivers of cost at their lab, and are prioritizing and managing these costs commensurate with the associated risks and benefits to the laboratory and the SC laboratory system.<br>Laboratory management and processes reflect a sense of accountability and responsibility with is evident down and through the entire organization. Communication between the laboratory and SC headquarters and the Site Office is such that all the national laboratories and the Department as a whole benefits. |
| A | The laboratory has improved dramatically in the last year in all of the following: building a robust and transparent contractor assurance system that integrates internal and external (corporate) evaluation processes to evaluate risk; demonstrating the use of this system in making decisions that are aligned with the laboratory's vision and strategic plan; understanding the drivers of cost at their lab, and prioritizing and managing these costs consistent with their associated risks and benefits to the laboratory and the SC laboratory system; demonstrating laboratory management and processes reflect a sense of accountability and responsibility with is evident down and through the entire organization; assuring communication between the laboratory and SC headquarters that is beneficial to both the lab and SC. |
| A- | The laboratory senior management performs better than expected (B+ grade) in these areas. |
| B+ | The laboratory has a robust and transparent contractor assurance system in place that integrates internal and external (corporate) evaluation processes to evaluate risk. The laboratory can demonstrate use of this system in making decisions that are aligned with the laboratory's vision and strategic plan. The laboratory understands the drivers of cost at their lab, and are prioritizing and managing these costs commensurate with the associated risks and benefits to the laboratory and the SC laboratory system.<br>Laboratory management and processes reflect a sense of accountability and responsibility with is evident down and through the entire organization. Communication between the laboratory and SC headquarters and the Site Office is such that there are no surprises or embarrassments. |

| | |
|---|---|
| B | The laboratory has a contractor assurance system in place but further improvements are necessary, or the link between the CAS and the laboratory's decision-making processes are not evident. The laboratory understands the drivers of cost at their lab, but they are not prioritizing and managing these costs as well as they should to be commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Laboratory management and processes reflect a sense of accountability and responsibility with is mostly evident down and through the entire organization. Communication between the laboratory and SC headquarters and the Site Office is such that there are no significant surprises or embarrassments. |
| C | The laboratory lacks a robust and transparent contractor assurance system in place that integrates internal and external (corporate) evaluation processes to evaluate risk. The laboratory cannot demonstrate use of this system in making decisions that are aligned with the laboratory's vision and strategic plan. The laboratory does not fully understand the drivers of cost at their lab, and thus are not prioritizing and managing these costs as well as they should to be commensurate with the associated risks and benefits to the laboratory and the SC laboratory system. Communication between the laboratory and SC headquarters and the Site Office is such that there has been at least one significant surprise or embarrassment. |
| D | The laboratory lacks a contractor assurance system, doesn't understand the drivers of cost at their lab, and is not prioritizing and managing costs. SC HQ must intercede in management decisions. Poor communication between the laboratory and SC headquarters and the Site Office has resulted in more than one significant surprise or embarrassment. |
| F | Lack of management by the laboratory's senior management has put the future of the laboratory at risk, or has significantly hurt the reputation of the Office of Science. |

### 4.3 Contractor Value-added

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

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

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

**Notable Outcomes**

- **BHSO**: BSA Management will demonstrate progress in implementing actions identified in their Accountability Initiative from FY14. (Objective 4.2)
- **BHSO**: BSA management will sustain improvements in safety performance achieved in FY14. (Objective 4.2)

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

**Table 4.1 – Performance Goal 4.0 Score Development**

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

**Table 4.2 – Goal 4.0 Final Letter Grade**

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

The weight of this Goal is TBD%.

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

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

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

**Notable Outcomes**

- **BHSO**: BSA will expand utilization of existing tools (hazard validation tool, ES&H surveillance cards, etc.) to improve the identification and management of hazards. (Objective 5.1)

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

**Table 5.1 – Performance Goal 5.0 Score Development**

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

**Table 5.2 – Goal 5.0 Final Letter Grade**

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

The weight of this Goal is TBD%.

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

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

In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends and outcomes in the development, deployment and integration of foundational program (e.g., Contractor Assurance, Quality, Financial Management, Acquisition Management, Property Management, and Human Resource Management) systems across the Laboratory. This may include, but is not limited to, minimizing the occurrence of management systems support issues; quality of work products; continual improvement driven by the results of audits, reviews, and other performance information; the integration of system performance metrics and trends; the degree of knowledge and appropriate utilization of established system processes/procedures by Contractor management and staff; benchmarking and performance trending analysis. The DOE evaluator(s) shall also consider the stewardship of the pipeline of innovations and resulting intellectual assets at the Laboratory along with impacts and returns created/generated as a result of technology transfer, work for others and intellectual asset deployment activities.

**Notable Outcomes**

- **BHSO**: BSA will demonstrate effective Contractor Assurance System (CAS) implementation in business systems. (Objectives 6.1, 6.4)

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

**Table 6.1 – Performance Goal 6.0 Score Development**

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

**Table 6.2 – Goal 6.0 Final Letter Grade**

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

The weight of this Goal is TBD%.

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

7.1 Manage Facilities and Infrastructure in an Efficient and Effective Manner that Optimizes Usage, Minimizes Life Cycle Costs, and Ensures Site Capability to Meet Mission Needs

7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to Support the Continuation and Growth of Laboratory Missions and Programs

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

**Notable Outcomes**

- **BHSO**: Implementation of the BNL Campus Strategy including sustainability objectives; space consolidation, and strengthen the mission need for projects to support the science mission described in the Annual Lab Plan. (Objectives 7.1, 7.2)

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

**Table 7.1 – Performance Goal 7.0 Score Development**

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

**Table 7.2 – Goal 7.0 Final Letter Grade**

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

The weight of this Goal is TBD%.

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

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

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

**Notable Outcomes**

- None

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

**Table 8.1 – Performance Goal 8.0 Score Development**

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

**Table 8.2 – Goal 8.0 Final Letter Grade**

# U.S. Department of Energy

# and

# Brookhaven Science Associates, LLC

# ATTACHMENT J.3

# APPENDIX C

# SPECIAL FINANCIAL INSTITUTION ACCOUNT

## Applicable to the Operation of

## The Brookhaven National Laboratory

## Contract No. DE-AC02-98CH10886

## Modification No. M324

# APPENDIX C

# SPECIAL FINANCIAL INSTITUTION ACCOUNT

## History of Amendments

| Amendments | Dated |
|---|---|
| Original Letter of Credit | December 22, 1997 |
| Amendment to Agreement | April 3, 2003 |
| Amendment to Agreement | April 8, 2004 |
| Amendment to Agreement | September 29, 2004 |
| Amendment to Agreement | November 30, 2007 |
| Amendment to Agreement | December 31, 2009 |
| Amendment to Agreement | May 3, 2010 |

## CHECKS-PAID METHOD OF LETTER OF CREDIT FINANCING

This agreement is entered into this First day of January 1998, between the UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as DOE); Associated Universities, Inc., corporation/legal entity existing under the laws of the State of New York, or successor contractor, (hereinafter referred to as the Contractor); and Chase Manhattan Bank, a banking institution wholly owned by Chase Manhattan Corporation, existing under the laws of the State of New York, located at 55 Water Street, Room 718, New York City, NY 10041, (hereinafter referred to as the Bank).

RECITALS

(a) On the effective date of August 21, 1995, DOE and the Contractor entered into Modification No. M327 of Contract No. DE-AC02-76CH00016, or successor contract, providing for transfer of funds on a payments-cleared basis.

(b) DOE requires that amounts transferred to the Contractor thereunder be deposited in a Special Demand Deposit Account at a financial institution covered by the U.S. Department of Treasury - approved Government deposit insurance organizations that are identified in I TFM 6-9000.

These special demand deposits must be kept separate from the Contractor's general or other funds; and the parties are agreeable to so depositing said amounts with the Bank.

(c) The special demand deposit account shall be designated Associated Universities, Inc. (or successor Contractor)/Brookhaven National Laboratory General Operating Account.

COVENANTS

In consideration of the foregoing, and for other good and valuable considerations, it is agreed that:

(1) The Government shall have a title to the credit balance in said account to secure the repayment of all funds transferred to the Contractor and said title shall be superior to any lien or claim of the Bank or others with respect to such accounts.

(2) The provisions of said contract(s) between DOE and the Contractor relating to the transfer of funds into and withdrawal of funds from the special demand deposit account, but the Bank shall not be responsible for the application of funds withdrawn from said account. After receipt by the Bank of directions from DOE, the Bank shall act thereon and shall be under no liability to any party hereto for any action taken in accordance with the said written directions. Any written directions received by the Bank from the Government upon DOE stationary and purporting to be signed by, or signed at the written direction of, the Government may, insofar as the rights, duties, and liabilities of the Bank are concerned, be considered as having been properly issued and filed with the Bank by DOE.

(3) DOE, or its authorized representatives, shall have access to financial records maintained by the Bank with respect to such a special demand deposit account at all reasonable times and for all reasonable purposes, including, but without limitation to, the inspection or copying of such financial records and any or all memoranda, payment requests, correspondence, or documents pertaining thereto. Such financial records shall be preserved by the Bank for a period of six (6) years after the final payment under this Agreement.

(4) In the event of the service of any writ of attachment, levy of execution, or commencement of garnishment proceedings with respect to the special demand deposit account, the Bank will promptly notify the Department of Energy at the Chicago Operations Office, 9800 S. Cass Avenue, Argonne, Illinois 60439.

(5) DOE shall authorize funds that shall remain available to the extent that obligations that have been incurred in good faith thereunder by the Contractor [Associated Universities, Inc., or successor Contractor] to the Bank for the benefit of the special demand deposit account. The Bank agrees to honor upon presentation for payment all payments issued by the Contractor and to restrict all withdrawals against the funds authorized to an amount sufficient to maintain the average daily balance in the special demand deposit account in a net positive as close to zero as administratively possible.

If the calculated average daily balance for the month, inclusive of the time deposit account, results in a positive account balance which exceeds the balance needed to cover transaction costs for that month, and the financial institution had no control over the positive balance, the financial institution will compensate DOE for the loss of the availability of funds by multiplying the average daily balance for the month by the Treasury Tax and Loan Funds Rate divided by 12. If the financial institution caused the positive account balance, it shall compensate by multiplying the excess fund balance by the Federal Funds Rate adjusted for the proper period of time. The compensation will be remitted to the cognizant DOE finance office.

The Bank agrees to service the account in this manner based on the requirements and specifications contained in this Agreement, in consideration of the placement by DOE of a noninterest-bearing time deposit in an amount agreed upon. The Bank agrees that per item costs, detailed in the Attachment C "Quotation Pricing Sheet" contained in the Bank's aforesaid bid will remain constant during the term of this Agreement, but may be reviewed for adequacy at the request of either party, with a formal review required semiannually. The contractor will withdraw $565,000 in funds from the special demand deposit account in the Bank. This account will hereinafter be defined as the time deposit account. The funds in the time deposit will remain on deposit and shall not be withdrawn or used for any purposes without the authorization of DOE. The amount of the deposit may be adjusted upward or downward but only with the approval of DOE.

(6) The Bank will post collateral, acceptable under Department of Treasury Circular No. 176, with the Federal Reserve Bank in amount equal to the net balances (including the noninterest-bearing time deposit account) in all of the accounts included in this Agreement.

(7) This Agreement, with all its provisions and covenants, shall be in effect for a term of two years, beginning on the first day of January, 1998, and ending through the thirty-first day of December, 1999.

(a) DOE may extend the term of this Agreement for an additional one year term by written notice to the Contractor and the Bank provided that DOE shall give the Contractor and Bank a preliminary written notice of its interest at least 90 days before this Agreement expires. The preliminary notice does not commit DOE to an extension.

(b) If the DOE exercises this option, the extended agreement shall be considered to include this option provision.

(c) The duration of the Agreement; including the exercise of any options under this Covenant, shall not extend past December 31, 2000.

(8) DOE or the Contractor may terminate this Agreement at any time within the agreement period submitting written notice to the other parties 90 (ninety) days prior to the desired termination date. The specific provisions for operating the account during the 90 (ninety) day period are contained in Covenant (11).

(9) DOE or the Contractor may terminate this Agreement at any time within the agreement period upon 30 days written notice to the bank if DOE or the Contractor, or both parties find that the bank has failed to substantially perform its obligations under this Agreement or that the Bank is performing its obligations in a manner that precludes administering the program in a effective and efficient manner or that precludes the effective utilization of the Government's cash resources.

(10) Notwithstanding the provisions of Covenants 8 and 9, in the event the contract (referenced in Recital (a) between the DOE and the Contractor) is not renewed or is terminated, this Agreement between DOE, the Contractor and the Bank may be terminated automatically by DOE or will be assignable to a successor Contractor upon the delivery of written notice to the Bank.

(11) In the event of termination or expiration the Bank agrees to retain the Contractor's special demand deposit account for an additional 90-day period to clear outstanding payment items. Within seven (7) days of expiration of the agreement an analysis of the special demand deposit account shall be made by the DOE to determine whether an insufficient or excessive balance was maintained in the time deposit account to compensate the Bank for services rendered up to the expiration date.

(a) If the analysis indicates that the Bank has been insufficiently compensated for services rendered up to the expiration of the Agreement, the Contractor shall-

(1) Maintain on deposit, during this 90 day period; sufficient Federal funds to reimburse the Bank for prior cumulative loss of earnings, and

(2) Maintain on deposit in the time deposit account sufficient Federal funds to compensate the bank for services rendered.

(b) If the analysis indicates that the Bank has been overcompensated for services rendered up to the expiration of the Agreement, DOE shall close out the time deposit account and secure from the Bank a payment in an amount equal to the cumulative excess compensation less compensation for estimated services to be rendered during the 90-day period.

(c) If cumulative excess compensation is not sufficient to compensate the Bank for services rendered during the 90-day period, adjustments will be made to the time deposit account to compensate the Bank for the difference between the cost of services rendered during the 90-day period and the cumulative excess compensation.

During the entire 90 day period, it is further understood that:

(a) The Bank shall maintain collateral in an amount sufficient to collateralize the highest balance in the account, less Federal Deposit Insurance Corporation coverage on the accounts.

(b) All service charges shall be consistent with the amounts reflected in this Agreement.

(c) All terms and conditions of the aforesaid bid submitted by the Bank which are not inconsistent with this 90-day additional term shall remain in effect

(d) This agreement shall continue in effect, with exception of the following:

(1) Funds Authorized (Covenant 5)

(2) Term Agreement ( Covenant 7).

(3) Termination of Agreement ( Covenant 8 and 9).

The Bank has submitted the forms entitled "Offeror Representations and Certifications" and "Quotation Pricing Sheet," the latter of which includes the calculation of required compensating balance. These forms have been accepted by the Contractor and the Government and are incorporated herein with the document entitled "Financial Institution's Information on the Checks-Paid Letter of Credit" as an integral part of this agreement.

Any direction received by the Bank from DOE which alters any portion of the terms and conditions of this agreement, including the amount of the time deposit agreed to herein, shall not be valid unless signed by the Contracting Officer.

IN WITNESS WHEREOF the parties hereto have caused this Agreement which consists of 5 pages including the signature pages, to be executed as of the day and year first above written.

12-5-97
Date Signed

ROBERT P. GORDON
CONTRACTING OFFICER

By _____
(Typed name of Contracting Officer)

_____
(Signature of Contracting Officer)

WITNESS

_____
(Typed Name of Witness)

_____
(Signature of Witness)

Note-In case of corporation, Witness not required. Type Names under all signatures.

Associated Universities, Inc.
(Typed Name of Contractor)

By Jerome Hudis
(Typed Name of Contractor's Representative)

_____
(Signature of Contractor's Representative)

Vice President and Controller
(Title)

1400 16th Street, N.W.
Washington, DC 20036
(Address)

December 3, 1997
(Date of Signature)

_____
(Typed Name of Witness)

_____
Signature of Witness)

Note-In case of corporation, Witness not required. Type Names under all signatures.

The Chase Manhattan Bank
(Typed Name of Bank)

By Joseph M. Bognanno
(Name of Bank Representative)

_____
(Signature of Bank Representative)
*See attached letter.

Vice President
(Title)

One Chase Square - Tower 8
Rochester, NY 14643
(Address)

December 22, 1997
(Date of Signature)

NOTE-The Contractor, if a corporation, should cause the following Certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Agreement and the Certificate.

CERTIFICATE

I, Leland F. Willis, certify that I am the Vice President of Environmental Safety and Health of the corporation named as Contractor herein; that Jerome Hudis, who signed this Agreement on behalf of the Contractor was then Vice President and Controller of said corporation; that said Agreement was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Leland F. Willis (Corporate Seal)
(Signature)

NOTE-Bank Repository, if a corporation, should cause the following certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Agreement and the Certificate.

CERTIFICATE

I, _____, certify that I am the _____

Of the corporation named as Bank Depository herein: that _____,

Who signed this Agreement on behalf of the Bank Depository was then _____

Of said corporation, the said Agreement was duly signed for and in behalf of said corporation by

Authority of its governing body, and is within the scope of corporate powers.

_____ (Corporate Seal)
(Signature)

AG(C)

# AMENDMENT TO AGREEMENT
# CHECKS-PAID METHOD OF LETTER OF CREDIT FINANCING

This is an Amendment to the Agreement entered into the First day of January 1998 between the UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as DOE); Associated Universities, Inc., corporation/legal entity existing under the laws of the State of New York, or successor contractor, (hereinafter referred to as the Contractor); and Chase Manhattan Bank, a banking institution wholly owned by Chase Manhattan Corporation, existing under the laws of the State of New York, located at 55 Water Street, Room 718, New York City, NY 10041, (hereinafter referred to as the Bank).

**WHEREAS**, the parties entered into an Agreement dated the First day of January 1998 entitled "Checks-Paid Method of Letter of Credit Financing;" and

**WHEREAS**, Brookhaven Science Associates, LLC succeeded Associated Universities, Inc., as the Contractor for Brookhaven National Laboratory effective the First day of March 1998; and

**WHEREAS**, The Chase Manhattan Corporation merged with J.P. Morgan & Co. Incorporated on December 31, 2000; and

**WHEREAS**, the parties have proceeded under the aforesaid Agreement from the First day of March 1998 until the date hereof; and

**WHEREAS**, the parties are desirous of formally extending the term of the aforesaid Agreement;

**NOW THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:**

1. The Term of the Agreement with all its provisions and covenants is hereby extended through the Fourth day of January 2004.

2. DOE may extend the Term of the Agreement for an additional period of time to be contemporaneous with any extension of time granted by DOE to the Contractor for the operation of Brookhaven National Laboratory, provided DOE gives written notice to the Contractor and the Bank at least ninety days prior to the Fourth day of January 2004. Such notice shall not commit DOE to the extension, which shall only occur after a formal amendment to the agreement is executed by the parties.

NOTE: The Contractor, if a Company, should cause the following Certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, Gregory Fess, certify that I am the Secretary of the Company named as Contractor herein; that Brian P. Sack, who signed this Amendment on behalf of the Contractor was then Chief Financial Officer of said Company; that said Amendment was duly signed for and in behalf of said Company by authority of its governing body, and is within the scope of its Company powers.

_____ (Company Seal)
Signature

NOTE: Bank Repository, if a Corporation, should cause the following certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, Margaret E. Garvin, certify that I am ~~the~~ an Assistant Secretary of the Corporation named as Bank Depository herein; that Joseph M. Bugnano, who signed this Amendment on behalf of the Bank Depository was then a Vice President of said Corporation; that said Amendment was duly signed for and in behalf of said Corporation by authority of its governing body, and is within the scope of its corporate powers.

_____ (Corporate Seal)
Signature

IN WITNESS WHEREOF the parties hereto have caused this Amendment which consists of three pages including the signature pages, to be executed as of the day and year first above written.

4-4-03
Date Signed

By: Robert P. Gordon, Contracting Officer
(Typed Name of Contracting Officer)

(Signature of Contracting Officer)

WITNESS

(Typed Name of Witness)

Brookhaven Science Associates, LLC
(Typed name of Contractor)

(Signature of Witness)

By: Brian P. Sack
(Typed name of Contractor's Representative)

(Signature of Contractor's Representative)

Chief Financial Officer
(Title)

Note-In case of Company, Witness not required. Type names under all signatures.

P.O. Box 5000, Bldg. 460, Upton, NY 11973
(Address)

4/2/03
(Date of Signature)

(Typed Name of Witness)

JPMorgan Chase Bank
(Typed name of Bank)

(Signature of Witness)

By: Joseph M. Bognanno
(Name of Bank Representative)

(Signature of Bank Representative)

Note-In case of Company, Witness not required. Type names under all signatures.

Vice President
(Title)

One Chase Square-Tower 10, Rochester, NY 14643
(Address)

4/3/03
(Date of Signature)

# AMENDMENT TO AGREEMENT
# CHECKS-PAID METHOD OF LETTER OF CREDIT FINANCING

This is an Amendment to the Agreement entered into the First day of January 1998 between the UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as DOE); Associated Universities, Inc., corporation/legal entity existing under the laws of the State of New York, or successor contractor, (hereinafter referred to as the Contractor); and Chase Manhattan Bank, a banking institution wholly owned by Chase Manhattan Corporation, existing under the laws of the State of New York, located at 55 Water Street, Room 718, New York City, NY 10041, (hereinafter referred to as the Bank).

**WHEREAS**, the parties entered into an Agreement dated the First day of January 1998 entitled "Checks-Paid Method of Letter of Credit Financing;" and

**WHEREAS**, Brookhaven Science Associates, LLC succeeded Associated Universities, Inc., as the Contractor for Brookhaven National Laboratory effective the First day of March 1998; and

**WHEREAS**, The Chase Manhattan Corporation merged with J.P. Morgan & Co. Incorporated on December 31, 2000; and

**WHEREAS**, the parties have proceeded under the aforesaid Agreement from the First day of March 1998 until the date hereof; and

**WHEREAS**, the parties are desirous of formally extending the term of the aforesaid Agreement;

**NOW THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:**

1. The Term of the Agreement with all its provisions and covenants is hereby extended through the Second day of July 2004.

2. DOE may extend the Term of the Agreement for an additional period of time to be contemporaneous with any extension of time granted by DOE to the Contractor for the operation of Brookhaven National Laboratory. Such notice shall not commit DOE to the extension, which shall only occur after a formal amendment to the agreement is executed by the parties.

IN WITNESS WHEREOF the parties hereto have caused this Amendment which consists of three pages including the signature pages, to be executed as of the day and year first above written.

_____
Date Signed

By: Robert P. Gordon, Contracting Officer
(Typed Name of Contracting Officer)

(Signature of Contracting Officer)

WITNESS

_____
(Typed Name of Witness)

Brookhaven Science Associates, LLC
(Typed name of Contractor)

_____
(Signature of Witness)

By: Brian P. Sack
(Typed name of Contractor's Representative)

(Signature of Contractor's Representative)

Chief Financial Officer
(Title)

Note-In case of Company, Witness not required. Type names under all signatures.

P.O. Box 5000, Bldg. 460, Upton, NY 11973
(Address)

_____
(Date of Signature)

Catherine I. Bowden_____
(Typed Name of Witness)

(Signature of Witness)

JPMorgan Chase Bank
(Typed name of Bank)

By: Philip M. Hendrix
(Name of Bank Representative)

(Signature of Bank Representative)

Note-In case of Company, Witness not required. Type names under all signatures.

Vice President
(Title)

One Chase Square-Tower 10, Rochester, NY 14643
(Address)

April 8, 2004
(Date of Signature)

NOTE: The Contractor, if a Company, should cause the following Certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, Gregory Fess, certify that I am the Secretary of the Company named as Contractor herein; that Brian P. Sack, who signed this Amendment on behalf of the Contractor was then Chief Financial Officer of said Company; that said Amendment was duly signed for and in behalf of said Company by authority of its governing body, and is within the scope of its Company powers.

_____ (Company Seal)
Signature

NOTE: Bank Repository, if a Corporation, should cause the following certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, Margaret E. Garrity, certify that I am ~~the~~ an Assistant Secretary of the Corporation named as Bank Depository herein; that Philip M. Hendrix, who signed this Amendment on behalf of the Bank Depository was then a Vice President of said Corporation; that said Amendment was duly signed for and in behalf of said Corporation by authority of its governing body, and is within the scope of its corporate powers.

_____ (Corporate Seal)
Signature

**AMENDMENT TO AGREEMENT**
**CHECKS-PAID METHOD OF LETTER OF CREDIT FINANCING**

This is an Amendment to the Agreement entered into the First day of January 1998 between the UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as DOE); Associated Universities, Inc., corporation/legal entity existing under the laws of the State of New York, or successor contractor, (hereinafter referred to as the Contractor); and Chase Manhattan Bank, a banking institution wholly owned by Chase Manhattan Corporation, existing under the laws of the State of New York, located at 55 Water Street, Room 718, New York City, NY 10041, (hereinafter referred to as the Bank).

**WHEREAS**, the parties entered into an Agreement dated the First day of January 1998 entitled "Checks-Paid Method of Letter of Credit Financing;" and

**WHEREAS**, Brookhaven Science Associates, LLC succeeded Associated Universities, Inc., as the Contractor for Brookhaven National Laboratory effective the First day of March 1998; and

**WHEREAS**, The Chase Manhattan Corporation merged with J.P. Morgan & Co. Incorporated on December 31, 2000; and

**WHEREAS**, the parties have proceeded under the aforesaid Agreement from the First day of March 1998 until the date hereof; and

**WHEREAS**, the parties are desirous of formally extending the term of the aforesaid Agreement;

**NOW THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:**

1. The Term of the Agreement with all its provisions and covenants is hereby extended through the Fourth day of January, 2008.

2. DOE may extend the Term of the Agreement for an additional period of time to be contemporaneous with any extension of time granted by DOE to the Contractor for the operation of Brookhaven National Laboratory. Such notice shall not commit DOE to the extension, which shall only occur after a formal amendment to the agreement is executed by the parties.

IN WITNESS WHEREOF the parties hereto have caused this Amendment which consists of three pages including the signature pages, to be executed as of the day and year first above written.

Sept 29, 2004
Date Signed

By: Robert P. Gordon, Contracting Officer
(Typed Name of Contracting Officer)

(Signature of Contracting Officer)

WITNESS

(Typed Name of Witness)

(Signature of Witness)

Brookhaven Science Associates, LLC
(Typed name of Contractor)

By: Brian P. Sack
(Typed name of Contractor's Representative)

(Signature of Contractor's Representative)

Chief Financial Officer
(Title)

Note-In case of Company, Witness not required. Type names under all signatures.

P.O. Box 5000, Bldg. 460, Upton, NY 11973
(Address)

September 29, 2004
(Date of Signature)

Jean E Rugoni
(Typed Name of Witness)

(Signature of Witness)

JPMorgan Chase Bank
(Typed name of Bank)

By: Nicholas V. Leone
(Name of Bank Representative)

(Signature of Bank Representative)

Note-In case of Company, Witness not required. Type names under all signatures.

Vice President
(Title)

277 Park Avenue, New York, NY 10172
(Address)

(Date of Signature)

NOTE: The Contractor, if a Company, should cause the following Certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, Gregory Fess, certify that I am the Secretary of the Company named as Contractor herein; that Brian P. Sack, who signed this Amendment on behalf of the Contractor was then Chief Financial Officer of said Company; that said Amendment was duly signed for and in behalf of said Company by authority of its governing body, and is within the scope of its Company powers.

Gregory Fess (Company Seal)
Signature

NOTE: Bank Repository, if a Corporation, should cause the following certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, Eunsun Lisa Lee, certify that I am the Assistant Secretary of the Corporation named as Bank Depository herein; that Nicholas V. Leone, who signed this Amendment on behalf of the Bank Depository was then Vice President of said Corporation; that said Amendment was duly signed for and in behalf of said Corporation by authority of its governing body, and is within the scope of its corporate powers.

(Corporate Seal)
Signature

# AMENDMENT TO AGREEMENT
# CHECKS-PAID METHOD OF LETTER OF CREDIT FINANCING

This is an Amendment to the Agreement entered into the First day of January 1998 between the UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as DOE); Associated Universities, Inc., corporation/legal entity existing under the laws of the State of New York, or successor contractor, (hereinafter referred to as the Contractor); and Chase Manhattan Bank, a banking institution wholly owned by Chase Manhattan Corporation, existing under the laws of the State of New York, located at 55 Water Street, Room 718, New York City, NY 10041, (hereinafter referred to as the Bank).

**WHEREAS**, the parties entered into an Agreement dated the First day of January 1998 entitled "Checks-Paid Method of Letter of Credit Financing;" and

**WHEREAS**, Brookhaven Science Associates, LLC succeeded Associated Universities, Inc., as the Contractor for Brookhaven National Laboratory effective the First day of March 1998; and

**WHEREAS**, The Chase Manhattan Corporation merged with J.P. Morgan & Co. Incorporated on December 31, 2000; and

**WHEREAS**, the parties have proceeded under the aforesaid Agreement from the First day of March 1998 until the date hereof; and

**WHEREAS**, the parties are desirous of formally extending the term of the aforesaid Agreement;

**NOW THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:**

1. The Term of the Agreement with all its provisions and covenants is hereby extended through the Fourth day of January, 2010.

2. DOE may extend the Term of the Agreement for an additional period of time to be contemporaneous with any extension of time granted by DOE to the Contractor for the operation of Brookhaven National Laboratory. Such notice shall not commit DOE to the extension, which shall only occur after a formal amendment to the agreement is executed by the parties.

IN WITNESS WHEREOF the parties hereto have caused this Amendment which consists of three pages including the signature pages, to be executed as of the day and year first above written.

11-16-07
Date Signed

By: Robert P. Gordon, Contracting Officer
(Typed Name of Contracting Officer)

(Signature of Contracting Officer)

WITNESS

(Typed Name of Witness)

(Signature of Witness)

Brookhaven Science Associates, LLC
(Typed name of Contractor)

By: John J. Hauser
(Typed name of Contractor's Representative)

(Signature of Contractor's Representative)

Chief Financial Officer
(Title)

Note-In case of Company, Witness not required. Type names under all signatures.

P.O. Box 5000, Bldg. 460, Upton, NY 11973
(Address)

11-16-07
(Date of Signature)

(Typed Name of Witness)

(Signature of Witness)

JPMorgan Chase Bank
(Typed name of Bank)

By: Paul Lionikis
(Name of Bank Representative)

(Signature of Bank Representative)

Note-In case of Company, Witness not required. Type names under all signatures.

Vice President
(Title)

420 West Van Buren Street, Floor 09, Chicago, IL 60606
(Address)

11/30/07
(Date of Signature)

NOTE: The Contractor, if a Company, should cause the following Certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, Gregory Fess, certify that I am the Secretary of the Company named as Contractor herein; that John J. Hauser, who signed this Amendment on behalf of the Contractor was then Chief Financial Officer of said Company; that said Amendment was duly signed for and in behalf of said Company by authority of its governing body, and is within the scope of its Company powers.

_____ (Company Seal)
Gregory Fess, Secretary Signature
Brookhaven Science Associates, LLC

NOTE: Bank Repository, if a Corporation, should cause the following certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, _____, certify that I am the _____ of the Corporation named as Bank Depository herein; that _____, who signed this Amendment on behalf of the Bank Depository was then_____ of said Corporation; that said Amendment was duly signed for and in behalf of said Corporation by authority of its governing body, and is within the scope of its corporate powers.

_____ (Corporate Seal)
Signature

SEE ATTACHED CERTIFICATE

# CERTIFICATE OF

# JPMORGAN CHASE BANK, NATIONAL ASSOCIATION

I, Maureen Morrissy, DO HEREBY CERTIFY that I am a duly elected and qualified Assistant Secretary of JPMorgan Chase Bank, National Association, a national banking association duly organized and existing under the laws of the United States of America (the "Bank") and that set forth below is a true and correct copy of resolutions duly adopted by the directors of the Bank pursuant to a unanimous written consent dated January 17, 2007. I further certify that said resolutions, at the date hereof, are still in full force and effect.

RESOLVED that loan agreements, contracts, indentures, mortgages, deeds, releases, conveyances, assignments, transfers, certificates, certifications, declarations, leases, discharges, satisfactions, settlements, petitions, schedules, accounts, affidavits, bonds, undertakings, guarantees, proxies, requisitions, demands, proofs of debt, claims, records, notes signifying indebtedness of JPMorgan Chase Bank, N.A. (the "Bank"), and any other contracts, instruments or documents in connection with the conduct of the business of the Bank, whether or not specified in the resolutions of the Bank's Board of Directors (the "Board") may be signed, executed, acknowledged, verified, delivered or accepted on behalf of the Bank by the Chairman of the Board, the Chief Executive Officer, the President, the Chief Operating Officer, a Vice Chairman of the Board, a Vice Chairman, any member of the Operating Committee or Executive Committee, any Executive Vice President, the Chief Financial Officer, the Treasurer, the Controller, the Chief Risk Officer, the Secretary, any Senior Vice President, any Managing Director, any Vice President, or any other officer who the Secretary or any Assistant Secretary certifies as having a functional title or official status which is equivalent to any of the foregoing, and the seal of the Bank may be affixed to any thereof and attested by the Secretary, any Vice President or any Assistant Secretary; *provided, however,* that any guarantees, comfort letters or other letters of support issued by the Bank in respect of obligations of any of the Bank's affiliates or subsidiaries ("Support Documents") may be executed only where consistent with such resolutions of the Board dated the date hereof, as may be amended, relating to the provision of Bank guarantees and other support issued by the Bank in respect of obligations of its subsidiaries and affiliates;

RESOLVED that powers of attorney may be executed on behalf of the Bank by the Chairman of the Board, the Chief Executive Officer, the President, the Chief Operating Officer, a Vice Chairman of the Board, a Vice Chairman, any member of the Operating Committee or Executive Committee, any Executive Vice President, the Chief Financial Officer, the Treasurer, the Controller, the Chief Risk Officer, the Secretary, any Senior Vice President, and by any Managing Director having a rank equivalent to Senior Vice President; *provided, however,* that such powers of attorney may not provide authority for signing Support Documents except as where consistent with such resolutions of the Board dated the date hereof, as may be amended, relating to the provision of Bank guarantees and other support issued by the Bank in respect of obligations of its subsidiaries and affiliates.

I further certify that **PAUL M. LIONIKIS** is a Vice President of JPMorgan Chase Bank, National Association and is empowered to act in conformity with the above resolutions.

WITNESS my hand and the seal of JPMorgan Chase Bank, National Association as of this 3rd day of December, 2007.

Maureen Morrissy
Assistant Secretary

(Corporate Seal)

**AMENDMENT TO AGREEMENT**
**CHECKS-PAID METHOD OF LETTER OF CREDIT FINANCING**

This is an Amendment to the Agreement entered into the First day of January 1998 between the UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as DOE); Associated Universities, Inc., corporation/legal entity existing under the laws of the State of New York, or successor contractor, (hereinafter referred to as the Contractor); and Chase Manhattan Bank, a banking institution wholly owned by Chase Manhattan Corporation, existing under the laws of the State of New York, located at 55 Water Street, Room 718, New York City, NY 10041, (hereinafter referred to as the Bank).

**WHEREAS**, the parties entered into an Agreement dated the First day of January 1998 entitled "Checks-Paid Method of Letter of Credit Financing;" and

**WHEREAS**, Brookhaven Science Associates, LLC succeeded Associated Universities, Inc., as the Contractor for Brookhaven National Laboratory effective the First day of March 1998; and

**WHEREAS**, The Chase Manhattan Corporation merged with J.P. Morgan & Co. Incorporated on December 31, 2000; and

**WHEREAS**, the parties have proceeded under the aforesaid Agreement from the First day of March 1998 until the date hereof; and

**WHEREAS**, the parties are desirous of formally extending the term of the aforesaid Agreement;

**NOW THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:**

1. The Term of the Agreement with all its provisions and covenants is hereby extended through the Fourth day of January, 2015.

2. DOE may extend the Term of the Agreement for an additional period of time to be contemporaneous with any extension of time granted by DOE to the Contractor for the operation of Brookhaven National Laboratory. Such notice shall not commit DOE to the extension, which shall only occur after a formal amendment to the agreement is executed by the parties.

IN WITNESS WHEREOF the parties hereto have caused this Amendment which consists of three pages including the signature pages, to be executed as of the day and year first above written.

12-30-09
Date Signed

By: Robert P. Gordon, Contracting Officer
(Typed Name of Contracting Officer)

(Signature of Contracting Officer)

WITNESS

(Typed Name of Witness)

Brookhaven Science Associates, LLC
(Typed name of Contractor)

(Signature of Witness)

By: Mark Israel
(Typed name of Contractor's Representative)

(Signature of Contractor's Representative)

Assistant Laboratory Director for Finance
(Title)

Note-In case of Company, Witness not required. Type names under all signatures.

P.O. Box 5000, Bldg. 460, Upton, NY 11973
(Address)

12-28-09
(Date of Signature)

(Typed Name of Witness)

JPMorgan Chase Bank
(Typed name of Bank)

(Signature of Witness)

By: Chris Casey
(Name of Bank Representative)

(Signature of Bank Representative)

Note-In case of Company, Witness not required. Type names under all signatures.

Vice President
(Title)

1 Chase Manhattan Plaza, Floor 8, New York, NY 10005
(Address)

12-31-09
(Date of Signature)

NOTE: The Contractor, if a Company, should cause the following Certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, Michael Goldman, certify that I am the Secretary of the Company named as Contractor herein; that Mark Israel, who signed this Amendment on behalf of the Contractor was then Assistant Laboratory Director for Finance of said Company; that said Amendment was duly signed for and in behalf of said Company by authority of its governing body, and is within the scope of its Company powers.

Michael Goldman _____ (Company Seal)
Signature

NOTE: Bank Repository, if a Corporation, should cause the following certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, _____, certify that I am the _____ of the Corporation named as Bank Depository herein; that _____, who signed this Amendment on behalf of the Bank Depository was then_____ of said Corporation; that said Amendment was duly signed for and in behalf of said Corporation by authority of its governing body, and is within the scope of its corporate powers.

_____ (Corporate Seal)
Signature

**AMENDMENT TO AGREEMENT**
**CHECKS-PAID METHOD OF LETTER OF CREDIT FINANCING**

This is an Amendment entered into as of January 1, 2010 (the "Amendment") to the Agreement entitled "Checks-Paid Method of Letter of Credit Financing" entered into the First day of January 1998 (the "Agreement") between UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as "DOE"); Associated Universities, Inc., corporation/legal entity existing under the laws of the State of New York, or successor contractor, (hereinafter referred to as the "Contractor"); and Chase Manhattan Bank, a banking institution wholly owned by Chase Manhattan Corporation, existing under the laws of the State of New York, located at 55 Water Street, Room 718, New York City, NY 10041, now known as JPMorgan Chase Bank, N.A., a national banking association organized under the laws of the United States of America with offices at 1 Chase Manhattan Plaza, Floor 8, New York, NY 10005 (the "Bank").

**WHEREAS,** the DOE, the Contractor and the Bank may be referred to collectively in this Amendment as the "parties"; and

**WHEREAS,** Brookhaven Science Associates, LLC succeeded Associated Universities, Inc., as the Contractor for Brookhaven National Laboratory effective the First day of March 1998; and

**WHEREAS,** through several mergers, JPMorgan Chase Bank, N.A. succeeded Chase Manhattan Bank as the Bank;

**WHEREAS,** the parties have proceeded under the aforesaid Agreement as amended from time to time from the First day of March 1998 until the date hereof; and

**WHEREAS**, the parties are desirous of formally extending the term of the aforesaid Agreement;

**NOW THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:**

1. The term of the Agreement with all its provisions and covenants as amended from time to time is hereby extended through the Fourth day of January, 2015.

2. DOE may extend the Term of the Agreement for an additional period of time to be contemporaneous with any extension of time granted by DOE to the Contractor for the operation of Brookhaven National Laboratory. Such notice shall not commit DOE, the Contractor or the Bank to the extension, which shall only occur after a formal amendment to the Agreement is executed by the parties.

**IN WITNESS WHEREOF** the parties hereto have caused this Amendment which consists of three pages including the signature pages, to be executed as of the day and year first above written.

March 30, 2010
Date Signed

By: Robert P. Gordon, Contracting Officer

(Signature of Contracting Officer)

WITNESS

(Typed Name of Witness)

Brookhaven Science Associates, LLC
(Typed Name of Contractor)

(Signature of Witness)

By: Mark O. Israel

(Signature of Contractor's Representative)

Assistant Laboratory Director for Finance
(Title)

Note-In case of Company, Witness not required. Type Names under all Signatures.

P.O.Box 5000, Bldg 460, Upton, NY 11973
(Address)

(Date of Signature)

(Typed Name of Witness)

JPMorgan Chase Bank, N.A.
(Typed Name of Bank)

(Signature of Witness)

By: Christopher J. Casey
(Name of Bank Representative)

Note In-case of Company, Witness not required. Type Names under all Signatures.

(Signature of Bank Representative)

Vice President
(Title)

1 Chase Manhattan Plaza, Floor 8, New York, NY 10005
(Address)

May 3, 2010
(Date of Signature)

NOTE: The Contractor, if a Company, should cause the following Certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, Michael Goldman, certify that I am the Secretary of the Company named as Contractor herein; that Mark Israel, who signed this Amendment on behalf of the Contractor was then Assistant Laboratory Director for Finance of said Company; that said Amendment was duly signed for and in behalf of said Company by authority of its governing body, and is within the scope of its Company powers.

_____ (Company Seal)
Signature

NOTE: Bank Repository, if a Corporation, should cause the following certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Amendment and the Certificate.

**CERTIFICATE**

I, Dale R. Granchalek, certify that I am an Executive Director of the national banking association named as Bank herein; that Christopher J. Casey who signed this Amendment on behalf of the Bank was then Vice President of said association; that said Amendment was duly signed for and in behalf of said association by authority of its governing body, and is within the scope of its corporate powers.

_____ (Association Seal)
Signature

# U.S. Department of Energy

# and

# Brookhaven Science Associates, LLC

## ATTACHMENT J.4

## APPENDIX D

## BUDGET PROGRAM

## Applicable to the Operation of
## The Brookhaven National Laboratory

## Contract No. DE-AC02-98CH10886
## Modification No. M253

# Appendix D

Budget Program

This Appendix implements the clause of this contract entitled, "Long Range Planning, Program Development and Budgetary Administration." The Parties agree that the following procedures will be used on a Government fiscal year basis to establish the Laboratory's work program and budgets.

1. During January - February of each year (or such other date as may be established by DOE), DOE will supply the Contractor with the dollar amounts for the Laboratory contained in the President's budget as well as a set of program assumptions for the budget and accounting policies and procedures to be used in the current budget preparation.

2. Prior to April 1 of each year (or such other date as may be agreed upon), the Contractor will submit to DOE a detailed work program and budget estimate for the next two succeeding fiscal years based on the level of the current year financial plan and the President's Budget, or other program guidance provided by DOE. The Contractor will provide construction project data sheets to DOE for each construction project proposed for the budget year and revisions of the construction project data sheets for other years as necessary for changes in cost estimate, funding, or scope. Prior to submission of the data sheets, DOE will be given an opportunity to review draft construction project data sheets and present the results of that review to the Contractor for consideration in the final data sheets.

3. As soon as possible after October 1 of each year, DOE shall issue to the Laboratory financial plans for the current fiscal year for operations and plant and capital equipment.

4. DOE approval of the work program and budget estimates will be reflected in approved funding programs, prime contract supplements and program letters/authorization, issued to the Contractor as soon as possible after October 1. The approved funding programs specify the funds available for work under the contract for the fiscal year and, in addition, establish obligations and cost limitations for specified individual portions of the work.

5. *An initial* modification to this contract will be executed *by the Parties* on or before November 1 of each fiscal year to provide all or portion of the funding for the current fiscal year, provided that appropriations have been made to DOE at this time, and if not then as soon as possible thereafter. *Subsequent* modifications will be written throughout the fiscal year to increase or decrease the available funding.

*6.* In order to provide added assurance of continuity of operations, it is the intent of DOE that the funds obligated under this contract be maintained at all times at an adequate level, which shall be defined as funds at least sufficient to provide for an estimated 20 days operating costs and outstanding commitments for each obligational control level as stated in the DOE Control and Reporting Levels. The Contractor will inform DOE when circumstances or DOE actions or proposed actions threaten to reduce any operational control levels below the level indicated in the previous sentence.

7. During the course of the work, DOE will review the work program and its costs based upon information submitted by the Contractor, and may, after consultation with the Contractor, revise the program letters and financial plans established by DOE under paragraph 4 of this Appendix.

8. It is recognized in the maintenance and operation of the Laboratory facilities, the Contractor is obliged to meet various standards and that DOE will make every effort to assure that adequate funds are provided under the contract to enable the Contractor to meet such requirements.

# U.S. Department of Energy

# and

# Brookhaven Science Associates, LLC

## ATTACHMENT J.5

## APPENDIX E

## KEY PERSONNEL

## Applicable to the Operation of
## The Brookhaven National Laboratory

## Contract No. DE-AC02-98CH10886
## Modification No. M570

# Appendix E
Key Personnel

Pursuant to the clause entitled, “Key Personnel,” the following positions are considered to be essential to work being performed.

| Name | Title |
|---|---|
| Dr. Doon Gibbs | Director |
| Mr. Jack Anderson | Deputy Director for Operations |
| Dr. Robert Tribble | Deputy Directory for Science & Technology |
| Ms. Amy Nunziata | Associate Laboratory Director, Facilities & Operations |
| Dr. William Bookless | Assistant Laboratory Director, Policy and Strategic Planning |
| Ms. Suzanne M. Davidson | Chief Financial Officer |
| Dr. Steven Dierker | Associate Laboratory Director, Photon Sciences |
| Ms. Anne Troutman | General Counsel |
| Ms. Gail Mattson | Assistant Laboratory Director for Environment, Safety & Health |
| Mr. David Manning | Associate Laboratory Director for Community, Education, Government & Public Affairs |
| Dr. Martin Schoonen | Interim Associate Laboratory Director for Environment, Biology, Nuclear Science, and Nonproliferation |
| Dr. James Misewich | Associate Laboratory Director, Basic Energy Sciences |
| Dr. Berndt Mueller | Associate Laboratory Director, Nuclear and Particle Physics |

**U.S. Department of Energy**

**and**

**Brookhaven Science Associates, LLC**

# ATTACHMENT J.6

# APPENDIX F

# RESERVED

**Applicable to the Operation of**
**The Brookhaven National Laboratory**

**Contract No. DE-AC02-98CH10886**
**Modification No. M253**

# U.S. Department of Energy

# and

# Brookhaven Science Associates, LLC

# ATTACHMENT J.7

# APPENDIX G

# PURCHASING SYSTEM REQUIREMENTS

## Applicable to the Operation of Brookhaven National Laboratory

## Contract No. DE-AC02-98CH10886
## Modification No. M253

# Appendix G

## Purchasing System Requirements

This Appendix and Clause I.148, "Contractor Purchasing System," sets forth DOE requirements applicable to the Purchasing System established under the Contract for the management of Brookhaven National Laboratory.

### Subcontracts Not Binding on DOE

As used herein, the term "subcontracts" includes subcontracts, purchase orders, letter agreements, basic ordering agreements, consultant agreements, micro-purchases, EDI and FACNET transactions, and lower tier subcontracts under cost-type subcontracts (in an unbroken cost-type chain) that represent costs properly chargeable to the Prime Contract.

All applicable subcontracts shall be made in the name of Brookhaven Science Associates, LLC shall not bind or purport to bind the Government, shall not relieve the Contractor of any obligation under the Prime Contract (including, among other things, the obligation to properly supervise and coordinate the work of subcontractors), and shall contain such provisions as are required by this Contract or as DOE may prescribe based on Federal statutes and regulations, or DOE Orders and Policies.

### DOE Approval

Prior DOE written approval is required for the following actions:

1. Laboratory award of any subcontract having a value of $5,000,000.00 or greater, or any subcontract modification which will cause the value to exceed $5,000,000.00;

2. Except as otherwise expressly provided or directed, in writing, by DOE Patent Counsel with notification to the Contracting Officer, actions which involve any one of, or combination of, the following intellectual property matters:

    a. Acquisition of software by negotiated lease or license;

    b. Purchase of patents or patent license rights, including the payment of royalties and permits, or license fees;

    c. Recognition of proprietary rights, including the recognition of technical data as trade secrets; or,

d. Any restriction of DOE's use of data procured under a subcontract.

3. Inter-Contractor Purchases (ICP's) expected to exceed $1,000,000.00.

Laboratory Procurement Policies and Procedures

All additions to, modifications or deletions of, Laboratory Procurement Policies and Procedures shall be submitted to DOE for approval prior to implementation.

# U.S. Department of Energy

# And

# Brookhaven Science Associates, LLC

## ATTACHMENT J.8

## APPENDIX H

## FY13 – SMALL BUSINESS SUBCONTRACTING PLAN

## Applicable to the Operation of

## The Brookhaven National Laboratory

**Contract No. DE-AC02-98CH10886**
**Modification No. M509**

# FY2013 SMALL BUSINESS SUBCONTRACTING PLAN

**October 24, 2012**

## Identification Data

Contractor: **BROOKHAVEN SCIENCE ASSOCIATES, LLC**

Address: **BROOKHAVEN NATIONAL LABORATORY**
**Upton, New York 11973-5000**

Solicitation or Contract Number: **DE-AC02-98CH10886**

Item/Service: **BASIC RESEARCH**

Total Amount of the Contract for the Performance Period: $ 613,162,000.

Period of Contract Performance: Oct. 1, 2012 through Sept. 30, 2013

1. Type of Plan

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

This Individual Contract Plan is for FY2013. Brookhaven Science Associates, LLC (BSA) small business goals are set for each fiscal year of the Contract.

2. Goals

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

Subcontracting goals for each of the five small business categories (including ANCs and Indian Tribes) are included in Appendix 1.

Below is an estimate of the principal types of supplies and services to be subcontracted under this Contract, and an indication of the types planned for subcontracting to the five categories of small business (including ANCs and Indian Tribes) and large business.

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

Note: The NAICS codes have not been included as the breadth of work subcontracted would require an extensive listing. The Small Business Liaison Officer (SBLO) will work directly with the procurement staff to ensure solicitations of small businesses (including ANCs and Indian Tribes) to the maximum extent possible.

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

BSA will ensure timely payment of amounts due pursuant to the terms of its subcontracts with small business (including ANCs and Indian Tribes), small disadvantaged (including ANCs and Indian Tribes), woman-owned small business, HUB-Zone small business, veteran-owned small business and service-disabled veteran-owned small business concerns.

BSA will use Small Business Set Asides to support the small business goals stated in Appendix 1.

A. Small Business Set-Asides Types:

Small Business (including ANCs and Indian Tribes) Set-Aside:

Each acquisition of supplies or services with an anticipated dollar value exceeding the Micro-Purchase ($3,000) but not over the Simplified Acquisition Threshold ($150,000) (FAR 2.101) will be reserved exclusively for small business concerns (including ANCs and Indian Tribes) and shall be set aside for small business (including ANCs and Indian Tribes) unless there is not a reasonable expectation of

obtaining offers from two or more responsible small business concerns that are competitive in terms of market prices, quality, and delivery.

Construction set-asides:

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

Sole Source Procurements:

BSA may award contracts on a sole-source basis to these types of small Businesses (including ANCs and Indian Tribes):

1. Small Business Administration (SBA) certified 8(a) small businesses (including ANCs and Indian Tribes)

2. SBA certified Historically Underutilized Small Businesses (HUB) small businesses

3. Service-Disabled Veteran-Owned Small Business (SDVOB) small businesses

Awards on a sole source basis can be made when the small business (including ANCs and Indian Tribes) is determined to be a responsible contractor with respect to the performance of the contract opportunity; and the award can be made at a fair market price; and the anticipated value of the contract is under $3.5 million ($4 million for construction and $6 million in the case of manufacturing NAICS codes) unless the award is being made to an Alaska Native Corporation (ANC). There will be no limit on the anticipated value of contracts awarded on a sole-source basis to ANC.

Additionally, a Protégé of any DOE Prime Contractor can be awarded a contract on a noncompetitive basis, without the need for a sole source justification for any value.

Note: Indirect costs have not been included in the dollar and percentage subcontracting goals stated in Appendix 1. *(LR: why does this have to be here? This is so out of place)*

3. Program Administrator

The Contractor's subcontracting program administrator is:

| | |
|---|---|
| Name: | Jill Clough-Johnston |
| Title: | Small Business Liaison Officer |
| Address: | Brookhaven National Laboratory<br>Procurement & Property Management Division<br>44 Ramsey Road |

Shirley, New York 11967-4704

Telephone: 631 344-3173 Email: clough@bnl.gov

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

A. Developing and promoting laboratory-wide policy initiatives that demonstrate BSA's support for awarding contracts and subcontracts to the five small business categories (including ANCs and Indian Tribes).

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

C. Attending or arranging for the attendance of small business counselors at various small business (including ANCs and Indian Tribes) opportunity workshops; the five small business categories (including ANCs and Indian Tribes) seminars, trade fairs, procurement conferences, etc.

D. Ensuring the five small business categories (including ANCs and Indian Tribes) are made aware of subcontracting opportunities and basic prerequisites for the preparation of a responsive bid.

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

F. Supporting the PPM Compliance and Policy Manager in randomly reviewing procurements to ensure the maximum possible participation of the five small business categories (including ANCs and Indian Tribes).

G. Monitoring the over $650,000 ($1,500,000 for construction) Large Business subcontractors' performance and making suggestions for the utilization of small business, where applicable, so that any adjustments necessary to achieve the subcontracting plan goals can be made.

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

I. Coordinating BSA's activities during the conduct of compliance reviews by Federal agencies.

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

4. Equitable Opportunity

BSA will ensure that all of the five small business categories (including ANCs and Indian Tribes) have an equitable opportunity to compete for subcontracts. The various efforts include, but are not limited to, the following activities:

A. Outreach efforts to obtain sources:

(i) The SBLO works with the Hauppauge Industrial Association (HIA), the Suffolk County Women's Business Enterprise Coalition (SCWBEC) and many other trade associations.

(ii) The SBLO also works with the: BNL/Stony Brook University/ Farmingdale College Small Business Development Centers (SBDC), the LaGuardia College – Procurement Technical Assistance Program (PTAP); and Small Business Administration (SBA),

(iii) Potential sources will be obtained from the SAM (formally CCR) database and other electronic medium.

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

B. Internal efforts to guide and encourage purchasing personnel:

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

(ii) Establishing, maintaining, and using the five small business categories (including ANCs and Indian Tribes) source lists, guides, and other data for soliciting subcontracts, and encouraging procurement staff to utilize this data.

(iii) Monitoring activities to evaluate compliance with the subcontracting plan.

C. Outreach efforts to promote small business development (including ANCs and Indian Tribes), will include:

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

(ii) Attending DOE annual small business conference and other small business (including ANCs and Indian Tribes) seminars and trade shows where it is expected that attendance will assist the identification of potential sources required to assist with reaching the small business goals.

(iii) Working closely with both the on & off site SBDC's and the local SBA office.

(iv) Networking with other M&O contractor SBLO's.

(v) Working closely with CEGPA and other BSA directorates on outreach efforts.

(vi) Providing contact information for 8(a) (including ANCs and Indian Tribes) and HUB-Zone small businesses to assist in achieving SBA certification.

(vii) Maintaining an internal Small Business Policy.

(viii) Participating in DOE SBPM conference calls.

5. Flow-Down Clauses

BSA will continue to include the provisions under FAR 52.219-8, "Utilization of Small Business Concerns", in all subcontracts that offer further subcontracting opportunities. BSA will also require all subcontractors, except small business concerns, that receive subcontracts in excess of $650,000 ($1,500,000 for construction) to adopt a plan that complies with the requirements of the clause at FAR 52.219-9, "Small Business Subcontracting Plan."

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

6. Reporting and Cooperation

BSA will cooperate in any studies or surveys that may be required by the contracting agency or the Small Business Administration; submit any periodic reports such as utilization reports, which show compliance with the subcontracting plan; submit timely "Subcontracting Report for Individual Contracts," (ISR) and "Summary Subcontract Report," (SSR) in accordance with the instructions identified on the eSRS website

(www.esrs.gov); and ensure that large business subcontractors with subcontracting plans provide electronic input to the eSRS as required

7. Document Retention

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

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

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

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

C. The procurement files for all subcontract solicitations over $150,000 will contain AMS-Form-002 which indicates for each solicitation whether the five small business categories (including ANCs and Indian Tribes) were solicited, and if any of the solicited the small business concerns received a subcontract award, as well as a justification for not soliciting small businesses or failure to award a subcontract to a solicited small business.

D. Representations and Certifications Information

   1. 8(a) certification approval through copies of their SBA certification letter (including ANCs and Indian Tribes).

   2. HUB-Zone certification approval through copies of their SBA certification letter.

8. Mentor-Protégé Program

BSA agrees to establish and implement an official DOE approved "Mentor-Protégé" in accordance with DOE DEARS Part 19. The Small Business Program Manager is the individual designated to administer this program.

9. Description of Good Faith Effort

BSA intends to use all reasonable and good faith efforts (as described in this Plan) to award the stated percentages of the final actual subcontract base amount with small business (including ANCs and Indian Tribes), veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, (including ANCs and Indian Tribes) and women-owned small business concerns. The following steps will be taken:

A. Issue and promulgate company-wide policy statements in support of the five small business categories (including ANCs and Indian Tribes) effort. Develop written procedures and work instructions, and assign specific responsibilities regarding requirements of the applicable Public Law.

B. Review specific procurement actions for possible acquisition from the five eligible small business categories (including ANCs and Indian Tribes).

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

D. Train and motivate the BSA personnel regarding the need for the support of the five small business categories (including ANCs and Indian Tribes).

E. Assist the five small business categories (including ANCs and Indian Tribes) by arranging solicitations, allowing time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns to enable these firms to compete fairly.

F. Counsel and discuss subcontracting opportunities with the five small business categories (including ANCs and Indian Tribes).

G. Execute Service Agreements, Teaming Agreements, and Basic Ordering Agreements with small business from the qualified five small business categories (including ANCs and Indian Tribes), as required, in an attempt to ensure availability and usage of subcontractor personnel to support BSA work efforts when required.

H. Make available specifications, drawings, and other relevant data so that qualified, known small business, in the five small business categories (including ANCs and Indian Tribes), have an equal opportunity in preparing bids.

I. Establish and maintain a categorized list of potential subcontractors with separate identification of the five small business categories (including ANCs and Indian Tribes).

# FY2013 SMALL BUSINESS SUBCONTRACTING PLAN

**October 24, 2012**

This subcontracting plan was submitted by:

Signature: _____ Date: 24 OCT 2012

Typed Name: Don Rawlings
Title: Manager Procurement and Property Management

Approval:

Signature: Evelyn Landini Date: 30 November 2012

Typed Name: Evelyn Landini
Title: Contracting Officer

**FY2013 Small Business Subcontracting Plan – Appendix 1**
**October 24, 2012**

Contractor: BROOKHAVEN SCIENCE ASSOCIATES, LLC

Address: BROOKHAVEN NATIONAL LABORATORY
Upton, New York 11973-5000

1. Total estimated dollar value of all planned subcontracting, (to all types of business concerns) under this contract, is $ 370,000,000.

2. The following percentage goals (expressed in terms of a percentage of total planned subcontracting dollars) and associated dollars are applicable to the contract cited above and will be pursued on a best efforts basis consistent with good commercial practices and best value assessments:

   (i) **Small Business (SB)** (including ANCs and Indian Tribes)
   **52.0% or $ 192,400,000** of total planned subcontracting dollars under this contract will go to subcontractors who are small business (% of "A").

   (ii) **8(a)/Small Disadvantaged Business (SDB)** (including ANCs and Indian Tribes)
   **5.0% or $ 18,500,000** of total planned subcontracting dollars under this contract will go to subcontractors who are 8(a)/small disadvantaged business (including ANCs and Indian Tribes) (% of "A"). This percentage is included in the percentage shown under 2(i) above as a subset.

   (iii) **Woman-Owned Small Business (WOB)**
   **5.0% or $ 18,500,000** of total planned subcontracting dollars under this contract will go to subcontractors who are woman-owned small business (% of "A"). This percentage is included in the percentage shown under 2(i) above as a subset.

   (iv) **HUB-Zone Small Business (HUB)**
   **3.0% or $ 11,100,000** of total planned subcontracting dollars under this contract will go to subcontractors who are woman-owned small business (% of "A"). This percentage is included in the percentage shown under 2(i) above as a subset.

   (v) **Service-Disabled Veteran-Owned Small Business (SDVOB)**
   **3.0% or $ 11,100,000** of total planned subcontracting dollars under this contract will go to subcontractors who are service-disabled veteran-owned small business (% of "A"). This percentage is included in the percentage shown under 2(i) above as a subset.

   Note: The dollar and percentage numbers are not inclusive of indirect costs

# U.S. Department of Energy

# And

# Brookhaven Science Associates, LLC

## ATTACHMENT J.8

## APPENDIX H

## FY14 – SMALL BUSINESS SUBCONTRACTING PLAN

## Applicable to the Operation of

## Brookhaven National Laboratory

**Contract No. DE-AC02-98CH10886**
**Modification No. M533**

# FY2014 SMALL BUSINESS SUBCONTRACTING PLAN

**October 1, 2013**

## Identification Data

Contractor: **BROOKHAVEN SCIENCE ASSOCIATES, LLC**

Address: **BROOKHAVEN NATIONAL LABORATORY**
**Upton, New York 11973-5000**

Solicitation or Contract Number: **DE-AC02-98CH10886**

Item/Service: **BASIC RESEARCH**

Total Amount of the Contract for the Performance Period: $ 633,000,000.

Period of Contract Performance: October 1, 2013 through September 30, 2014

1. Type of Plan

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

This Individual Contract Plan is for FY2014. Brookhaven Science Associates, LLC (BSA) small business goals are set for each fiscal year of the Contract.

2. Goals

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

Subcontracting goals for the five small business categories (including ANCs and Indian Tribes) are included in Appendix 1.

Below is an estimate of the principal types of supplies and services to be subcontracted under this Contract, and an indication of the supplies and services planned for subcontracting to the five categories of small business (including ANCs and Indian Tribes) and large business.

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

Note: The NAICS codes have not been included as the breadth of work subcontracted would require an extensive listing. The Small Business Liaison Officer (SBLO) will work directly with the procurement staff to ensure solicitations of small businesses (including ANCs and Indian Tribes) to the maximum extent possible.

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

BSA will ensure timely payment of amounts due pursuant to the terms of its subcontracts with the five small business concerns (including ANCs and Indian Tribes). BSA will use Small Business Set Asides to support the small business goals stated in Appendix 1.

A. Small Business Set-Asides Types:

Small Business Set-Aside (including ANCs and Indian Tribes):

Each acquisition of supplies or services with an anticipated dollar value exceeding the Micro-Purchase ($3,000) but not over the Simplified Acquisition Threshold ($150,000) (FAR 2.101) will be reserved exclusively for small business concerns (including ANCs and Indian Tribes) and shall be set aside for small business (including ANCs and Indian Tribes) unless there is not a reasonable expectation of obtaining offers from two or more responsible small business concerns that are competitive in terms of market prices, quality, and delivery.

Construction Set-Asides:

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

Sole Source Procurements:

BSA may award contracts on a sole-source basis to these types of small Businesses (including ANCs and Indian Tribes):

1. Small Business Administration (SBA) certified 8(a) small businesses (including ANCs and Indian Tribes)

2. SBA certified Historically Underutilized Small Businesses (HUB) small businesses

3. Service-Disabled Veteran-Owned Small Business (SDVOB) small businesses

Awards on a sole source basis can be made when the small business (including ANCs and Indian Tribes) is determined to be a responsible contractor with respect to the performance of the contract opportunity; and the award can be made at a fair market price; and the anticipated value of the contract is under $3.5 million ($4 million for construction and $6 million in the case of manufacturing NAICS codes) unless the award is being made to an ANC. There will be no limit on the anticipated value of contracts awarded on a sole-source basis to ANC.

Additionally, a Protégé of any DOE Prime Contractor can be awarded a contract on a non-competitive basis, without the need for a sole source justification for any value.

3. Program Administrator

The Contractor's subcontracting program administrator is:

Name: Jill Clough-Johnston
Title: Small Business Liaison Officer
Address: Brookhaven National Laboratory
Procurement & Property Management Division
44 Ramsey Road
Shirley, New York 11967-4704

Telephone: 631 344-3173 Email: clough@bnl.gov

Duties: General overall responsibility for Brookhaven Science Associates (BSA) subcontracting program, i.e., developing, preparing, and executing subcontracting plans

and monitoring performance relative to the requirements of this particular plan. These duties include, but are not limited to, the following activities:

A. Developing and promoting laboratory-wide policy initiatives that demonstrate BSA's support for awarding contracts and subcontracts to the five small business categories (including ANCs and Indian Tribes).

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

C. Attending or arranging for the attendance of the procurement personnel at the five small business (including ANCs and Indian Tribes) opportunity workshops; seminars, trade fairs, procurement conferences, etc.

D. Ensuring the five small business categories (including ANCs and Indian Tribes) are made aware of subcontracting opportunities and basic prerequisites for the preparation of a responsive bid.

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

F. Supporting the PPM Compliance and Policy Manager in randomly reviewing procurements to ensure the maximum possible participation of the five small business categories (including ANCs and Indian Tribes).

G. Monitoring the over $650,000 ($1,500,000 for construction) Large Business subcontractors' performance and making suggestions for the utilization of the five small business categories, where applicable, so that any adjustments necessary to achieve the subcontracting plan goals can be made.

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

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

4. Equitable Opportunity

BSA will ensure that the five small business categories (including ANCs and Indian Tribes) have an equitable opportunity to compete for subcontracts. The various efforts include, but are not limited to, the following activities:

A. Outreach efforts to obtain sources:

(i) The SBLO works with the Hauppauge Industrial Association (HIA), the Suffolk County Women's Business Enterprise Coalition (SCWBEC) and many other trade associations.

(ii) The SBLO also works with the: BNL/Stony Brook University/ Farmingdale College Small Business Development Centers (SBDC), the LaGuardia College – Procurement Technical Assistance Program (PTAP); and Small Business Administration (SBA).

(iii) Potential sources will be obtained from the SAM (formally CCR) database and other electronic medium.

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

B. Internal efforts to guide and encourage purchasing personnel:

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

(ii) Establishing, maintaining, and using the five small business categories (including ANCs and Indian Tribes) source lists, guides, and other data for soliciting subcontracts, and encouraging procurement staff to utilize this data.

(iii) Monitoring activities to evaluate compliance with the subcontracting plan.

C. Outreach efforts to promote small business development (including ANCs and Indian Tribes), will include:

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

(ii) Attending DOE small business conferences and other small business (including ANCs and Indian Tribes) seminars and trade shows where it is expected that attendance will identify potential sources to aid in reaching the small business goals.

(iii) Working closely with both the on & off site SBDC's and the local SBA office.

(iv) Networking with other M&O contractor SBLO's.

(v) Working closely with CEGPA and other BSA directorates on outreach efforts.

(vi) Providing contact information for 8(a) (including ANCs and Indian Tribes) and HUB-Zone small businesses to assist them in achieving SBA certification.

(vii) Maintaining an internal Small Business Policy.

(viii) Participating in DOE SBPM conference calls.

5. Flow-Down Clauses

BSA will continue to include the provisions under FAR 52.219-8, "Utilization of Small Business Concerns", in all subcontracts that offer further subcontracting opportunities. BSA will also require all subcontractors, except small business concerns, that receive subcontracts in excess of $650,000 ($1,500,000 for construction) to adopt a plan that complies with the requirements of the clause at FAR 52.219-9, "Small Business Subcontracting Plan."

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

6. Reporting and Cooperation

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

7. Document Retention

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

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

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

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

C. The procurement files for all subcontract solicitations over $150,000 will contain AMS-Form-002 which indicates for each solicitation whether the five small business categories (including ANCs and Indian Tribes) were solicited, and if any of the solicited the small business concerns received a subcontract award, as well as a justification for not soliciting small businesses or failure to award a subcontract to a solicited small business.

D. Representations and Certifications Information

   1. 8(a) certification approval through copies of their SBA certification letter (including ANCs and Indian Tribes).

   2. HUB-Zone certification approval through copies of their SBA certification letter.

8. Mentor-Protégé Program

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

9. Description of Good Faith Effort

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

A. Issue and promulgate company-wide policy statements in support of the five small business categories (including ANCs and Indian Tribes). Develop written procedures and work instructions, and assign specific responsibilities regarding requirements of the applicable Public Law.

B. Review specific procurement actions for possible acquisition from the five eligible small business categories (including ANCs and Indian Tribes).

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

D. Train and motivate the procurement personnel regarding the need for the support of the five small business categories (including ANCs and Indian Tribes).

E. Assist the five small business categories (including ANCs and Indian Tribes) by helping with questions on solicitations, quantities, specifications, and delivery requirements.

F. Counsel and discuss subcontracting opportunities with the five small business categories (including ANCs and Indian Tribes).

G. Execute Service Agreements, Teaming Agreements, and Basic Ordering Agreements with small business from the five qualified small business categories (including ANCs and Indian Tribes), as required, in an attempt to ensure availability and usage of subcontractor personnel to support work efforts when required.

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

# FY2014 SMALL BUSINESS SUBCONTRACTING PLAN

**October 1, 2013**

This subcontracting plan was submitted by:

Signature: Guadagni Date: 9/13/13

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

Approval:

Signature: Evelyn Landini Date: 9/30/13

Typed Name: Evelyn Landini
Title: Contracting Officer

**FY2014 Small Business Subcontracting Plan – Appendix 1**
**October 1, 2013**

Contractor: BROOKHAVEN SCIENCE ASSOCIATES, LLC

Address: BROOKHAVEN NATIONAL LABORATORY
Upton, New York 11973-5000

1. Total estimated dollar value of all planned subcontracting, (to all types of business concerns) under this contract, is $ 136,000,000.

2. The following percentage goals (expressed in terms of a percentage of total planned subcontracting dollars) and associated dollars are applicable to the contract cited above and will be pursued on a best efforts basis consistent with good commercial practices and best value assessments:

   (i) **Small Business (SB)** (including ANCs and Indian Tribes)
   52% **or $ 70,720,000** of total planned subcontracting dollars under this contract will go to subcontractors who are small business (% of value in 1).

   (ii) **Small Disadvantaged Business (SDB)/8(a)** (including ANCs and Indian Tribes)
   5% **or $ 6,800,000** of total planned subcontracting dollars under this contract will go to subcontractors who are small disadvantaged business/8(a) small businesses (including ANCs and Indian Tribes). This percentage is included in the percentage shown under 2(i) above as a subset.

   (iii) **Woman-Owned Small Business (WOB)**
   6% **or $ 8,160,000** of total planned subcontracting dollars under this contract will go to subcontractors who are woman-owned small business (% of "A"). This percentage is included in the percentage shown under 2(i) above as a subset.

   (iv) **Historically Underutilized Small Business (HUB)**
   3% **or $ 4,080,000** of total planned subcontracting dollars under this contract will go to subcontractors who are HUB small business (% of "A"). This percentage is included in the percentage shown under 2(i) above as a subset.

   (v) **Service-Disabled Veteran-Owned Small Business (SDVOB)**
   3% **or $ 4,080,000** of total planned subcontracting dollars under this contract will go to subcontractors who are service-disabled veteran-owned small business (% of "A"). This percentage is included in the percentage shown under 2(i) above as a subset.

# U.S. Department of Energy

# and

# Brookhaven Science Associates, LLC

# ATTACHMENT J.8

# APPENDIX H

# FY15 – SMALL BUSINESS SUBCONTRACTING PLAN

## Applicable to the Operation of
## The Brookhaven National Laboratory

## Contract No. DE-AC02-98CH10886
## Modification No. M563

# FY2015 SMALL BUSINESS SUBCONTRACTING PLAN

**October 1, 2014**

## Identification Data

Contractor: **BROOKHAVEN SCIENCE ASSOCIATES, LLC**

Address: **BROOKHAVEN NATIONAL LABORATORY**
**Upton, New York 11973-5000**

Solicitation or Contract Number: **DE-AC02-98CH10886**

Total Amount of the Contract for the Performance Period: $635,000,000.

Period of Contract Performance: October 1, 2014 through September 30, 2015

I. Type of Plan

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

This Individual Subcontracting Plan is for FY2015. Brookhaven Science Associates, LLC (BSA) small business goals are set for each fiscal year of the Contract.

II. Goals

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

Subcontracting goals for the six small business categories (including ANCs and Indian Tribes) are included in Appendix 1.

Below is an estimate of the principal types of supplies and services to be subcontracted under this Contract, and an indication of the supplies and services planned for subcontracting to the six categories of small business (including ANCs and Indian Tribes) and large business.

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

Note: The NAICS codes have not been included as the breadth of work subcontracted would require an extensive listing. The Small Business Liaison Officer (SBLO) will work directly with the procurement staff to ensure solicitations of small businesses (including ANCs and Indian Tribes) to the maximum extent possible.

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

BSA will ensure timely payment of amounts due pursuant to the terms of its subcontracts with the six small business concerns (including ANCs and Indian Tribes). BSA will use Small Business Set Asides to support the small business goals stated in Appendix 1.

a. Small Business Set-Asides Types:

1. Small Business Set-Aside (including ANCs and Indian Tribes):

Each acquisition of supplies or services with an anticipated dollar value exceeding the Micro-Purchase ($3,000) but not over the Simplified Acquisition Threshold ($150,000) (FAR 2.101) will be reserved exclusively for small business concerns (including ANCs and Indian Tribes) and shall be set aside for small business (including ANCs and Indian Tribes) unless there is not a reasonable expectation of obtaining offers from two or more responsible small business concerns that are competitive in terms of market prices, quality, and delivery.

2. Construction Set-Asides:

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

III. Sole Source Procurements:

BSA may award contracts on a sole-source basis to these types of small Businesses (including ANCs and Indian Tribes):

a. Small Business Administration (SBA) certified 8(a) small businesses (including ANCs and Indian Tribes); in accordance with FAR 19.805 (2) for purchases valued at: (A) $6.5 million or less for 8(a) small business within North American Industry Classification System (NAICS) codes for manufacturing or $4 million or less for small business within any other NAICS codes. There will be no limit on the anticipated value of contracts awarded on a sole-source basis to ANC; and

b. SBA certified Historically Underutilized Small Businesses (HUB) Zone small businesses in accordance with FAR 19.1306 (2) for purchases valued at: (A) $6.5 million or less for HUBZone small business within North American Industry Classification System (NAICS) codes for manufacturing or $4 million or less for HUBZone small business within any other NAICS codes. There will be no limit on the anticipated value of contracts awarded on a sole-source basis to ANC; and

c. Service-Disabled Veteran-Owned Small Business (SDVOB) small businesses in accordance with FAR19.1406 (2) sole-source awards to service-disabled veteran-owned small business concerns for $6 million or less for requirement within the NAICS codes for manufacturing; or $3.5 million for a requirement within any other NAICS codes. There will be no limit on the anticipated value of contracts awarded on a sole-source basis to ANC.

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

   To further facilitate Brookhaven National Laboratory Small Business Program, BSA will, without further documentation to the file, and based on its unilateral decision, utilize the option of making awards without competition up to the simplified acquisition threshold ($150,000) to small business concerns (including ANCs and Indian Tribes) in accordance with the Department of Energy Acquisition Guide, Chapter 19: Small Business Program - Overview; section D (Discretionary Set-Asides) dated December 2010;

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

**Note:** Indirect costs have not been included in the dollar and percentage subcontracting goals stated in Appendix 1.

## IV. Program Administrator

The Contractor's subcontracting program administrator is:


Name: Jill Clough-Johnston
Title: Small Business Liaison Officer
Address: Brookhaven National Laboratory
Procurement & Property Management Division
Building 902B
Upton, New York 11973

Telephone: (631) 344-3173 Email: clough@bnl.gov


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

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

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

c. Attending or arranging for the attendance of the procurement personnel at small business opportunity workshops; seminars, trade fairs, procurement conferences, etc.

d. Ensuring small businesses (including ANCs and Indian Tribes) are made aware of subcontracting opportunities and basic prerequisites for the preparation of a responsive bid.

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

f. Supporting the PPM Compliance and Policy Manager in randomly reviewing procurements to ensure the maximum possible participation of the six small business categories (including ANCs and Indian Tribes).

g. Monitoring the over $650,000 ($1,500,000 for construction) large business subcontractors' performance and making suggestions for the utilization of small business, where applicable, so that any adjustments necessary to achieve the subcontracting plan goals can be made.

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

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

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

V. Equitable Opportunity

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

a. Outreach efforts to obtain sources:

(i) The SBLO works with the Hauppauge Industrial Association (HIA), the Suffolk County Women's Business Enterprise Coalition (SCWBEC) and many other trade associations.

(ii) The SBLO also works with the: Stony Brook University/ Farmingdale College Small Business Development Centers (SBDC), the LaGuardia College – Procurement Technical Assistance Program (PTAP); and Small Business Administration (SBA).

(iii) Potential sources will be obtained from the SAM database and other electronic medium.

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

b. Internal efforts to guide and encourage purchasing personnel:

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

(ii) Establishing, maintaining, and using small business source lists, guides, and other data for soliciting subcontracts, and encouraging procurement staff to utilize this data.

(iii) Monitoring activities to evaluate compliance with the subcontracting plan.

c. Outreach efforts to promote small business development (including ANCs and Indian Tribes), will include:

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

(ii) Attending DOE small business conferences and other small business seminars and trade shows where it is expected that attendance will identify potential sources to aid in reaching the small business goals.

(iii) Working closely with both the on & off site SBDC's and the local SBA office.

(iv) Networking with other Management and Operation (M&O) contractor SBLO's.

(v) Working closely with CEGPA and other BSA directorates on outreach efforts.

(vi) Providing contact information for 8(a) (including ANCs and Indian Tribes) and HUB-Zone small businesses to assist them in achieving SBA certification.

(vii) Maintaining an internal Small Business Policy.

(viii) Participating in DOE SBPM conference calls.

## VI. Flow-Down Clauses

BSA will continue to include the provisions under FAR 52.219-8, "Utilization of Small Business Concerns", in all subcontracts that offer further subcontracting opportunities. BSA will also require all subcontractors, except small business concerns and foreign suppliers, that receive subcontracts in excess of $650,000 ($1,500,000 for construction) to adopt a plan that complies with the requirements of the clause at FAR 52.219-9, "Small Business Subcontracting Plan."

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

## VII. Reporting and Cooperation

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

## VIII. Document Retention

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

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

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

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

c. The procurement files for all subcontract solicitations over $150,000 will contain AMS-Form-002 which indicates for each solicitation whether small businesses (including ANCs and Indian Tribes) were solicited, and if any of the solicited the small business concerns received a subcontract award, as well as a justification for not soliciting small businesses or failure to award a subcontract to a solicited small business.

d. Representations and Certifications Information

   (i) 8(a) certification approval through copies of their SBA certification letter (including ANCs and Indian Tribes).

(ii) Confirmation of HUB-Zone certification will be verified by searching the Dynamic Small Business Data Base (DSBS).

## IX. Mentor-Protégé Program

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

## X. Description of Good Faith Effort

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

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

b. Review specific procurement actions for possible acquisition from eligible small businesses (including ANCs and Indian Tribes).

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

d. Train and motivate the procurement personnel regarding the need for the support of small businesses (including ANCs and Indian Tribes).

e. Assist small businesses (including ANCs and Indian Tribes) by helping with questions on solicitations, quantities, specifications, and delivery requirements.

f. Counsel and discuss subcontracting opportunities with small businesses (including ANCs and Indian Tribes).

g. Execute Service Agreements, Teaming Agreements, and Basic Ordering Agreements with small business from the six qualified small business categories (including ANCs and Indian Tribes), as required, in an attempt to ensure availability and usage of subcontractor personnel to support work efforts when required.

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

**FY2015 SMALL BUSINESS SUBCONTRACTING PLAN**
**October 1, 2014**

This subcontracting plan was submitted by:

Signature: _____ Date: 9/17/14

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

Approval:

Signature: _____ Date: 10/07/14

Typed Name: Evelyn Landini
Title: Contracting Officer

**In accordance with the Small Business Administration recommendation, Appendix 1 has been amended to include a goal for Veteran Owned Business (VOB).**

**The body of the plan will be amended to reflect this change at a subsequent update.**

**FY2015 Small Business Subcontracting Plan - Appendix 1**
**October 1, 2014**

Contractor: BROOKHAVEN SCIENCE ASSOCIATES, LLC
Address: BROOKHAVEN NATIONAL LABORATORY
Upton, New York 11973-5000

1. Total estimated dollar value of all planned subcontracting, (to all types of business concerns) under this contract, is $136,525,000.

2. The following percentage goals (expressed in terms of a percentage of total planned subcontracting dollars) and associated dollars are applicable to the contract cited above and will be pursued on a best efforts basis consistent with good commercial practices and best value assessments:

   (i) Small Business (SB) (including ANCs and Indian Tribes) 50% or $68,262,500 of total planned subcontracting dollars under this contract will go to subcontractors who are small business (% of value in 1).

   (ii) Small Disadvantaged Business (SDB)/ 8(a) (including ANCs and Indian Tribes) 5% or $6,826,250 of total planned subcontracting dollars under this contract will go to subcontractors who are small disadvantaged business/8(a) small businesses (including ANCs and Indian Tribes). This percentage is included in the percentage shown under 2(i) above as a subset.

   (iii) Woman-Owned Small Business (WOB) 6% or $8,191,500 of total planned subcontracting dollars under this contract will go to subcontractors who are woman-owned small business (% of "1"). This percentage is included in the percentage shown under 2(i) above as a subset.

   (iv) Historically Underutilized Small Business (HUB) 3% or $4,095,750 of total planned subcontracting dollars under this contract will go to subcontractors who are HUB small business (% of "1"). This percentage is included in the percentage shown under 2(i) above as a subset.

   (v) Service-Disabled Veteran-Owned Small Business (SDVOB) 3% or $4,095,750 of total planned subcontracting dollars under this contract will go to subcontractors who are service-disabled veteran-owned small business (% of "1"). This percentage is included in the percentage shown under 2(i) above as a subset.

   (vi) Veteran-Owned Small Business (SDVOB) 3% or $4,095,750 of total planned subcontracting dollars under this contract will go to subcontractors who are veteran-owned small business (% of "1"). This percentage is included in the percentage shown under 2(i) above as a subset.

# U.S. Department of Energy

# and

# Brookhaven Science Associates, LLC

## ATTACHMENT J.9

## APPENDIX I

## DOE DIRECTIVES/LIST B

**Applicable to the Operation of**
**The Brookhaven National Laboratory**

**Contract No. DE-AC02-98CH10886**
**Modification No. M570**

# APPENDIX I

# DOE DIRECTIVES

There is no List A to this Appendix.

List B to this Appendix contains two parts as follows:

Part I: "Directives List"

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

Part II: "Partial Deletions of Directives"

This section contains a list of Directives that are applicable, but have subsequently been revised by DOE to remove certain sections.

# Appendix I - Part I

**DOE DIRECTIVES LIST**

**DOE Directives may be found at the following address: http://www.directives.doe.gov**

| DATE | TYPE | NUMBER | THROUGH CHANGE | SUBJECT TITLE<br>Contractor Requirements Document (CRD)<br>Includes Compliance Notes as Necessary |
|---|---|---|---|---|
| 9/29/95 | Order | 130.1 | | CRD - Budget Formulation Process |
| 5/2/01 | Policy | 141.1 | | Department of Energy Management of Cultural Resources |
| 9/4/08 | Manual | 142.2-1 | Admin Chg. 1<br>6-27-13 | CRD – Manual for Implementation of the Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency |
| 12/15/06 | Order | 142.2A | Admin Chg. 1<br>6-27-13 | CRD – Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency |
| 10/14/10 | Order | 142.3A | | CRD – Unclassified Foreign Visits and Assignments Program |
| | | | | |
| 3/31/14 | Order | 150.1A | | CRD – Continuity Programs |
| 11/2/05 | Order | 151.1C | | CRD - Comprehensive Emergency Management System |
| 6/27/07 | Order | 153.1 | | CRD - Departmental Radiological Emergency Response Assets |
| 12/23/08 | Order | 200.1A | | CRD – Information Technology Management |
| 1/7/05 | Order | 203.1 | | Limited Personal Use of Government Office Equipment Including Information Technology |
| 5/8/01 | Policy | 205.1 | | Departmental Cyber Security Management Policy |
| 5/16/11 | Order | 205.1B | Admin Chg. 3<br>4/29/14 | CRD – Department of Energy Cyber Security Program |
| 4/17/06 | Manual | 205.1-3 | Admin Chg. 1<br>12/20/12 | Telecommunications Security Manual |
| 1/16/09 | Order | 206.1 | | CRD - Department of Energy Privacy Program |
| 2/19/13 | Order | 206.2 | | CRD – Identity, Credential, and Access Management (ICAM) |
| 4/8/11 | Order | 210.2A | | CRD – DOE Corporate Operating Experience Program |
| 4/19/08 | Order | 221.1A | | CRD - Reporting Fraud, Waste, and Abuse to the Office of Inspector General |
| 2/25/08 | Order | 221.2A | | CRD - Cooperation with the Office of Inspector General |
| 3/4/11 | Order | 225.1B | | CRD - Accident Investigations |
| 8-30-11 | Order | 227.1 | | CRD – Independent Oversight Program |
| 6-27-11 | Order | 231.1B | Admin Chg. 1<br>11/28/12 | CRD – Environment, Safety and Health Reporting |
| 8/30/11 | Order | 232.2 | Admin Chg. 1<br>3/12/14 | CRD – Occurrence Reporting and Processing of Operations Information |
| 12/13/10 | Order | 241.1B | | CRD - Scientific and Technical Information Management |
| 3/11/13 | Order | 243.1B | | CRD – Records Management Program |
| 2/2/06 | Order | 243.2 | | CRD - Vital Records |
| 2/23/11 | Order | 252.1A | Admin Chg. 1<br>3/12/13 | CRD - Technical Standards Program |

***See Part II, Partial Deletions**

**DOE DIRECTIVES LIST**
**DOE Directives may be found at the following address: http://www.directives.doe.gov**

| DATE | TYPE | NUMBER | THROUGH CHANGE | SUBJECT TITLE<br>Contractor Requirements Document (CRD)<br>Includes Compliance Notes as Necessary |
|---|---|---|---|---|
| 11/19/09 | Order | 313.1 | | CRD – Management and Funding of the Departments Overseas Presence |
| 10/18/07 | Order | 341.1A<br>Parts:<br>1.(a-b)<br>2.a.,<br>2.a.(1-3),<br>2.a,(4)(a-h) | | CRD - Federal Employee Health Services |
| 2/23/10 | Order | 350.1 | Chg. 4<br>4/29/13 | CRD - Contractor Human Resource Management Programs |
| 11/16/11 | Order | NA 350.2 | Rev. 1<br>11/18/12 | CRD – Use of Management and Operation Contractor Employees for Services to NNSA in the Washington, D.C., Area |
| 5/31/11 | Order | 350.2B | | CRD – Use of Management and Operating or Other Facility Management Contractor Employees for Services to DOE in the Washington D.C. Area |
| 4/14/14 | Policy | 364.1 | | Health and Safety Training Reciprocity |
| 8/17/09 | Order | 410.2 | Admin Chg. 1<br>4/10/14 | CRD – Management of Nuclear Materials |
| 4/21/05 | Order | 412.1A | Admin Chg. 1<br>6/21/14 | Work Authorization System |
| 10/28/08 | Order | 413.1B | | CRD – Internal Control Program |
| 4/19/06 | Order | 413.2B | Admin Chg. 1<br>1/31/11 | CRD - Laboratory Directed Research and Development |
| 11/29/10 | Order | 413.3B | | CRD – Program and Project Management for the Acquisition of Capital Assets |
| 4/25/11 | Order | 414.1D | Admin Chg. 1<br>5/8/13 | CRD – Quality Assurance |
| 12/3/12 | Order | 415.1 | | CRD – Information Technology Project Management |
| 2/8/11 | Policy | 420.1 | | Department of Energy Nuclear Safety Policy<br><br>**Compliance Note:** Only applicable to BNL facilities categorized as Hazardous Category 1, 2 or 3 nuclear facilities |
| 12/04/12 | Order | 420.1C | | CRD – Facility Safety<br><br>**Compliance Note:** Chapters 1, 3, and 5 are applicable to BNL facilities categorized as hazardous category 1, 2 and 3 nuclear facilities. In the future, if needed, BNL will implement chapters 1, 3, and 5 as applicable if a hazard category 1, 2 or 3 nuclear facility is proposed by BNL and approved by DOE. |
| 7/21/11 | Order | 420.2C | | CRD – Safety of Accelerator Facilities |

**DOE DIRECTIVES LIST**

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| DATE | TYPE | NUMBER | THROUGH CHANGE | SUBJECT TITLE<br>Contractor Requirements Document (CRD)<br>Includes Compliance Notes as Necessary |
|---|---|---|---|---|
| 6/29/10 | Order | 422.1 | Admin Chg. 1<br>6/25/13 | CRD- Conduct of Operations<br><br>**Compliance Note:** Applicable to Hazardous Category 1, 2, or 3 nuclear facilities and other facilities as defined by BSA in a Program Plan, to be approved by BHSO, for incorporating |
| 4/16/10 | Order | 425.1D | Admin Chg. 1<br>4/2/13 | CRD – Verification of Readiness to Start Up or Restart Nuclear Facilities<br><br>**Compliance Note:** Only applicable to BNL facilities categorized as Hazardous Category 1, 2 or 3 nuclear facilities |
| 4/21/10 | Order | 426.2 | Admin Chg. 1<br>7/29/13 | CRD - Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities |
| 09/24/03 | Order | 430.1B | Admin Chg. 2<br>4/25/11 | CRD – Real Property and Asset Management |
| 4/21/10 | Order | 433.1B | Admin Chg. 1<br>3/12/13 | CRD - Maintenance Management Program for DOE Nuclear Facilities<br><br>**Compliance Note:** Only applicable to BNL facilities categorized as Hazardous Category 1, 2 or 3 nuclear facilities |
| 11/7/13 | Policy | 434.1A | | Conduct and Approval of Select Agent and Toxin Work at Department of Energy Sites |
| 7/9/99 | Order | 435.1 | Admin Chg. 1<br>8/28/01 | CRD - Radioactive Waste Management |
| 7/9/99 | Manual | 435.1-1 | 1<br>6/19/01 | Radioactive Waste Management Manual |
| 5/2/11 | Order | 436.1 | | CRD – Departmental Sustainability |
| 11/27/02 | Order | 440.2C | Admin Chg. 1<br>6/22/11 | CRD - Aviation Management and Safety |
| 3/7/08 | Manual | 441.1-1 | | CRD - Nuclear Material Packaging Manual |
| 6/6/01 | Order | 442.1A | | CRD - Department of Energy Employee Concerns Program |
| 7/29/11 | Order | 442.2 | | CRD – Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health |
| 3/17/11 | Order | 443.1B | | CRD – Protection of Human Research Subjects |
| 4-25-11 | Policy | 450.4A | | Integrated Safety Management Policy |
| 7/21/11 | Order | 452.8 | | CRD - Control of Nuclear Weapon Data |
| 5/31/11 | Order | 456.1 | | CRD – The Safe Handling of Unbound Engineered Nanoparticles |
| 9/15/05 | Policy | 456.1 | | Secretarial Policy Statement on Nanoscale Safety |
| 2/11/11 | Order | 458.1 | Admin Chg. 3<br>1/15/13 | CRD- Radiation Protection of the Public and the Environment |
| 5/14/10 | Order | 460.1C | | CRD - Packaging and Transportation Safety |

***See Part II, Partial Deletions**

**DOE DIRECTIVES LIST**
**DOE Directives may be found at the following address: http://www.directives.doe.gov**

| DATE | TYPE | NUMBER | THROUGH CHANGE | SUBJECT TITLE<br>Contractor Requirements Document (CRD)<br>Includes Compliance Notes as Necessary |
|---|---|---|---|---|
| 12/22/04 | Order | 460.2A | | CRD - Departmental Materials Transportation and Packaging Management |
| 6/4/08 | Manual | 460.2-1A | | Radioactive Material Transportation Practices Manual |
| 11/10/08 | Order | 462.1 | Admin Chg. 1<br>7/10/13 | CRD – Import and Export of Category 1 and 2 Radioactive Sources Aggregated Quantities |
| 12/29/10 | Policy | 470.1A | | Safeguards and Security Program |
| 8/12/08 | Order | 470.3B | | Graded Security Protection (GPS) Policy |
| 7/21/11 | Order | 470.4B | | CRD – Safeguards and Security Program |
| 1/16/09 | Manual | 470.4-4A* | 1<br>10/12/10 | CRD – Information Security Manual<br><br>**Compliance Note:** This Directive is cancelled by Order 471.6, except for Section D. – Technical Surveillance Countermeasures, which will be retained in its entirety. |
| 6/2/14 | Order | 470.5 | | CRD – Insider Threat Program |
| 3/1/10 | Order | 471.1B | | CRD - Identification and Protection of Unclassified Controlled Nuclear Information |
| 4/9/03 | Order | 471.3 | Admin Chg. 1<br>1/13/11 | CRD - Identifying and Protecting Official Use Only Information |
| 4/9/03 | Manual | 471.3-1 | Admin Chg. 1<br>1/13/11 | CRD - Manual for Identifying and Protecting Official Use Only Information |
| 6/20/11 | Order | 471.6 | Admin Chg. 1<br>11-23-12 | CRD – Information Security<br><br>Compliance Note: This Directive contains a Partial deletion of Manual 470.4-4A |
| 7/27/11 | Order | 472.2 | Admin Chg. 1<br>10-8-13 | CRD – Personnel Security |
| 6/27/11 | Order | 473.3 | | CRD - Protection Program Operations |
| 6/27/11 | Order | 474.2 | Admin Chg. 2<br>11/19/12 | CRD – Nuclear Material Control and Accountability |
| 12/10/04 | Order | 475.1 | | Counterintelligence Program |
| 2/1/11 | Order | 475.2A | | CRD – Identifying Classified Information |
| 1/03/01 | Manual | 481.1-1A | Admin Chg. 1<br>9/28/01 | Reimbursable Work for Non-Federal Sponsored Process Manual |
| 11-6-13 | Order | 483.1A | | CRD - DOE Cooperative Research and Development Agreements |

***See Part II, Partial Deletions**

| DOE DIRECTIVES LIST<br>DOE Directives may be found at the following address: http://www.directives.doe.gov | | | | |
|---|---|---|---|---|
| **DATE** | **TYPE** | **NUMBER** | **THROUGH CHANGE** | **SUBJECT TITLE**<br>**Contractor Requirements Document (CRD)**<br>**Includes Compliance Notes as Necessary** |
| 8/17/06 | Order | 484.1 | Admin Chg. 2 6/30/14 | CRD - Reimbursable Work for the Department of Homeland Security |
| 11/3/04 | Order | 522.1 | | CRD - Pricing of Departmental Materials and Services |
| 1/6/03 | Order | 534.1B | | CRD – Accounting |
| 4/2/12 | Order | 551.1D | | CRD – Official Foreign Travel |
| 3/30/12 | Order | 580.1A | Admin Chg. 1 10/22/12 | CRD – Department of Energy Personal Property Management Program |

## Appendix I - Part II

| PARTIAL DELETIONS OF DIRECTIVES | | | | |
|---|---|---|---|---|
| **DATE** | **DOE DIRECTIVE NUMBER** | **SUBJECT TITLE** | **DELETION DIRECTIVE DATE** | **SECTIONS DELETED** |
| 10/12/10 | M 470.4-4A | Information Security Manual | Order 471.6 | All, except for Section D. – Technical Surveillance Countermeasures, which will be retained in its entirety |

***See Part II, Partial Deletions**

**U.S. Department of Energy**

**and**

**Brookhaven Science Associates, LLC**

# ATTACHMENT J.10

# APPENDIX J

# TREATIES AND INTERNATIONAL AGREEMENTS/WAIVED INVENTIONS

**Applicable to the Operation of**
**The Brookhaven National Laboratory**

**Contract No. DE-AC02-98CH10886**
**Modification No. M253**

United States Department of Energy
Agreement Listing

| Expiration Date | DOE Office | Title |
|---|---|---|
| 1-6-97; exec 1-6-92 | PO | Agreement relating to scientific and technical cooperation between the Government of the United States of America and the Government of the Republic of Korea. |
| 7-6-99; exec 7-6-94 | IA and Department of State | Agreement between the Government of the United States of America and the Government of Estonia on science and technology cooperation. |
| 7-6-99; exec 7-6-94 | IA and Department of State | Agreement between the Government of the United States of America and the Government of Latvia on science and technology cooperation. |
| 7-6-99; exec 7-6-94 | IA and Department of State | Agreement between the Government of the United States of America and the Government of the Republic of Lithuania on science and technology cooperation. |
| | | Arrangement for the Exchange of Technical Information and for Cooperation in the Field of Peaceful uses of nuclear energy between the Atomic Energy Office for Peace and the U.S. National Laboratory. |
| Exec 1-15-92 | | Agreement between the Government of the Republic of Indonesia and the Government of the United States of America for cooperation in scientific research and technology development. |
| Exec 6-14-96 | | Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a cooperative laboratory relationship. |
| Exec 12-11-96 | | Agreement between the Department of Energy and the Nuclear Power Engineering Corporation of Japan for cooperation in the field of research and development of light water reactor-associated technologies. |

United States Department of Energy
Agreement Listing

Listing of Agreements Under the Aegis of: IAEA

| Exp Date | DOE Office | Agreement # | Title |
|---|---|---|---|
| 7/20/98 | ER | 000233 | Agreement among the European Atomic Energy Community, Japan, Russia and the United States on Cooperation in the Engineering Design Activities of the International Thermonuclear Experimental Reactor (ITER) |

# Office of Policy and International Affairs

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|

## Country: *Argentina*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 61 | 407 | 8/1/1996 | 8/1/2001 | Primary DOE | | | None | Energy Research and Development | Energy Technology Cooperation |

**Title:** ***Specific Arrangement between the Department of Energy of the United States of America and the Public Works and Services Secretariat of the Argentine Republic in the Area of Energy Technology Cooperation***

**Comment:** Energy Forecasting meeting was hosted by FE in Oct. of 97. Seminar on New Technologies for the Energy Sector was held in Buenos Aires in Dec 98. EERE has work on energy efficiency and renewable projects started under a statement of intent which was a precursor to this agreement. In Dec of 97 four priority areas of work were identified - energy efficiency, energy and environment, energy planning, and renewable energy by then Secretaries of Energy.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 62 | 409 | 10/16/199 | 10/16/200 | Primary DOE | | | None | Arms Control and Nonproliferation | Nuclear Technologies |

**Title:** ***Implementing Arrangement between the Department of Energy of the United States of America and the National Atomic Energy Commission of the Argentine Republic for Technical Exchange and Cooperation in the area of Peaceful Uses of Nuclear Energy***

**Comment:** Expanded sister lab arrangement supporting Article IV of the NPT. Existing annexes cover work in Molybdenum-99 production for LEU, boron neutron capture therapy, decontamination and decommissioning, and LEU advanced fuels.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 475 | 431 | 4/13/1998 | 10/16/200 | Secondary DOE | | 62 | Primary DOE | Arms Control and Nonproliferation | Annex 1 - LEU Moly-99 production |

**Title:** ***Project Annex 1 Cooperation in the Field of Molybdenum-99 Production from Low-Enriched Uranium***

**Comment:** In force as long as the Implementing Arrangement. Action sheets are under development.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 521 | 431 | 2/8/1999 | 2/8/2003 | Tertiary DOE | | 475 | Secondary DOE | Nuclear Energy | Action Sheet 1 - Project Annex 1 |

**Title:** ***Action Sheet 1 pursuant to Project Annex 1 for Cooperation in the Field of Molybdenum-99 Production for Low-Enriched Uranium between the National Atomic Energy Commission of he Argentine Republic and the University of Chicago, as Operator of Argonne National Laboratory***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 476 | 431 | 4/13/1998 | 10/16/200 | Intergovernmental | | 62 | Primary DOE | Arms Control and Nonproliferation | Annex 2 - Boron Neutron Capture Therapy |

**Title:** ***Project Annex 2 Cooperation in the Area of Boron Neutron Capture Therapy***

**Comment:** In force as long as the Implementing Arrangement. Expert visits are underway.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 503 | 431 | 8/11/1998 | | Tertiary DOE | | 476 | Secondary DOE | Arms Control and Nonproliferation | Action Sheet 1 |

**Title:** ***Action Sheet 1 Purusant to Project Annex 2 Cooperation in the Field of Boron Neutron Capture Theraphy***

**Comment:** Technical exchange visits.

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 477 | 431 | 4/13/1998 | 10/16/200 | Secondary DOE | | 62 | Primary DOE | Arms Control and Nonproliferation | Annex 3 - D&D of Nuclear Facilities |

**Title:** ***Project Annex 3 Cooperation in the Field of Decontamination and Decommissioning of Nuclear Facilities***

**Comment:** In force as long as the Implementing Arrangement. Workshop was successfully held in fall of 98 at ANL.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 496 | 431 | 8/18/1998 | 10/16/200 | Secondary DOE | | 62 | Primary DOE | Arms Control and Nonproliferation | Annex 4 - Advanced Fuels |

**Title:** ***Project Annex 4 Cooperation in Field of Low Enriched Uranium Advanced Fuels***

**Comment:** Remains in force as long as the Implement Arrangement. Action sheets are under development.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 555 | 431 | 2/8/1999 | 2/8/2003 | Tertiary DOE | | 496 | Secondary DOE | Arms Control and Nonproliferation | Action Sheet 1 Annex 4, Dart Code Development |

**Title:** ***Action Sheet I Pursuant to Project Annex 4 for Cooperation in the Field of Low Enriched Uranium Advanced Fuels between the National Atomic Energy Commission of the Argentine Republic (CNEA) and the University of Chicago, as Operator of Argonne National Laboratory***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 63 | 331 | 4/18/1994 | 4/18/2004 | Primary DOE | | | None | Arms Control and Nonproliferation | International Safeguards Applications |

**Title:** ***Agreement between the United States Department of Energy and the National Atomic Energy Commission of Argentina Concerning Research and Development in Nuclear Material Control, Accountancy, Verification, Physical Protection, and Advanced Containment and Surveillance Technology for International Safeguards Applications***

**Comment:** Cooperate in research, development, testing, and evaluation of technology, equipment and procedures in order to improve nuclear material control, accountancy, verification, physical protection and advanced containment and surveillance technologies for international safeguards applications.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 64 | 387 | 5/29/1996 | 5/29/2006 | Primary DOE | | | None | Environmental Restoration and Waste Management | Radioactive and Mixed Waste Management |

**Title:** ***Implementing Arrangement between the Department of Energy of the United States of America and the National Atomic Energy Commission of the Argentine Republic for Technical Exchange and Cooperation in the Area of Radioactive and Mixed Waste Management***

**Comment:** Study radioactive and mixed waste management activities in such areas as: preparation and packaging; decontamination and decommissioning; surface and subsurface storage; characterization of geologic formations; disposal in geologic formations, etc.

## Country: ***Australia***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 509 | 456 | 9/15/1998 | 9/14/2008 | Primary DOE | | | None | Arms Control and Nonproliferation | Safeguards Arrangement |

**Title:** ***Arrangement between the United States Department of Energy and the Australian Safeguards and Nonproliferation Office Concerning Research and Development in Nuclear material Control Accountancy, Verification, Physical Protection, Advance Containment and Surveillance Technologies for International Safeguards***

**Comment:**

## Country: ***Austria***

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 65 | 337 | 9/18/1994 | | Primary DOE | | | None | Energy Efficiency and Renewable Energy | EE/Conservation and Climate Change |

**Title:** ***Memorandum of Understanding on Cooperation in Environmental Aspects of Energy Policy and the Protection of Global Climate***

**Comment:** Cooperate in areas of sufficient growth of energy supplies; energy efficiency and conservation measures and protection of the biosphere (climate change).

## Country: ***Bangladesh***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 501 | 450 | 12/15/199 | | Statement of Intent | | | None | Energy Research and Development | SOI in Enregy Cooperation |

**Title:** ***Joint Statement of Cooperation in Energy***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 514 | 460 | 2/11/1999 | 2/11/2004 | Primary DOE | | | None | Information and/or Personnel Exchange | Exchange of Energy Information |

**Title:** ***Arrangement between the Department of Energy of the United States of America and the Ministry of Energy and Mineral Resources, Government of the People's Republic of Bangladesh for Exchange of Energy Information***

**Comment:** EIA will work with an agency designated by MEOMR to establish a reasonably balanced exchange of energy information.

## Country: ***Botswana***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 600 | 495 | 12/15/200 | | Statement of Intent | | | None | Fossil Energy | Cooperation in the Field of Fossil Energy |

**Title:** ***Statement of Intent Between The Department of Energy of the United States of America and The Ministry of Minerals, Energy and Water Afairs of the Republic of Botswana for Cooperation in the Field of Fossil Energy Technology***

**Comment:**

## Country: ***Brazil***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 26 | 391 | 9/30/1996 | | Statement of Intent | | | None | Fossil Energy | Clean Coal Technologies |

**Title:** ***Joint Statement of Intent on Clean Coal Technologies between the Department of Energy of the United States of America and the State of Rio Grande do Sul and the State of Santa Catarina, and the Sindicato Nacional da Industria da Extracao do Carvao, Eletrabras, and the Ministry of Mines and Energy of the Federal Republic of Brazil***

**Comment:** Intention to cooperate between DOE, the State of Rio Grande do Sul, the State of Santa Catarina, The Sindicato National da Industria da Extracao do Carvao, Electrobras, and the Ministry of Mines and Energy of Brazil in clean coal technologies.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 655 | 550 | 6/20/2003 | 6/20/2008 | Primary DOE | | | None | Science and Technology | Cooperation in Nuclear Energy |

**Title:** ***Agreement between the Department of Energy of the United States of America nd the Ministry of Science and Technology of the Federative Republic of Brazil Concerning Cooperation in Nuclear Energy***

**Comment:**

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 75 | 412 | 10/14/199 | 10/14/200 | Primary DOE | | | None | Energy Research and Development | Energy Technology |
| | **Title:** | ***Implementing Arrangement between the United States of America and the Federative Republic of Brazil for Cooperation in the Area of Energy Technology*** | | | | | | | |
| | **Comment:** | Umbrella Agreement | | | | | | | |
| 279 | 412 | 10/14/199 | 10/14/200 | Secondary DOE | | 75 | Primary DOE | Fossil Energy | Annex 1 - Coal and Power Systems |
| | **Title:** | ***Annex I to the Implementing Arrangement between the United States of America and the Federative Republic of Brazil for Cooperation in the Area of Energy Technology in the Field of Coal and Power Systems*** | | | | | | | |
| | **Comment:** | Exchange experience and views on clean coal technologies, advanced power systems, advanced coal preparation, and environmental monitoring technologies and standards. | | | | | | | |
| 280 | 412 | 10/14/199 | 10/14/200 | Secondary DOE | | 75 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 2 - Renewable Energy |
| | **Title:** | ***Annex II to the Implementing Arrangement between the United States of America and the Federative Republic of Brazil for Cooperation in the Area of Energy Technology in the Field of Renewable Energy*** | | | | | | | |
| | **Comment:** | Collaboration on renewables resource assessment, integration in electric utility, policy analysis, and identification of opportunities for renewable energy in Brazil. | | | | | | | |
| 281 | 412 | 10/14/199 | 10/14/200 | Secondary DOE | | 75 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 3- Energy Efficiency |
| | **Title:** | ***Annex III - to the Implementing Arrangement between the United States of America and the Federative Republic of Brazil for Cooperation in the Area of Energy Technology in the Field of Energy Efficiency*** | | | | | | | |
| | **Comment:** | Collaboration to increase energy, efficiency, promote global environmental protection, and stimulate the market in Brazil for energy efficiency goods and services. | | | | | | | |
| 76 | 332 | 4/18/1994 | 4/18/2004 | Primary DOE | | | None | Arms Control and Nonproliferation | International Safeguards Applications |
| | **Title:** | ***Agreement between the United States Department of Energy and the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials Concerning Research and Development in Nuclear Material Control, Accountancy, Verification, and Advanced Containment and Surveillance Technologies for International Safeguards Applications*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 77 | 376 | 9/19/1995 | 9/19/2000 | Primary DOE | | | None | Arms Control and Nonproliferation | International Safeguards Applications |
| | **Title:** | ***Agreement between the United States Department of Energy and the National Nuclear Energy Commission of Brazil Concerning Research and Development in Nuclear Material Control, Accountancy, Verification, and Physical Protection, and Advanced Containment and Surveillance Technologies for International Safeguards Applications*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 651 | 546 | 9/17/2001 | 9/17/2006 | Secondary DOE | | 77 | Primary DOE | Arms Control and Nonproliferation | Extension - Agreement bet. DOE and the National Nuclear Energy Commission |
| | **Title:** | ***Agreement to Extend the Agreement between the Department of Energy of the United States and the National Nuclear Energy Commission of Brazil Concerning Research and Development in Nuclear Material Control, Accountancy, Verification, Physical Protection, and Advanced Containment and Surveillance Technologies for International Safeguards Applications*** | | | | | | | |
| | **Comment:** | 5- year extension | | | | | | | |

## Country: ***Canada***

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 28 | 363 | 7/21/1995 | | Statement of Intent | | 21 | Broad | Energy Efficiency and Renewable Energy | Building Energy Simulation Tools |
| | **Title:** | ***Statement of Intent between the United States Department of Energy and the Department of Natural Resources of Canada on Building Energy Simulation Tools*** | | | | | | | |
| | **Comment:** | Collaborate in building energy simulation R&D and information dissemination. | | | | | | | |
| 614 | 509 | 10/22/200 | 10/22/200 | Primary DOE | | | None | Energy Efficiency and Renewable Energy | Arrangement between DOE and Dept. of Natural Resources Canada |
| | **Title:** | ***Implementing Arrangement between the Department of Energy of the United States of America and the Department of Natural Resrouces Canada for Cooperation in the areas of Microgeneration and Community Energy Systems*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 632 | 527 | 5/10/2000 | 5/10/2005 | Primary DOE | | | None | Science and Technology | Cooperation in the area of Bioenergy |
| | **Title:** | ***Implementing Arrangement between the United States Department of Energy and the Department of Natural Resources of Canada for Cooperation in the area of Bioenergy*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 656 | 551 | 6/17/2003 | 6/17/2008 | Primary DOE | | | None | Nuclear Energy | Nuclear Energy Research |
| | **Title:** | ***Implementing Arrangement between the United States Department of Energy and the Department of Natural Resources of Canada and Atomic Energy of Canada Limited for Collaboration in the area of Nuclear Energy Research*** | | | | | | | |
| | **Comment:** | Foreign Party for Atomic Energy of Canada Limited signed this agreement also on June 17, 2003. | | | | | | | |
| 81 | 425 | 3/18/1998 | 3/18/2008 | Primary DOE | | | None | Energy Research and Development | Energy R&D |
| | **Title:** | ***Memorandum of Understanding between the Department of Energy of the United States of America and the Department of Natural Resources of Canada on Collaboration in Energy Research and Development*** | | | | | | | |
| | **Comment:** | Establish wider areas of cooperation for mutual benefit | | | | | | | |
| 524 | 469 | 2/1/2000 | 2/1/2005 | Secondary DOE | | 81 | Primary DOE | Fossil Energy | DOE/NRCan Fuel Cells Implementing Arrangement |
| | **Title:** | ***Implementing Arrangement between the Department of Energy of the United States of America and the Department of Natural resources Canada for Cooperation in the area of Fuel Cells*** | | | | | | | |
| | **Comment:** | Automatic Renewal after 5 years with written agreement of the participants. | | | | | | | |
| 525 | 470 | 2/1/2000 | 2/1/2005 | Secondary DOE | | 81 | Primary DOE | Fossil Energy | DOE/NRCan Fossil Fuels Implementing |
| | **Title:** | ***Implementing Arrangement between Department of Energy of the United States of America and the Department of Natural Resources Canada for Cooperation in the area of Fossil Fuels*** | | | | | | | |
| | **Comment:** | Automatic renewal for 5 years with written agreement of the participants. | | | | | | | |

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 646 | 541 | 9/11/2002 | 9/11/2007 | Tertiary DOE | | 525 | Secondary DOE | Fossil Energy | Project Annex I - Weyburn CO2 Sequestration |

**Title:** ***Project Annex I - Weyburn CO2 Sequestration Project under the Implementing Arrangement Between the Department of Energy of the United States of America and the Department of Natural Resources Canada for Cooperation in the Area of Fossil Fuels***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 27 | 341 | 11/18/199 | | Statement of Intent | | 21 | Broad | Energy Efficiency and Renewable Energy | Biennial Biomass Conf. of the Americas |

**Title:** ***Statement of Intent between the United States Department of Energy and the Department of Mines and Resources on Biennial Biomass Conference of Americas***

**Comment:** Collaborate in a biennial conference to present the latest results in biomass energy research and development.

## Country: ***Chile***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 352 | 3/7/1995 | | Statement of Intent | | | None | Energy Efficiency and Renewable Energy | Control Emissions of Greenhouse Gases |

**Title:** ***Statement of Intent for Sustainable Development Cooperation and Joint Implementation of Measures to Control Emissions of Greenhouse Gases Between the Department of Energy of the United States of America and the National Energy Commission of Chile***

**Comment:** Intent to facilitate the development of joint implementation projects in order to encourage: market deployment of greenhouse gas-reducing technologies, including energy efficiency and renewable energy technologies; education and training programs, etc.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 474 | 430 | 4/18/1998 | 4/12/2000 | Statement of Intent | | | None | Energy Efficiency and Renewable Energy | Natural Gas-Powered Bus Pilot Project |

**Title:** ***Statement of Intent Concerning the Natural Gas-Powered Bus Pilot Project in the Metropolitan Region of Chile***

**Comment:** Signed in Santiago, Chile, during the SOAII

## Country: ***China***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 427 | 1/31/1979 | 4/30/2001 | Intergovernmental | | | None | Science and Technology | Gov't to Gov't S&T |

**Title:** ***Agreement between the Government of United States of America and the Government of People's Republic of China on Cooperation in Science and Technology***

**Comment:** Need copy of agreement

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 238 | 123 | 5/11/1983 | 4/30/2001 | Primary DOE | | 1 | Intergovernmental | Fusion Energy | Protocol on Nuclear Physics and Magnetic Fusion |

**Title:** ***Protocol between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China on Cooperation in the Fields of Nuclear Physics and Controlled Magnetic Fusion Research***

**Comment:** Cooperate in promoting each other's program in Nuclear Physics and Controlled Magnetic Fusion. Co-terminates with umbrella S&T agreement.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 290 | 223 | 9/28/1987 | 4/30/2001 | Secondary DOE | | 239 | Primary DOE | Fossil Energy | Annex 2 - Mine Safety and Health |

**Title:** ***Annex II to the Protocol on Cooperation in the Field of Fossil Energy Research and Development between the Department of Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China in the Area of Mine Safety and Health***

**Comment:** Co-terminates with the Protocol

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 291 | 217 | 8/19/1987 | 4/30/2001 | Secondary DOE | | 239 | Primary DOE | Energy Research and Development | Annex 3 - Atmospheric Trace Gasses |

**Title:** ***Annex III to the protocol on fossil energy R&D on Cooperation in the field of atmospheric trace gases***

**Comment:** Co-terminates with the Protocol

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 292 | 226 | 10/13/198 | 4/30/2001 | Secondary DOE | | 239 | Primary DOE | Fossil Energy | Annex 4 - Coal Preparation & Waste Stream Utilization |

**Title:** ***Annex IV to protocol on cooperation in field of fossil energy R&D between U.S. Department of Energy & Ministry of Coal Industry of the People's Republic of China in the area of coal preparation and waste stream utilization***

**Comment:** TASKS PLANNED WERE COMPLETED IN 10/90. DISCUSSIONS ON POSSIBLE FURTHER COOPERATION IN COAL PREP. Co-terminates with the Protocol

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 293 | 227 | 10/13/198 | 4/30/2001 | Secondary DOE | | 239 | Primary DOE | Fossil Energy | Annex 5 - Atmospheric Fluidized Bed Combustion Info Exchange |

**Title:** ***Annex V to protocol on cooperation in field of fossil energy R&D between U.S. Department of Energy - Ministry of Coal Industry of the People's Republic of China in the area of atmospheric fluidized bed (AFB) combustion information exchange***

**Comment:** EXCHANGE OF REPORTS AND DATA. Co-terminates with Protocol

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 296 | 349 | 2/23/1995 | 2/23/2000 | Secondary DOE | | 239 | Primary DOE | Fossil Energy | Annex 11 - Coal Bed Methane Recovery and Utilization |

**Title:** ***Annex XI to the Protocol for Cooperation in the Field of Fossil Energy Research and Development between the Department Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China for Cooperation in the Area of Coalbed Methane Recovery and Utilization***

**Comment:** Promote technological and economic cooperation in coal bed methane recovery and utilization technology in order to make positive contributions toward improving recovery efficiency and utilization of globally significant natural gas energy resources.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 297 | 348 | 2/23/1995 | 2/23/2000 | Secondary DOE | | 239 | Primary DOE | Fossil Energy | Annex 12 - Regional Climate Research |

**Title:** ***Annex XII to the Protocol on Cooperation in the Field of Fossil Energy Research and Development between the Department Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China for Cooperation in the Area of Regional Climate Research with the China Meteorological Administration***

**Comment:** Establish a program of joint R&D and information exchange to document regional climate and climate change, to predict regional climate and climate change and to identify regional impacts of climate

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 485 | 439 | 11/14/199 | 11/14/200 | Secondary DOE | | 239 | Primary DOE | Fossil Energy | Annex 13 - Fossil Fuel Utilization |

**Title:** ***Annex XIII to the Protocol for Cooperation in the Field of Fossil Energy Research and Development between the Department of Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China in the Area of Fossil Fuel Utilization for Production of Chemicals***

**Comment:** Co-terminiates with Protocol

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 298 | 413 | 11/14/199 | 11/14/200 | Secondary DOE | | 239 | Primary DOE | Fossil Energy | Annex 14 - Bilateral Consultations on Coal Industry |

**Title:** ***Annex XIV to the Protocol for Cooperation in the field of Fossil Energy Research & Development between the Department of Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China on Bilateral Consultations and Exchanges on Coal Industry Development and Information***

**Comment:** Co-terminates with the Protocol

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 618 | 513 | 12/7/2000 | 12/7/2005 | Secondary DOE | | 239 | Primary DOE | Fossil Energy | Annex III - for Cooperation in the areas of Oil and |

**Title:** ***Annex III to the Protocol for Cooperation in the Field of Fossil Energy Technology Development and Utilization between the Department of Energy of the United States of America and The Ministry of Science and Technology of the People's Republic of China for Cooperation in the areas of Oil and Gas***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 240 | 351 | 2/23/1995 | 2/22/2005 | Primary DOE | | 1 | Intergovernmental | Energy Efficiency and Renewable Energy | Protocol for Energy Efficiency and Renewable |

**Title:** ***Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China***

**Comment:** Desire to conduct bilateral energy consultations by forming a Chinese-American Ministerial Working Group to enhance the understanding of energy issues and promote the exchange of information on energy policies, programs and technologies.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 478 | 432 | 6/27/1995 | 6/27/2000 | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 1 - 100 Counties Renewable Energy |

**Title:** ***Annex I to the Protocol for Cooperation in the Field of Energy Efficiency and Renewable Energy between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China for Developing Cooperative Activities in the Area of Renewable Energy Under the Hundred Counties Integrated Rural Energy Development Program in China between the Department of Energy of the United States of America and the Ministry of Agriculture of the People's Republic of China***

**Comment:** Remains in force for five years or until termination of the Protocol, whichever occurs first

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 299 | 420 | 10/25/199 | 10/25/200 | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 2 - Wind Energy Development |

**Title:** ***Wind Energy Development in China Developing Cooperative Activities between the Department of Energy of the United States of America and the Ministry of Electric Power of the People's Republic of China ANNEX II under the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization between the Department of Energy of the United States of America and the State Science and Technology Commission of the People's Republic of China***

**Comment:** Remains in force for five years or until termination of the Protocol, whichever occurs first.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 300 | 422 | 10/25/199 | 10/25/200 | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 3 - Energy Efficiency |

**Title:** ***Annex III to the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and utilization between the Department of Energy of the United States of America and the State Science and Technology Commission of the People's Republic of China for Cooperation Between the Department of Energy of the United States of America and the State Planning Commission of the People's Republic of China in the Area of Energy Efficiency***

**Comment:** Remains in force for five years or until termination of the Protocol, whichever occurs first

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 301 | 421 | 10/25/199 | 10/25/200 | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 4 - Renewable Energy Business Development |

**Title:** ***Renewable Energy Business Development ANNEX IV Cooperative Activities between the Department of Energy of the United States of America and the State Economic and Trade Commission of the People's Republic of China***

**Comment:** Remains in force for five years or until termination of the Protocol, whichever occurs first

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 302 | 414 | 11/18/199 | 11/18/200 | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 5 - Electric Vehicle Development |

**Title:** ***The Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China for Cooperation in the Field of Energy Efficiency and Renewable Energy Technology Development and Utilization Annex V Electric Vehicle and Hybrid-Electric Vehicle Development***

**Comment:** Remains in force for five years or until termination of the Protocol, whichever occurs first.

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 303 | 415 | 11/18/199 | 11/18/200 | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 6 - Geothermal Production and Use |

**Title:** ***Geothermal Production and Use Cooperative Activities between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China Annex VI under The Protocol for cooperation in the Field of Energy Efficiency and renewable Energy Technology Development and Utilization between the Department of Energy of the United States of America and the State Science and Technology Commission of the People's Republic of China***

**Comment:** Remains in force for five years or until termination of the Protocol, whichever occurs first.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 490 | 443 | 7/9/1998 | | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Design Criteria for Energy Efficient Building |

**Title:** ***Statement of Work between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 563 | 486 | 5/11/2000 | 5/11/2005 | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 7 - Renewable Energy Policy and Planning |

**Title:** ***Renewable Energy Policy and Planning Annex VII Cooperative Activities between Department of Energy of the United States of America and the State Development Planning Commission of the People's Republic of China***

**Comment:** Remains in force for five years or until termination of the Protocol, whichever occurs first.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 616 | 511 | 7/18/2001 | | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Design Criteria for Energy Efficient Building |

**Title:** ***Amendment to The Statement of Work of July 9, 1998 between The Department of Energy of the United States of America and The Ministry of Science and Technology of the People's Republic of***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 621 | 516 | 2/12/2002 | 2/12/2007 | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Annex II - The State Power Corporation of China |

**Title:** ***Agreement to Extend Annex II to the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization for Cooperative Activities in Wind Development in China between the Department of Energy of the United States of America and the State Power Corporation of China***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 622 | 517 | 2/12/2002 | 2/12/2007 | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Annex III - State Planning Commission |

**Title:** ***Agreement to Extend and Amend Annex III to the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization for Cooperative Activities in Energy Efficiency between The Department of Energy of the United States of America and the State Planning Commission of the People's Republic of China***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 623 | 518 | 2/12/2002 | 2/12/2007 | Secondary DOE | | 240 | Primary DOE | Energy Efficiency and Renewable Energy | Annex IV - State Economic and Trade Commission |

**Title:** ***Agreement to Extend and Amend Annex IV to the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization for Cooperative Activities in Renewable Enerby Business Development between the Department of Energy of the United States of America and the State Economic and Trade Commission of the People's Republic of***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 241 | 38 | 1/31/1979 | 4/30/2001 | Primary DOE | | 1 | Intergovernmental | High Energy Physics | High Energy Physics |

**Title:** ***Implementing Accord between the U.S. Department of Energy and the State Scientific and Technological Commission of the People's Republic of China on Cooperation in the Field of High Energy Physics.***

**Comment:** Co-Terminates with the S&T Agreement

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 242 | 311 | 11/4/1992 | 11/4/2002 | Primary DOE | | 1 | Intergovernmental | High Energy Physics | Superconducting Super Collider |
| | **Title:** | ***Implementing Accord between the U.S. Department of Energy and the Chinese Academy of Sciences for a Program of Collaboration on the Superconducting Super Collider*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 522 | 467 | 1/12/2000 | 1/12/2005 | Primary DOE | | 1 | Intergovernmental | Information and/or Personnel Exchange | Exchange of Energy Information |
| | **Title:** | ***Protocol for Cooperation Concerning the Exchange of Energy Information between the Department of Energy of the United States of America and the National Bureau of Statistics of the People's Republic of China*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 531 | 476 | 4/20/2000 | 4/30/2001 | Primary DOE | | 1 | Intergovernmental | Fossil Energy | Fossil Energy Protocol |
| | **Title:** | ***Protocol for Cooperation in the Field of Fossil Energy Technology Development and Utilization between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China*** | | | | | | | |
| | **Comment:** | Remains in force for 5 years from date of signature or as long as the Umbrella Agreement (US-China S&T) remains in force, whichever is shorter. | | | | | | | |
| 649 | 544 | 11/19/200 | 11/19/200 | Secondary DOE | | 531 | Primary DOE | Fossil Energy | Annex II - Cooperation in the area of Clean Fuels |
| | **Title:** | ***Annex II to the Protocol on Cooperation in the Field of Fossil Energy Technology Development and Utilization between The Department of Energy of the United States of America and The Ministry of Science and Technology of the People's Republic of China for Cooperation in the Area of Clean Fuels*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 3 | 410 | 10/29/199 | | Intergovernmental | | | None | *Other - Energy and Environment | Energy and Environment Cooperation Initiative |
| | **Title:** | ***United States of American and People's Republic of China Energy and Environment Cooperation Initiative*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 31 | 347 | 2/23/1995 | | Statement of Intent | | | None | Nuclear Energy | Research Reactor Fuel |
| | **Title:** | ***Statement of Intent between the Department of Energy of the United States of America and the China Atomic Energy Authority of the People's Republic of China on Research Reactor Fuel*** | | | | | | | |
| | **Comment:** | Exchange information and views on opportunities for the conversion of research reactors to the use of low enriched uranium. | | | | | | | |
| 493 | 445 | 6/29/1998 | 6/29/2003 | Primary DOE | | | None | Nuclear Energy | Nuclear Technologies Agreement |
| | **Title:** | ***Agreement between the Department of Energy of the United States of America and the State Development Planning Commission of the People's Republic of China on Cooperation Concerning Peaceful Uses of Nuclear Technologies*** | | | | | | | |
| | **Comment:** | Subject to the Gov't to Gov't Peaceful Uses of Nuclear Energy Agreement signed July 23, 1985. | | | | | | | |
| 494 | 445 | 6/29/1998 | 6/29/2003 | Secondary DOE | | 493 | Primary DOE | Nuclear Energy | Annex 1 - IPR |
| | **Title:** | ***Annex I- Intellectual Property*** | | | | | | | |
| | **Comment:** | Attached to original agreement. | | | | | | | |

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 620 | 515 | 5/11/2000 | 5/11/2005 | Secondary DOE | | 493 | Primary DOE | Energy Efficiency and Renewable Energy | Annex VII |

**Title:** ***Renewable Energy Policy and Planning Annex VII Cooperative Activities Between the Department of Energy of the United States of America and the State Development Planning Commission of the People's Republic of China***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 554 | 483 | 3/29/1999 | | Statement of Intent | | | None | *Other - Energy and Environment | MOU on Clean Energy Projects and Technologies |

**Title:** ***Memorandum of Understanding Among The State Development Planning Commission of the People's Republic of China, China Development Bank, The United States Department of Energy, and Export Import Bank of the United States Regarding Cooperation on Clean Energy Projects and Technologies***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 642 | 537 | 9/10/2002 | | Statement of Intent | | | None | Science and Technology | SOI - Clean Energy Technologies |

**Title:** ***Statement of Intent between the Department of Energy of the United States of America and the Municipality of Beijing of the People's Republic of China Concerning Clean Energy Technologies***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 84 | 345 | 2/23/1995 | | Primary DOE | | | None | *Other - Bilateral Energy Consultations | Bilateral Energy Consultations |

**Title:** ***Memorandum of Understanding between the Department of Energy of the United States of America and the State Planning Commission of the People's Republic of China on Bilateral Energy Consultations***

**Comment:** Desire to conduct bilateral energy consultations by forming a Chinese-American Ministerial Working Group to enhance the understanding of energy issues and promote the exchange of information on energy policies, programs and technologies.

## Country: ***Costa Rica***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 36 | 401 | 5/9/1997 | 5/9/2002 | Statement of Intent | | | None | Energy Efficiency and Renewable Energy | Electric Transport |

**Title:** ***Statement of Intent by the Ministry of Environment and Energy of Costa Rica and the Department of Energy of the United States of America for Cooperation in the Field of Electric Transport***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 504 | 451 | 11/17/199 | 11/17/200 | Primary DOE | | | None | Arms Control and Nonproliferation | Sister Lab Arrangement |

**Title:** ***Arrangement for information Exchange and Cooperation in the Area of Peaceful Uses of Nuclear Energy between Argonne National Laboratory and Atomic Energy Commission of Costa Rica***

**Comment:** ACDA led sister lab.

## Country: ***Czech Republic***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 4 | 300 | 10/22/199 | 10/22/200 | Intergovernmental | | | None | Science and Technology | Science & Technology |

**Title:** ***Agreement between the Government of the Czech and Slovak Federal Republic and the Government of the United States of America for Scientific and Technological Cooperation***

**Comment:** Develop, support and facilitate S&T cooperation between cooperating organizations between the two countries in the areas of basic science, environmental protection, medical sciences and health, agriculture, engineering research, energy, natural resources and their useful utilization, standardization, S&T policy and management.

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|

## Country: ***Egypt***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 517 | 463 | 7/1/1999 | 7/1/2004 | Primary DOE | | None | | Energy Research and Development | Energy Technology Agreement |

**Title:** ***Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Electricity and Energy of the Arab Republic of Egypt for Cooperation in Energy Technology***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 527 | 472 | 2/23/2000 | 2/23/2005 | Secondary DOE | 517 | Primary DOE | | Energy Efficiency and Renewable Energy | Annex 1 - Renewable Energy |

**Title:** ***Annex I to the Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Electricity and Energy of the Arab Republic of Egypt in the Field of Renewable Energy***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 528 | 473 | 2/23/2000 | 2/23/2005 | Secondary DOE | 517 | Primary DOE | | Energy Efficiency and Renewable Energy | Annex 2 - Fuel Cells |

**Title:** ***Annex II to the Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Electricity and Energy of the Arab Republic of Egypt for Cooperation in Energy Technology in the Field of Fuel Cells***

**Comment:**

## Country: ***Estonia***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 526 | 471 | 2/4/2000 | 2/4/2003 | Primary DOE | | None | | Fossil Energy | Oil Shale Research and Utilization |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Ministry of Economic Affairs of the Republic of Estonia for Scientific and Technology Cooperation on Oil Shale Research and Utilization***

**Comment:** Establishes a Joint Coordinating Committee to manage cooperative work under the agreement.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 99 | 353 | 3/13/1995 | 3/13/2000 | Primary DOE | | None | | Environmental Restoration and Waste Management | Technical Cooperation in Clean-up Paldiski Site |

**Title:** ***Memorandum of Understanding between the Department of Energy of the United States and the Ministry of Economy of Estonia for Technical Cooperation in the Clean-up of the Paldiski Nuclear Training Site***

**Comment:** Cooperate and share interests and objectives in environmental restoration and in the safe and effective management of hazardous wastes and the clean-up of the environment at and around the nuclear training site at Paldiski, Estonia.

## Country: ***European Atomic Energy Community (EURATOM)***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 568 | 490 | 1/6/1995 | 1/6/2005 | Primary DOE | | None | | International Safeguards | EURATOM Safeguards |

**Title:** ***Agreement between the European Atomic Energy Community Represented by the Commission of the European Communities and the United States Department of Energy in the field of Nuclear Materials Safeguards Research and Development***

**Comment:** Auto renewal for five years periods.

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 576 | 490 | 2/18/1999 | 2/18/2001 | Secondary DOE | | 568 | Primary DOE | International Safeguards | Action Sheet 10 - Tank Analysis |

**Title:** ***Action Sheet 10 - The United States Department of Energy (DOE) and The European Atomic Energy Community represented by The Commission of European Communities (EURATOM) for Computer Code Development for Automated Acquisition and Real-Time Analysis of Volume Measurement Data***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 612 | 507 | 5/14/2001 | 5/14/2006 | Primary DOE | | | None | Fusion Energy | Fusion Agreement between EURATOM and DOE |

**Title:** ***Agreement for Cooperation between the European Atomic Energy Community Represented by the Commission of the European Communities and the Department of Energy of the United States of America in the Field of Fusion Energy Research and Development***

**Comment:**

## Country: ***European Union***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 648 | 543 | 5/14/2001 | 5/14/2006 | Primary DOE | | | None | Science and Technology | Non-Nuclear Energy S&T Agreement |

**Title:** ***Implementing Agreement between the Department of Energy of the United States of America and the European Commission for Non-Nuclear Energy Scientific and Technological Co-operation***

**Comment:**

## Country: ***Finland***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 116 | 393 | 1/17/1997 | 1/17/2001 | Primary DOE | | | None | Energy Research and Development | Energy R&D |

**Title:** ***Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Trade and Industry of Finland for Cooperation in Energy Research and***

**Comment:** Auto renewal for 5 years

## Country: ***France***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 39 | 132 | 10/27/198 | | Secondary DOE | | 121 | Primary DOE | Environmental Restoration and Waste Management | Radioactive Waste Management--West Valley |

**Title:** ***Statement of Intent between the United States Department of Energy and the French Commissariat a l'Energie Atomique on the West Valley Demonstration Project***

**Comment:** Cooperate in the areas of treatment of radioactive waste and decontamination and decommissioning activities throughout the course of the DOE Demonstration Project at the Western New York Nuclear Service Center located at West Valley, New York.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 40 | 185 | 6/20/1986 | | Secondary DOE | | 121 | Primary DOE | Civilian Radioactive Waste Management | Low-Level Radioactive Waste |

**Title:** ***Statement of Intent between the United States Department of Energy and the French Commissariat a l'Energie Atomique in the Field of Low-Level Radioactive Waste***

**Comment:** Confirm intent to expand radioactive waste management cooperation in the area of surface and subsurface disposal and storage of low-level radioactive waste, as well as defined activities.

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 128 | 416 | 12/29/199 | 12/29/200 | Primary DOE | | | None | Arms Control and Nonproliferation | Material Control and Accounting |
| | **Title:** | ***Agreement between the Department of Energy of the United States and the Commissariate a l'Eenergie Atomique of France Concerning Research and Development in the Field of Nuclear Material Control and Accounting Measures*** | | | | | | | |
| | **Comment:** | Cooperate on research, development, testing and evaluation in the area of nuclear material control and accounting measures. | | | | | | | |
| 577 | 416 | 1/20/2000 | 1/20/2001 | Secondary DOE | | 128 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 2 - Isotopic Analysis Evaluation Using the PC/FRAM Physics Isotopics Software |
| | **Title:** | ***Action Sheet No. 2 The United States Department of Energy (DOE) and The Commissariat a I'Energie Atomique (CNEA) of France for Isotopic Analysis Evaluation Using the PC/FRAM Physics Isotopics Software*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 129 | 417 | 12/29/199 | 12/29/200 | Primary DOE | | | None | Arms Control and Nonproliferation | Physical Protection of Nuclear Materials |
| | **Title:** | ***Agreement between the Department of Energy of the United States and the Commissariat a l'Energie Atomique of France Concerning Research and Development in the Field of Physical Protection of Nuclear Materials and Facilities*** | | | | | | | |
| | **Comment:** | Improve the US & France nuclear materials and facilities physical protection procedures | | | | | | | |
| 567 | 417 | 3/14/2000 | 3/14/2002 | Secondary DOE | | 129 | Primary DOE | International Safeguards | Action Sheet 3 - Nuclear Materials Transportation Security |
| | **Title:** | ***Action Sheet No. 3 The United States Department of Energy (DOE) and the Commissariat a l'Energie Atomique of France (CEA) for Nuclear Transportation Security*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 130 | 357 | 4/26/1995 | 4/26/2005 | Primary DOE | | | None | High Energy Physics | Accelerator Driven Technology |
| | **Title:** | ***Agreement between the Department of Energy and the Commissariat a l'Energie Atomique for Cooperation in Research Development and Application for Accelerators driven Technology*** | | | | | | | |
| | **Comment:** | Conduct cooperative program of scientific and technical engineering in research, development and application for accelerator driven technology | | | | | | | |
| 131 | 377 | 9/20/1995 | 9/20/2000 | Primary DOE | | | None | Civilian Radioactive Waste Management | Radioactive Waste Management |
| | **Title:** | ***Agreement between the United States Department of Energy and the French Commissariat a l'Energie Atomique in the field of Radioactive Waste Management*** | | | | | | | |
| | **Comment:** | Cooperation in the management of radioactive wastes for the purpose of minimizing the consequences of radioactive contamination on health and environment and promoting the safe and economic application of nuclear energy. Cooperation includes: characterization of geologic formations; field/laboratory testing; preparation/packaging of radioactive wastes; disposal in geologic formations; environmental and safety issues, etc. | | | | | | | |
| 132 | 379 | 10/8/1995 | 10/8/2000 | Primary DOE | | | None | Civilian Radioactive Waste Management | Radioactive Waste Management |
| | **Title:** | ***Agreement between the United States Department of Energy and the National Radioactive Waste Management Agency of France in the Field of Radioactive Waste Management*** | | | | | | | |
| | **Comment:** | Cooperate for purposes of minimizing consequences of radioactive contamination on health and environment and promoting safe and economic application of nuclear energy. | | | | | | | |

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 564 | 487 | 5/9/2000 | 5/9/2005 | Primary DOE | | | None | Defense Programs | DOE/DGA Emerging Technologies |

**Title:** ***Technical Arrangement between the Department of Energy of the United States of America and the Minster of Defense of the French Repubic Concerning Cooperation in the Application of Emerging Technologies***

**Comment:** Auto Renewal for 5 year periods.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 582 | 257 | 8/9/1994 | 8/9/2004 | Primary DOE | | | None | Defense Programs | 1994- High Energy Lasers |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Commissariat a l'Energie Atomique of France of Cooperation in Research, Development and Applications of High Energy Lasers and high Energy Laser-Mater Interaction Physics***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 316 | 342 | 11/19/199 | | Secondary DOE | | 582 | Primary DOE | Defense Programs | Megajoule-Class Solid State Lasers - IA #1 |

**Title:** ***Implementing Arrangement I between the United States Department of Energy and the French Atomic Energy Commission concerning Sharing of Science and Technology Information Related to Megajoule-class Solid State Lasers***

**Comment:** Sharing of specific S&T information related to megajoule-class solid state lasers.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 317 | 343 | 11/19/199 | 8/9/2004 | Secondary DOE | | 582 | Primary DOE | Defense Programs | Megajoule-Class Solid State Laser Technology - IA |

**Title:** ***Implementing Arrangement #2 between the United States Department of Energy and the French Commissariat a l'Energie Atomique on Cooperation in Megajoule-Class Solid State Laser Technology***

**Comment:** Implement cooperative activities in research and development in megajoule-class solid state laser technology (high-power, high-energy solid state lasers and target experimental chambers and support

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 601 | 496 | 9/18/2000 | 9/18/2005 | Primary DOE | | | None | Nuclear Energy | Advanced Nuclear Reactor |

**Title:** ***Agreement between The Department of Energy of the United States of America and The Commissariat A L'Energie Atomique of France for Cooperation in Advanced Nuclear Reactor Science and Technology***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 635 | 530 | 7/9/2001 | 7/9/2006 | Secondary DOE | | 601 | Primary DOE | Nuclear Energy | Advanced Nuclear Reactor Science and Technology (I-NERI) |

**Title:** ***Implementing Arrangement No. 1 under the Agreement between the Department of Energy of the United States of America and Commissariat A L'Energie Atomique of France for Cooperation in Advanced Nuclear Reactor Science and Technology***

**Comment:** International Nuclear Energy Research Initiative

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 629 | 524 | 1/2/2002 | 1/2/2007 | Statement of Intent | | | None | Exchange of Information on Research in Life Sciences | SOI between DOE and France |

**Title:** ***Statement of Intent Between the Department of Energy of the United States of America and the Commissariat A' L'Energie Atomique of France Concerning Exchange of Information on Research in Life Sciences***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 630 | 525 | 3/13/2002 | 3/12/2007 | Primary DOE | | | None | Computer Sciences | Computer Sciences |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Commissariat A' L'E'nergie Atomique of France Concerning Cooperation in Computer Sciences***

**Comment:**

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 631 | 526 | 3/13/2002 | 3/13/2007 | Primary DOE | | | None | Fundamental Science | Fundamental Science on Stockpile Stewardship |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Commissariat A' L'E'nergie Atomique of France Concerning Cooperation in Fundamental Science Supporting Stockpile Stewardship***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 650 | 545 | 5/23/2002 | 5/23/2007 | Primary DOE | | | None | Civilian Radioactive Waste Management | Radioactive Waste Management Agreement |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Commissariat A L'Energie Atomique of France in the field of Radioactive Waste Management***

**Comment:**

## Country: ***Germany***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 613 | 508 | 7/24/2001 | 7/24/2006 | Primary DOE | | | None | Science and Technology | Agreement between DOE and Germany on Dense Plasma Physics |

**Title:** ***Implementing Agreement between the Federal Ministry of Education and Research of the Federal Republic of Germany and the Department of Energy of the United States of America on Collaboration in the Field of Dense Plasma Physics***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 88 | 419 | 2/20/1998 | 2/20/2003 | Primary DOE | | | None | Energy Research and Development | Energy Research |

**Title:** ***Agreement Between the Department of Energy of the United States of America and the Federal Ministry of Education, Science, Research and Technology of the Federal Republic of Germany on Cooperation in Energy Research, Science and Technology, and Development***

**Comment:** Auto renewal for 5 year periods. Broad-based umbrella agreement to allow formal cooperation in various program areas

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 480 | 434 | 5/12/1998 | 5/12/2001 | Secondary DOE | | 88 | Primary DOE | Environmental Restoration and Waste Management | Project: Transportation of Rad Waste |

**Title:** ***Project Agreement between the Department of Energy of the United States of America and the Federal Institute for Material Research and Testing of the Federal Republic of Germany: Technical Exchange and Cooperation on Transportation Requirements in the Field of Management of Radioactive Waste***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 93 | 31 | 9/27/1977 | | Primary DOE | | | None | Arms Control and Nonproliferation | Nuclear Materials Safeguards/Physical Security |

**Title:** ***Agreement between the United States Department of Energy and the Federal Minister for Research and Technology of Germany Cooperate in the field of Nuclear Material Safeguards and Physical Security Research and Development***

**Comment:** Open-end expiration date

## Country: ***Ghana***

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 149 | 392 | 10/1/1996 | 10/1/2001 | Primary DOE | | | None | Energy Research and Development | Energy Policy, S&T and Development |

**Title:** ***Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Mines and Energy of the Republic of Ghana on Cooperation in Energy Policy, Science and Technology, and, Development***

**Comment:** Facilitate and establish cooperative activities in such areas as: energy efficiency and renewable energy; fossil energy, including natural gas, liquefied petroleum gas, and clean coal technologies; environmental management, including utilization of energy technologies, particularly cost-effective technologies aimed at reducing emissions of greenhouse gases and minimizing environmental impacts; independent power project development, etc.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 330 | 399 | 2/27/1997 | 2/27/2001 | Secondary DOE | | 149 | Primary DOE | Energy Efficiency and Renewable Energy | Industrial Assessment Center |

**Title:** ***Implementing Arrangement Between the Department of Energy of the United States of America and the Ministry of Mines and Energy of the Republic of Ghana: Exchange of Information, Technical Assistance and Collaboration for the Establishment of the Industrial Assessment Center at the University of Science and Technology in Kumasi, Ghana***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 43 | 378 | 9/29/1995 | | Statement of Intent | | | None | Energy Efficiency and Renewable Energy | Energy Efficiency and Renewable Energy |

**Title:** ***Statement of Intent between the Department of Energy of the United States and the Ministry of Mines and Energy of the Republic of Ghana to Cooperate in the Fields of Energy Efficiency and Renewable Energy***

**Comment:** Exchanging experience and views on opportunities for the utilization of energy efficiency and renewable energy technologies.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 44 | 380 | 10/30/199 | | Primary DOE | | | None | Nuclear Energy | Peaceful Uses of Nuclear Energy |

**Title:** ***Memorandum of Understanding for the Exchange of Technical Information and for Cooperation in the Field of Peaceful Uses of Nuclear Energy between the Ghana Atomic Energy Commission and Argonne National Laboratory***

**Comment:** Establish the basis for a cooperative institutional relationship for the exchange of S&T information regarding the peaceful uses of atomic energy. This is between Ghana Atomic Energy Commission and ARGONNE NATIONAL LAB)

## Country: ***India***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 615 | 510 | 9/13/2000 | 9/13/2005 | Primary DOE | | | None | Energy Efficiency and Renewable Energy | MOU between DOE and India concerning Energy Consultations |

**Title:** ***Memorandum of Understanding between the Ministry of Power of the Republic of India and the Department of Energy of the United States of America Concerning Energy Consultations***

**Comment:**

## Country: ***Israel***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 156 | 384 | 2/1/1996 | 2/1/2001 | Primary DOE | | | None | Energy Efficiency and Renewable Energy | Energy Cooperation |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Ministry of Energy and Infrastructure of Israel Concerning Energy Cooperation***

**Comment:** Establish a framework for collaboration in energy R&D activities including: solar energy; biomass; energy efficiency; wind energy; fossil energy, including oil, gas and coal; electric power production and transmission. Annex I on Intellectual Property and Annex II on Security Obligations are attached. Discussion underway in clean coal technology and electric vehicles.

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 530 | 475 | 2/22/2000 | | Statement of Intent | | | None | Arms Control and Nonproliferation | SOI on Nonproliferation, Arms Control and Regional Security |

**Title:** ***Letter of Intent between the Department of Energy of the United States of America and the Atomic Energy Commission of Israel on cooperation in the Fields of Non-Proliferation, Arms Control, and Regional Security***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 617 | 512 | 10/23/200 | 10/23/200 | Primary DOE | | | None | Energy Efficiency and Renewable Energy | Cooperation in the Field of High Temperature Superconductivity |

**Title:** ***Implementation Agreement 3 between the Department of Energy of the United States of America and the Ministry of National Infrastructure of the State of Israel for Cooperation in the Field of High Temperature Superconductivity***

**Comment:**

## Country: ***Italy***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 160 | 358 | 5/26/1995 | 5/26/2000 | Primary DOE | | | None | Energy Research and Development | Energy R&D |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Italian Republic in the Field of Energy Research and Development***

**Comment:** continues 1985 MOU in Energy R&D

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 344 | 358 | 5/7/1997 | | Secondary DOE | | 160 | Primary DOE | Fossil Energy | Annex 3 - Fossil Energy |

**Title:** ***Annex III to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Republic of Italy to Cooperate in the Field of Fossil Energy***

**Comment:** Two additional areas were added in March 1998;fuel cells for power applications and externally fired combined cycle systems

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 345 | 358 | 3/24/1998 | 3/24/2003 | Secondary DOE | | 160 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 4 - Advanced Geothermal Technology |

**Title:** ***Annex IV to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and handicraft of the Republic of Italy in the Field of Energy Research and Development for Cooperation on Advanced Geothermal Technology***

**Comment:** Provides for collaboration between Ladrello and the Geyser Geothermal Facilities

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 346 | 358 | 3/24/1998 | 3/24/2008 | Secondary DOE | | 160 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 5 - Biomass Energy |

**Title:** ***Annex V to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Republic of Italy in the Field of Energy Research and Development for Cooperation in the Field of Biomass Energy***

**Comment:** Information Exchange on biomass systems. Task sharing on hot gas clean-up for medium-scale gasifiers.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 347 | 358 | 3/24/1998 | 3/24/2008 | Secondary DOE | | 160 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 6 - Photovoltaic Technology |

**Title:** ***Annex VI to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Republic of Italy in the Field of Energy Research and Development for Cooperation in the Field of Photovoltaic Technology***

**Comment:** Info exchange on reducing manufacturing costs of PV cells. Cooperation on guidelines for building integrated PV systems.

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 492 | 444 | 7/10/1998 | 7/10/2003 | Secondary DOE | | 160 | Primary DOE | Energy Research and Development | Annex 7 - Electric and Hybrid Vehicles |

**Title:** ***Annex VII to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Republic of Italy in the Field of Energy Research and Development for Cooperation in the Field of Electric and Hybrid Vehicles***

**Comment:** Remains in force for 5 years or until the Agreement expires, whichever is sooner.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 7 | 323 | 10/4/1993 | 10/4/2003 | Intergovernmental | | | None | Science and Technology | Gov't to Govt S & T |

**Title:** ***Agreement between the Government of the United States of America and the Government of the Italian Republic for Scientific and Technological Cooperation***

**Comment:** Science and Technology agreement between the United States and the Government of Italy which allows U.S. Government agencies to undertake cooperation in their respective areas of responsibility. Renewed last in 1998.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 46 | 323 | 10/31/198 | | Statement of Intent | | 7 | Intergovernmental | Information and/or Personnel Exchange | Synchrotron Light Source |

**Title:** ***Protocol of Intent of Intent between the Department of Energy of the United States of America and the Ministry of the University and of Scientific and Technological Research of the Republic of Italy***

**Comment:**

## Country: ***Japan***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 251 | 385 | 5/3/1996 | 5/3/2001 | Primary DOE | | 10 | Intergovernmental | Science and Technology | DOE/STA Basic Science & Technology |

**Title:** ***Implementing Arrangement between the Department of Energy of the United States of America and the Science and Technology Agency of Japan in the Field of Basic Science and Technology***

**Comment:** Determine cooperation on joint projects in the field of basic S&T which may include nuclear physics; synchrotron radiation; medical application of the radiation produced by accelerators; spin physics program at the Relativistic Heavy Ion Collider and biologic effects of radiation.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 166 | 195 | 12/3/1986 | 12/2/2001 | Primary DOE | | | None | Nuclear Energy | Radioactive Waste Management |

**Title:** ***Agreement between the United State Department of Energy and the Power Reactor and Nuclear Fuel Development Corp of Japan in the Area of Radioactive Waste Management***

**Comment:** Study topics and develop cooperatively and jointly technology and techniques necessary for the safe management of radioactive wastes.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 511 | 195 | 7/17/1998 | 7/17/2000 | Secondary DOE | | 166 | Primary DOE | Civilian Radioactive Waste Management | Project Annex on Engineered Barriers |

**Title:** ***Project Annex for Cooperation in Near-Field Performance and Analyses on the Long-Term Behavior of the Engineered Barriers under the Agreement between the Department of Energy of the United States of America and the Power Reactor and Nuclear Fuel Development Corporation Japan in the Area of Radioactive Waste Management***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 395 (PNC) | 365 | 2/19/1997 | 5/19/2000 | Secondary DOE | | 171 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 30 - Randomized Inspection |

**Title:** ***Action Sheet PNC 30 The United States Department of Energy (DOE) and The Power Reactor and Nuclear Fuel Development Corporation of Japan (PNC) for Joint Study of Improved Safeguards Methodology Using Non-Notice Randomized Inspection***

**Comment:**

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 545 | 365 | 12/18/199 | 12/18/200 | Secondary DOE | | 171 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 37 - A-MAGB at Plutonium Fuel Production Facility |
| **Title:** | ***Action Sheet 37 between the United States Department of Energy (DOE) and the Japan Nuclear Cycle Development Institute (JNC) for Development of Plutonium Isotopic Systems for Measuring Containers in the Advanced Material Accountancy Glove Box at PFPF*** | | | | | | | | |
| **Comment:** | | | | | | | | | |
| 546 | 365 | 12/18/199 | 12/18/200 | Secondary DOE | | 171 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 38 - Remote Monitoring for Tokai |
| **Title:** | ***Action Sheet 38 between the United States Department of Energy (DOE) and the Japan Nuclear Cycle Development Institute (JNC) for Development of Remote Monitoring for Tokai Vitrification Facility Safeguards System*** | | | | | | | | |
| **Comment:** | | | | | | | | | |
| 547 | 365 | 3/12/1999 | 3/12/2002 | Secondary DOE | | 171 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 39 - Radiation Sensor Monitors at |
| **Title:** | ***Action Sheet 39 between The United States Department of Energy (DOE) and The Japan Nuclear Cycle Development Institute (JNC) for Development of Radiation Sensor Monitors to Improve Dual C/S at Monju Reactor Core*** | | | | | | | | |
| **Comment:** | | | | | | | | | |
| 548 | 365 | 3/22/1999 | 3/22/2002 | Secondary DOE | | 171 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 40 - Isotope Dilution Gamma-Ray Spectrometry |
| **Title:** | ***Action Sheet (40) between The United States Department of Energy (DOE) and The Japan Nuclear Cycle Development Institute (JNC) for Joint Research and Development Study of the Metrology of the Isotope Dilution Gamma-Ray Spectrometry (IDGS)*** | | | | | | | | |
| **Comment:** | | | | | | | | | |
| 549 | 365 | 3/24/1999 | 9/24/2000 | Secondary DOE | | 171 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 41 Conceptual Design for RETF Safeguards System Phase 2. |
| **Title:** | ***Action Sheet 41 between The Japan Nuclear Cycle Development Institute (JNC) And The United States Department of Energy (DOE) For Joint Study on the Conceptual Design for the RETF Safeguards System (Phase-2)*** | | | | | | | | |
| **Comment:** | | | | | | | | | |
| 173 | 356 | 4/11/1995 | 4/11/2005 | Primary DOE | | | None | Nuclear Energy | Nuclear Reactor Technologies R&D |
| **Title:** | ***Memorandum of Understanding between the United States Research and Development Organizations and the Japanese Research Organizations for Cooperation in Nuclear Reactor Technologies Research and Development*** | | | | | | | | |
| **Comment:** | Provide a vehicle for cooperation between DOE and its national laboratories, EPRI and the Advanced Reactor Corporation, and the Japanese R&D Organizations, including PNC, JAPC , JAERI and CRIEPI to cooperate in nuclear reactor technologies R&D. | | | | | | | | |
| 174 | 362 | 7/17/1995 | 7/17/2005 | Primary DOE | | | None | Nuclear Energy | Nuclear Research and Development - JAERI |
| **Title:** | ***Agreement between the Department of Energy of the United States of America and the Japan Atomic Energy Research Institute in the Field of Nuclear Research and Development*** | | | | | | | | |
| **Comment:** | Cooperation to conduct programs associated with nuclear R&D in such areas as basic nuclear S&T, nuclear safety, and advanced nuclear technologies. | | | | | | | | |

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 397 | 428 | 4/23/1998 | 4/23/2001 | Secondary DOE | | 174 | Primary DOE | High Energy Physics | Collaborative program for target development for high power spallation neutron sources |

**Title:** ***Specific Memorandum of Agreement between the Japan Atomic Energy Research Institute and the Department of Energy of the United States of America for Collaborative Program of Target Development for High Power Spallation Neutron Sources***

**Comment:** Work will be preformed at the Alternating Gradient Synchrotron facility at Brookhaven National Laboratory

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 481 | 435 | 6/9/1997 | 6/9/2007 | Secondary DOE | | 174 | Primary DOE | Arms Control and Nonproliferation | SMA - Safeguards |

**Title:** ***Specific Memorandum of Agreement Between the Japan Atomic Energy Research Institute and the Department of Energy of the United States of America Concerning Research and Development in Nuclear Material Control, Accountancy, Verification and Physical Protection***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 523 | 468 | 1/27/2000 | 1/27/2005 | Primary DOE | | | None | Arms Control and Nonproliferation | DOE/JNC Safeguards Agreement |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Japan Nuclear Cycle Development Institute For Cooperation in Research and Development (R&D) Concerning Nuclear Material Control and Accounting Measures for Safeguards and Nonproliferation***

**Comment:** Improving the efficiency and effectiveness of equipment and techniques for safeguards and nonproliferation to implement policies and procedures pursuant to the non-proliferation treaty.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 550 | 482 | 1/27/2000 | 7/27/2001 | Secondary DOE | | 523 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 42 Measurement Methods for Scrap Materials |

**Title:** ***Action Sheet 42 between The Japan Nuclear Cycle Development Institute (JNC) and The United States Department of Energy (DOE) For Investigation of Measurements Methods for Scrap Materials with High Impurities***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 551 | 482 | 1/27/2000 | 1/27/2003 | Secondary DOE | | 523 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 43 NDA Techniques at Ningyo |

**Title:** ***Action Sheet 43 between The United States Department of Energy (DOE) and The Japan Nuclear Cycle Development Institute (JNC) for Design Studies and Development of NDA Techniques for In-Process and Waste Invention at the Ningyo Enrichment Plant***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 552 | 482 | 1/27/2000 | 1/27/2002 | Secondary DOE | | 523 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 44 - Dry Reprocessing Methods |

**Title:** ***Action Sheet 44 between The Japan Nuclear Cycle Development Institute (JN) and The United States Department of Energy (DOE) for A Joint Study of Safeguards Systems for Dry Reprocessing***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 553 | 482 | 1/27/2000 | 1/27/2003 | Secondary DOE | | 523 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 45 Remote Monitoring System at PFPF |

**Title:** ***Action Sheet 45 between The United States Department of Energy (DOE) and The Japan Nuclear Cycle Development Institute (JNC) for Development of the Integrated Remote Monitoring System at the Plutonium Fuel Production Facility in Japan***

**Comment:**

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 597 | 492 | 8/22/2000 | 8/22/2005 | Primary DOE | | | None | Nuclear Energy | Agreement for Nuclear Technologies |
| | **Title:** | ***Agreement Between The Department of Energy of the United States of America and The Japan Nuclear Cycle Developments Institute in the Field of Nuclear Technologies.*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 640 | 535 | 7/10/2002 | 7/10/2005 | Primary DOE | | | None | Civilian Radioactive Waste Management | Nuclear Waste Management Organization Agreement (NUMO) |
| | **Title:** | ***Agreement between the Department of Energy of the United States of America and the Nuclear Waste Management Organization of Japan in the Field of Radioactive Waste Management*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 643 | 538 | 9/2/2002 | 9/2/2005 | Primary DOE | | | None | | Agreement bet. DOE and the Japan Atomic Energy Research Institute |
| | **Title:** | ***Specific Memorandumm of Agreement between the Department of Energy of the United States of America and the Japan Atomic Energy Research Institute on Cooperation in the Field of Synchrotron Radiation Research*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 653 | 548 | 3/19/2003 | 3/19/2008 | Primary DOE | | | None | Civilian Radioactive Waste Management | Radioactive Waste Management |
| | **Title:** | ***Agreement between the Department of Energy of the United States of America and the Japan Nuclear Cycle Development Institute in the Field of Radioactive Waste Management*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 657 | 552 | 8/18/2000 | 8/18/2005 | Amendment | | 263 | None | Fusion Energy | Amendment V |
| | **Title:** | ***Amendment V to the Agreement between the Japan Atomic Energy Research Institute and the United States Department of Energy on Cooperation in Doublet III Project*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 8 | 42 | 5/2/1979 | 5/1/2005 | Intergovernmental | | | None | Energy Research and Development | US/Japan Energy and Related Fields Agreement |
| | **Title:** | ***Agreement between the Government of the United States of America and the Government of Japan on Cooperation in Research and Development in Energy and Related Fields*** | | | | | | | |
| | **Comment:** | Maintaining and intensifying cooperation in research and development in energy and related fields. | | | | | | | |
| 22 | 114 | 1/24/1983 | 5/1/2005 | Broad | | 8 | Intergovernmental | Fusion Energy | Fusion Energy |
| | **Title:** | ***Exchange of Notes establishing the Cooperation in Fusion Research and Development*** | | | | | | | |
| | **Comment:** | A cooperative program for the exchange of information, personnel and equipment, and special activities as may be mutually agreed, in various technical areas of fusion energy between DOE and the Ministry of Education, the STA, MONBUSHO, and the MITI, as established by an exchange of diplomatic notes and separate agreements within each organization. Remains in force as long as the Agreement between US-Japan on Cooperation in Research and Development in Energy and Related Fields remains in force. | | | | | | | |
| 255 | 116 | 1/25/1983 | 5/1/2005 | Primary DOE | | 22 | Broad | Fusion Energy | Fusion Energy - MITI |
| | **Title:** | ***Exchange of Letters establishing the MITI-DOE Cooperation in Fusion Research and Development*** | | | | | | | |
| | **Comment:** | Remains in effect as long as the Exchange of Notes between USA-Japan on Cooperation in Fusion Research and Development | | | | | | | |

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 256 | 117 | 1/25/1983 | 5/1/2005 | Primary DOE | | 22 | Broad | Fusion Energy | Fusion Energy - STA - Primary DOE agreement |

**Title:** ***Exchange of Letters establishing the STA-DOE Cooperation in Fusion Research and Development***

**Comment:** Remains in effect as long as the Exchange of Notes between USA-Japan on Cooperation in Fusion Research and Development

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 417 | 134 | 11/8/1983 | 5/1/2005 | Secondary DOE | | 256 | Primary DOE | Fusion Energy | Fusion Research and Development - JAERI |

**Title:** ***Implementing Arrangement between the Japan Atomic Energy Research Institute and the United States Department of Energy on Cooperation in Fusion Research and Development***

**Comment:** Appoint coordinators to report to Fusion Committee and to cooperate in such areas as plasma-containment devices, such as tokamaks; joint research related to plasma physics; magnetic fusion concepts; magnetic systems for fusion devices; plasma engineering; fusion-reactor materials; fusion-systems engineering; environmental and safety aspects of fusion energy; plasma diagnostics and vacuum technology; and applications of fusion energy.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 463 | 133 | 11/8/1983 | 3/31/2004 | Tertiary DOE | | 417 | Secondary DOE | Fusion Energy | Annex 1 - First Wall and Blanket Structural |

**Title:** ***Annex I to Implementing Arrangement between Japan Atomic Energy Research Institute and U.S. Department of Energy on Cooperation in Fusion Research and Development U.S.-Japan Collaborative Testing of First Wall and Blanket Structural Materials with Mixed Spectrum Fission Reactors***

**Comment:** JOINT IRRADIATION EXPERIMENTS AND EVALUATION OF RESULTS.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 466 | 210 | 6/11/1987 | 6/11/2001 | Tertiary DOE | | 417 | Secondary DOE | Fusion Energy | Annex 4 - Fusion - Fuel Processing |

**Title:** ***Annex IV to the Implementing Arrangement between the Japan Atomic Energy Research Institute and the United States Department of Energy on Cooperation in Fusion Research and Development for the DOE-JAERI Collaborative Program Technology for Fusion-Fuel Processing***

**Comment:** Define, conduct, evaluate the joint operation/experiments on fusion fuel technology with TSTA at LANL for the purposes of developing and demonstrating fuel process technology for fusion power systems; developing/testing environmental/personnel protective systems for tritium handling; developing/testing/qualifying equipment and material for tritium services in the fusion energy program,

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 471 | 270 | 1/11/1990 | 1/11/2005 | Tertiary DOE | | 417 | Secondary DOE | Fusion Energy | Annex 9 - Data Link |

**Title:** ***Annex IX to the Implementing Arrangement between the Japan Atomic Energy Research Institute and United States Department of Energy on Cooperation in Fusion Research and Development for the DOE-JAERI Collaboration on the Data Link***

**Comment:** Establish the Data Link to facilitate rapid information exchanges between fusion researchers of the Parties through (1) code development and/or usage; (2) data analysis and/or theory/experiment comparison; (3) access to computers in home countries by visiting scientists for computations related to purpose of visit; (4) administration of the Data Link. VISITS: Yes DURATION: To Be Determined DOE/HQ CONTACT: Arthur Katz, ER-523, (301) 903-4932; FTS: 233-4932

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 257 | 115 | 1/29/1983 | 5/1/2005 | Primary DOE | | 22 | Broad | Fusion Energy | Fusion Energy - Monbusho - Primary DOE |

**Title:** ***Exchange of Letters establishing the Monbusho-DOE Cooperation in Fusion Research and Development***

**Comment:** Remains in effect as long as the Exchange of Notes between USA-Japan on Cooperation in Fusion Research and Development

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 419 | 214 | 7/17/1987 | 7/19/2001 | Secondary DOE | | 257 | Primary DOE | Fusion Energy | Annex 1 - Irradiation Effects Utilizing Fission |

**Title:** ***Annex 1 to 01/25/83 exchange of letters between Japan Ministry of Education (Monbusho) and USDOE on cooperation in fusion R&D for collaboration in fundamental studies of irradiation effects in fusion materials utilizing fission***

**Comment:** JOINT IRRADIATION AND EVALUATION EXPERIMENTS ON MATERIALS

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 420 | 258 | 12/12/198 | 12/21/200 | Secondary DOE | | 257 | Primary DOE | Fusion Energy | Annex 2 - Data Link & Data Link Projects for |

**Title:** ***Annex II to the January 25, 1983 Exchange of Letters between Monbusho of Japan and the Department of Energy of the United States on Cooperation in Fusion Research and Development Monbusho-DOE Collaboration on a data Link and Data Link Projects for Fusion***

**Comment:** STEERING COMMITTEE MEETING

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 602 | 497 | 1/17/2001 | 7/19/2007 | Secondary DOE | | 257 | Primary DOE | Fusion Energy | Amedment 4 - Annex 1 Fusion Research and Development |

**Title:** ***Amendment 4 of Annex I to the DOE - Monbusho Exchange of Letters on Cooperation in Fusian Research and Development***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 259 | 228 | 10/16/198 | 5/1/2005 | Primary DOE | | 8 | Intergovernmental | Fossil Energy | Coal R&D - AIST and ANRE |

**Title:** ***Implementing Arrangement between the Agency of Industrial Science and Technology and the Agency of Natural Resources and Energy of Japan and the United States Department of Energy in Coal Research and Development***

**Comment:** Establish comprehensive cooperation in the area of coal energy R&D in order to accelerate development of coal R&D efforts, i.e., coal liquefaction, coal gasification; materials and components for coal conversion and utilization; pollution control technology related to coal conversion and utilization.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 262 | 48 | 8/24/1979 | 5/1/2005 | Primary DOE | | 8 | Intergovernmental | Fusion Energy | Fusion Energy/Coordinating Committee |

**Title:** ***Exchange of Letters Establishing a Coordinating Committee on Fusion Energy***

**Comment:** Establish a Coordinating Committee on Fusion Energy to facilitate the coordination and implementation of cooperative activities in the area of fusion as well as to assure proper balance and to ensure the overall planning and oversight of such cooperative activities.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 263 | 50 | 8/28/1979 | 8/28/2000 | Primary DOE | | 8 | Intergovernmental | Fusion Energy | Fusion Energy/Doublet III |

**Title:** ***Agreement between the United States Department of Energy and the Japan Atomic Energy Research Institute on Cooperation in Doublet III Project***

**Comment:** Undertake experimental research on tokamak plasmas with doublet and dee-shaped cross-sections in the Doublet III, a tokamak facility, located in LaJolla, California.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 264 | 58 | 11/11/197 | 5/1/2005 | Primary DOE | | 8 | Intergovernmental | High Energy Physics | High Energy Physics |

**Title:** ***Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Education, Science and Culture of Japan on Cooperation in Field of High Energy Physics***

**Comment:** Establish a framework for cooperation in the field of high energy physics including research; accelerator and detector instrumentation R&D; the fabrication and subsequent use of new experimental devices and facilities. Remains in forces for the duration of the U.S.-Japan R&D in Energy and Related Fields Agreement signed on May 2, 1979

## Country: ***Kazakhstan***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 186 | 402 | 7/12/1996 | | Primary DOE | | | None | Science and Technology | Energy R&D and Tech exchange |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Ministry of Science-Academy of Sciences of the Republic of Kazakhstan on Scientific Research and Development and Technology Exchange Programs***

**Comment:**

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 428 | 402 | 5/13/1997 | | Secondary DOE | | 186 | Primary DOE | *Other - Remote Sensing | Remote Sensing Mission |
| | **Title:** | ***Annex 1 - For the Conduct of the Remote Sensing Mission (AMPS) in the Republic of Kazakhstan*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 529 | 474 | 12/19/200 | | Primary DOE | | | None | Arms Control and Nonproliferation | Decommissioning of the BN-350 Reactor |
| | **Title:** | ***Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Energy, Industry and trade of the Republic of Kazakhstan Concerning Decommissioning of the BN-350 Reactor*** | | | | | | | |
| | **Comment:** | | | | | | | | |

## Country: ***Korea, Republic of***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 180 | 389 | 6/14/1996 | 6/14/2001 | Primary DOE | | 11 | Intergovernmental | Fusion Energy | Fusion Energy Research and Related Fields |
| | **Title:** | ***Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for Cooperation in the Area of Fusion Energy Research and Related Fields*** | | | | | | | |
| | **Comment:** | Promote S&T cooperation in fusion energy research and related fields in order to enhance contributions. Remains in force for 5 years or until termination of the S&T Agreement, whichever occurs first. | | | | | | | |
| 626 | 521 | 6/14/2001 | 6/14/2006 | Secondary DOE | | 180 | Primary DOE | Fusion Energy | Extension on the Implementing Arrangement between DOE and Korea |
| | **Title:** | ***Agreement to Extend the Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for Cooperation in the Area of Fusion Energy Research and Related Fields*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 179 | 388 | 6/14/1996 | 6/14/2001 | Primary DOE | | | None | Nuclear Energy | Cooperative Laboratory Relationship |
| | **Title:** | ***Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a Cooperative Laboratory Relationship*** | | | | | | | |
| | **Comment:** | Cooperate in the field of peaceful uses of nuclear energy including such areas as: nuclear waste management; nuclear safety and environment; nuclear safeguards technology; basic sciences; education; health physics; environmental research related to nuclear technology, etc | | | | | | | |
| 595 | 388 | 6/29/2000 | 6/29/2005 | Secondary DOE | | 179 | Primary DOE | Nuclear Energy | Annex 4 - Cintichem Process Technology (first project annex) |
| | **Title:** | ***Annex 4 Joint Project on Cintichem Technology between the Department of Energy of the United States of America and the Korea Atomic Energy Research Institute under the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a Cooperative Laboratory Relationship*** | | | | | | | |
| | **Comment:** | | | | | | | | |

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 608 | 503 | 5/16/2001 | 5/16/2006 | Secondary DOE | | 179 | Primary DOE | Nuclear Energy | Annex V - MOU between DOE and Ministry of Science and Technology of the Republic of Korea on I-NERI |

**Title:** ***Annex V to the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a Cooperative Laboratory Relationship on a Collaboration Project Supporting the International Nuclear Energy Research Initiative (INERI)***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 609 | 504 | 5/16/2001 | 6/14/2001 | Secondary DOE | | 179 | Primary DOE | Nuclear Energy | Amendment C to Annex III Participating Institutions to the MOU between DOE and Ministry Science and Technology |

**Title:** ***Amendment C to Annex III - Participating Institutions to the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a Cooperative Laboratory Relationship***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 644 | 539 | 6/14/2001 | 6/14/2006 | Secondary DOE | | 179 | Primary DOE | Science and Technology | Extend and Amend MOU bet. DOE and MOST |

**Title:** ***Agreement to Extend and Amend the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a Cooperative Laboratory Relationship***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 639 | 534 | 9/17/2002 | 9/17/2007 | Primary DOE | | | None | Science and Technology | Safeguards Agreement |

**Title:** ***Arrangement between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea Concerning Research and Development in Nuclear Material Control, Accountancy, Verification, Physical Protection, and Advanced Containment and Surveillance Technologies for International Safeguards Applications***

**Comment:**

## Country: ***Mexico***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 | 41 | 6/15/1972 | | Intergovernmental | | | None | Science and Technology | Science & Technology |

**Title:** ***Agreement Between the United States of America and Mexico for Scientific and Technical Cooperation***

**Comment:** Effected by Exchange of Notes Signed at Washington June 15, 1972

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 270 | 386 | 5/7/1996 | 5/7/2001 | Primary DOE | | 12 | Intergovernmental | Energy Research and Development | Energy Cooperation |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Secretariat of Energy of the United Mexican States for Energy Cooperation***

**Comment:** Develop a framework for cooperation to facilitate establishment of cooperative activities in research, development and commercialization to promote improved use of renewable energy and energy efficiency and fossil energy technologies, giving due consideration to environmental concerns, as well as to exchange, develop, and analyze energy strategies and regulatory criteria and to encourage the promotion of energy trade opportunities.

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 483 | 437 | 6/10/1998 | 6/10/2001 | Secondary DOE | | 270 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 1 - Renewable Energy |

**Title:** ***Project Annex 1 Cooperation in the Field of Renewable Energy***

**Comment:** Project areas under discussion by SNL and CNEA (Mexico National Commission for Energy Savings)

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 484 | 438 | 6/10/1998 | 6/10/2001 | Secondary DOE | | 270 | Primary DOE | Energy Efficiency and Renewable Energy | Annex 2 - Energy Efficiency |

**Title:** ***Project Annex 2 Cooperation in the Field of Energy Efficiency***

**Comment:** Project areas under discussion.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 498 | 447 | 10/21/199 | 10/21/200 | Secondary DOE | | 270 | Primary DOE | Environmental Restoration and Waste Management | Annex 3 - Enviro Cooperation in hydrocarbons |

**Title:** ***Project Annex 3 - Environmental Cooperation in the Field of Hydrocarbons***

**Comment:** Facilitating work between Mexico Institute of Petroleum and ORNL.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 519 | 465 | 12/7/1999 | 5/7/2001 | Secondary DOE | | 270 | Primary DOE | Fossil Energy | Annex 4- Clean Fossil Energy Technologies |

**Title:** ***Project Annex 4 Cooperation in the field of Clean Fossil Energy Technologies***

**Comment:** Annex is in force as long as the Agreement is in force.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 610 | 505 | 5/7/2001 | 5/7/2006 | Secondary DOE | | 270 | Primary DOE | Science and Technology | |

**Title:** ***Extension of the Agreement for Energy Cooperation between the Deparment of Energy of the United States of America and the Secretariat of Energy of the United Mexican States, and its Four***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 188 | 405 | 3/25/1985 | 3/25/2005 | Primary DOE | | | None | Arms Control and Nonproliferation | Sister Lab Arrangement |

**Title:** ***Memorandum of Understanding (MOU) for the Exchange of Technical Information and for Cooperation in the Field of Peaceful Uses of Nuclear Energy between the National Institute of Nuclear Research of Mexico and the Los Alamos National laboratory of the United States of America***

**Comment:** Sister lab arrangement supporting Article IV of the NPT.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 604 | 499 | 3/9/2001 | | Broad | | | None | Fifth Hemispheric Energy Ministers Meeting | Mexico Declaration |

**Title:** ***Fifth Hemispheric Energy Ministers Meeting Mexio City, Mexico - March 9, 2001. Mexico Declaration - Energy: A Crucial Factor for Integration and Sustainable Development in the Hemisphere***

**Comment:**

## Country: ***Morocco***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 599 | 494 | 10/16/200 | 10/16/200 | Primary DOE | | | None | Energy Efficiency and Renewable Energy | Agreement on Concerning Cooperation in Energy Efficiency and Renewable Energy |

**Title:** ***Agreement Between The Department of Energy of the United States of America and The Ministry of Industry, Commerce, Energy and Mines of the Kingdom of Morocco Concerning Cooperation in Energy Efficiency and Renewable Energy***

**Comment:**

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 627 | 522 | 10/16/200 | 10/16/200 | Secondary DOE | | 599 | Primary DOE | Energy Efficiency and Renewable Energy | Project Annex I - EERE |

**Title:** ***Project Annex I to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce, Energy and Mines of the Kingdom of Morocco Concerning Cooperation in Energy Efficiency and Renewable Energy***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 647 | 542 | 6/3/2002 | 6/3/2007 | Secondary DOE | | 599 | Primary DOE | Energy Efficiency and Renewable Energy | Project Annex 2 - Clean Energy Technologies |

**Title:** ***Project Annex 2 to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce, Energy and Mines of the Kingdom of Morocco Concerning Cooperation in Clean Energy Technologies***

**Comment:**

## Country: ***Nigeria***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 48 | 76 | 7/23/1980 | | Statement of Intent | | | None | Energy Research and Development | Energy R&D |

**Title:** ***Memorandum of Intent Concerning Energy Cooperation between the Government of the United States of America and the Government of the Federal Republic of Nigeria***

**Comment:** Exploit and use conventional sources of energy, develop effective machinery to monitor environmental effects of energy, develop and demonstrate technologies to utilize new and renewable energy sources, training in energy planning and technology and strengthen bilateral relations through increased official cooperation. Formal cooperation never establish

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 520 | 466 | 8/14/1999 | | Primary DOE | | | None | *Other - Energy Policy | MOU on Energy Policy |

**Title:** ***Memorandum of Understanding between the Department of Energy of the United States of America and the Federal Ministry of Power and Steel of the Federal Republic of Nigeria on Energy Policy***

**Comment:**

## Country: ***Pakistan***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 49 | 339 | 9/24/1994 | | Statement of Intent | | | None | *Other - Climate Change | Climate Change |

**Title:** ***Joint Statement of Intent between the Department of Energy of the United States of America and the Environment and Urban Affairs Division of the Islamic Republic of Pakistan***

**Comment:** Enhancing mutual environmental protection, in particular, controlling greenhouse gas emissions to limit potential adverse climate change impacts (Environment and Urban Affairs Division).

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 50 | 338 | 9/24/1994 | | Statement of Intent | | | None | Fossil Energy | Statement of Intent w/ Ministry of Petroleum and Natural Resources |

**Title:** ***Statement of Intent between the Department of Energy of the United States of America and the Ministry of Petroleum and Natural Resources, Government of the Islamic Republic of Pakistan***

**Comment:** Promoting trade, investment and cooperation between U.S. & Pakistan (Min of Petroleum and Natural Resources) public and private-sector entities in the fields of fossil fuels (petroleum and minerals, including coal) and new and renewable energy resources, related infrastructure development, and in the exchange of experience and views on opportunities in these sectors.

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 51 | 340 | 9/24/1994 | | Statement of Intent | | | None | Energy Efficiency and Renewable Energy | Statement of Intent w/ Ministry of Water and Power |

**Title:** ***Statement of Intent between the Department of Energy of the United States of America and the Ministry of Water and Power of the Islamic Republic of Pakistan***

**Comment:** Promoting trade, investment and cooperation between the U.S. and Pakistan (Ministry of Water and Power) private and public sector entities in the fields of fossil and renewable energy, and in the exchange of experience and views on opportunities for improving energy efficiency and enhancing electricity policy.

## Country: ***Palestinian Authority***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 535 | 479 | 2/22/2000 | | Statement of Intent | | | None | Energy Research and Development | Energy Planning SOI |

**Title:** ***Joint Statement of Intent between the Department of Energy of the United States of America and the Palestinian Energy Authority on Cooperation in the Field of Energy***

**Comment:**

## Country: ***Peru***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 512 | 458 | 6/17/1991 | 6/16/2001 | Primary DOE | | | None | Arms Control and Nonproliferation | Sister Lab Arrangement |

**Title:** ***Arrangement for the Exchange of Technical Information and for Cooperation in the Field of Peaceful Uses of Nuclear Energy between the Peruvian Institute of Nuclear Energy and the Los Alamos National Laboratory***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 603 | 498 | 3/8/2001 | | Statement of Intent | | | None | Cooperation in the Field of Energy | Cooperation in the Field of Energy |

**Title:** ***Joint Statement of Intent between the Department of Energy of the United States of America and The Ministry of Energy and Mines of the Republic of Peru on Cooperation in the Field of Energy***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 645 | 540 | 8/14/2001 | 8/14/2006 | Primary DOE | | | None | Science and Technology | MOU - Cooperation in the Field of Energy |

**Title:** ***Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Peru on Cooperation in the Field of***

**Comment:**

## Country: ***Philippines***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 195 | 403 | 6/19/1997 | 6/19/2002 | Primary DOE | | | None | Information and/or Personnel Exchange | Info Exchange |

**Title:** ***Memorandum of Agreement between the Department of Energy of the United States of America and the Department of Energy of the Republic of the Philippines for the Exchange of Energy***

**Comment:**

## Country: ***Poland***

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 13 | 224 | 9/28/1987 | 9/28/2002 | Intergovernmental | | | None | Science and Technology | Science & Technology |

**Title:** ***Agreement between the Government of the United States of America and the Government of the Polish People's Republic on Cooperation in Science and Technology and its Funding***

**Comment:** Develop, support and facilitate S&T cooperation on the basis of the principles of equality, reciprocity, and mutual benefit. Joint projects of mutual interest are funded by a fund contributed to by the two governments. Renewed last in 1997.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 198 | 367 | 8/21/1995 | 8/21/2000 | Primary DOE | | | None | Environmental Restoration and Waste Management | Environmental Restoration Hazardous Waste Mgmt |

**Title:** ***Agreement for Technical Exchange and Cooperating between the Department of Energy of the United States of America and the Institute for Ecology of Industrial Areas of the Republic of Poland in the Area of Environmental Restoration and Hazardous Waste Management***

**Comment:** Study topics associated with the safe management of hazardous wastes, e.g., risks associated with human exposure to environmental contamination from chemical and heavy metals in soils; demonstration of technologies or methodologies for soil cleaning; and other areas determined by both parties.

## Country: ***Romania***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 513 | 459 | 3/29/1999 | 3/26/2004 | Primary DOE | | | None | Arms Control and Nonproliferation | Sister Lab Arrangement |

**Title:** ***Arrangement for Information Exchange and Cooperation in Area of Peaceful Uses of Atomic Energy between United States Department of Energy (DOE) and the Ministry of Industry and Commerce (MIC) - Romania***

**Comment:** Establishes the basis for a cooperative institutional relationship between the participants for the exchange of scientific and technological and other information regarding the peaceful uses of atomic

## Country: ***Russian Federation***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 203 | 395 | 9/16/1996 | 9/16/2001 | Primary DOE | | 14 | Intergovernmental | Environmental Restoration and Waste Management | Environmental Restoration and Waste Management |

**Title:** ***Memorandum of Cooperation between the Department of Energy of United States of America and the Ministry of the Russian Federation on Atomic Energy in the Fields of Environmental Restoration and Waste Management***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 211 | 396 | 9/16/1996 | 9/16/2001 | Primary DOE | | 14 | Intergovernmental | Nuclear Energy | Nuclear Reactor Safety |

**Title:** ***Memorandum of Cooperation between the United States of America and the Russian Federation in the Field of Civilian Nuclear Reactor Safety***

**Comment:** replaces MOU in Civilian Nuclear Reactor Safety signed 26 April, 1988

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 213 | 397 | 9/16/1996 | 9/16/2001 | Primary DOE | | 14 | Intergovernmental | Fusion Energy | Magnetic Confinement Fusion |

**Title:** ***Memorandum of Cooperation between the Department of Energy of the United States of America and the Ministry of the Russian Federation on Atomic Energy in the Field of Magnetic Confinement Fusion***

**Comment:** Focus on Fusion science research and development

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 436 | 397 | 9/16/1996 | 9/16/2001 | Secondary DOE | | 213 | Primary DOE | Nuclear Energy | Annex 1 |

**Title:** ***Annex 1 - List of Organizations that could participate***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 214 | 398 | 2/17/1997 | 2/17/2002 | Primary DOE | | 14 | Intergovernmental | *Other - High Energy and Nuclear Physics | Fundamental Properties of Matter |

**Title:** ***Memorandum of Cooperation in the Field of Research on Fundamental Properties of Matter between the Department of Energy of the United States of America and the Ministry of Atomic Energy and the State Committee for Science & Technologies of the Russian Federation***

**Comment:** activities coordinated by the Joint Coordinating Committee for Research in the Fundamental Properties of Matter (FCC-FPM)

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 15 | 315 | 2/18/1993 | | Intergovernmental | | | None | Nuclear Energy | Disposition HEU Extracted From Nuclear Weapons |

**Title:** ***Agreement between the Government of the United States of America and the Government of the Russian Federation Concerning the Disposition of Highly Enriched Uranium Extracted from Nuclear Weapons***

**Comment:** Conversion of HEU extracted from nuclear weapons resulting from the reduction of nuclear weapons; the establishment of appropriate measures to fulfill the nonproliferation, physical protection, nuclear material accounting and control, and environmental requirements with respect to HEU and LEU.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 202 | 394 | 9/16/1996 | 9/16/2001 | Primary DOE | | | None | *Other - Fuel Cell Technology | RAFCO |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Ministry of the Russian Federation on Atomic Energy Regarding a Russian-American Fuel Cell Consortium***

**Comment:** Joint R&D work in fuel cell technology development

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 208 | 324 | 1/14/1994 | 1/14/2004 | Intergovernmental | | | None | Environmental Safety Health | Radioactive Contamination Health & Environment |

**Title:** ***Agreement between the Government of the United States of America and the Government of the Russian Federation on Cooperation in Research on Radiation Effects for the Purpose of Minimizing the Consequences of Radioactive Contamination on Health and the Environment***

**Comment:** Establish a framework for cooperation in research on radiation effects for the purpose of minimization of the consequences of radioactive contamination on health and the environment. DOE is the Executive Agent and is responisable for coordination of activities to implement the agreement.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 210 | 360 | 6/16/1995 | | Primary DOE | | | None | Arms Control and Nonproliferation | Nonproliferation of Weapons/Weapons Expertise |

**Title:** ***Memorandum of Agreement between the Department of Energy of the United States of America and the International Science and Technology Center in the Russian Federation for Cooperation in Approved Projects to Facilitate the Nonproliferation of Weapons and Weapons Expertise***

**Comment:** Facilitate cooperation under the ISTC agreement including the efforts to reduce or eliminate weapons of mass destruction in a safe and secure manner.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 209 | 359 | 6/15/1995 | | Secondary DOE | | 210 | Primary DOE | Fusion Energy | Annex 1 Weapons Expertise for the Globus-M |

**Title:** ***Annex I to the Memorandum of Agreement between the Department of Energy of the United States of America and the International Science and Technology Center in the Russian Federation Concerning Cooperation in Approved Projects to Facilitate the Nonproliferation Weapons and Weapons Expertise for the Globus-M Project***

**Comment:** Cooperate to support the A.F. IOFFE Physics-Technical Institute in the completion of the GLOBUS-M project by participating in the modification (or reconstruction) of the experimental hall of the Institute in order to accommodate the new GLOBUS-M spherical tokamak device and the near-by supporting equipment, the buildings that house all the other device supporting systems, and the connections/conduits between the experimental hall and those buildings needed by the GLOBUS-M project.

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 536 | 480 | 6/22/1999 | 6/22/2001 | Secondary DOE | | 210 | Primary DOE | Fusion Energy | ISTC Annex III -Advanced Diagnostics equipment for Spherical Tokamak Globus-M |

**Title:** ***Annex III to the Memorandum of Agreement between the Department of Energy of the United States of America and the International Science and Technology Center in the Russian Federation Concerning Cooperation in Approved Projects to Facilitate the Nonproliferation of Weaons and Weapons Expertise for Advanced Diagnostics Equipment for Sapherical Tokamak Globus-M (ISTC Project No. 1126)***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 435 | 328 | 3/16/1994 | | Primary DOE | | | None | Nuclear Energy | Replacement of Russian Pu Production Reactors |

**Title:** ***Protocol of Meeting between the United States and the Russian Federation on the Replacement of Russian Plutonium Production Reactors***

**Comment:** Plan for replacement of plutonium production reactors with alternate energy sources.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 515 | 461 | 9/22/1998 | 9/22/2003 | Intergovernmental | | | None | Arms Control and Nonproliferation | Nuclear Cities Initiative |

**Title:** ***Agreement between the Government of the United States of America and the Government of the Russian Federation on the Nuclear Cities Initiative***

**Comment:** DOE is the US Executive Agent for the carrying out provisions of the agreement. Ministry of the Russian Federation for Atomic Energy is the Executive agent for Russia

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 518 | 464 | 3/24/1999 | 3/24/2004 | Primary DOE | | | None | Science and Technology | MOU w/ Russian Academy of Sciences |

**Title:** ***Memorandum of Understanding between the Department of Energy of the United States of America and the Russian Academy of Sciences on Cooperation in Science and Technology***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 565 | 488 | 5/15/2000 | 3/24/2004 | Secondary DOE | | 518 | Primary DOE | Environmental Restoration and Waste Management | DOE/RAS Implementing Arrangement 1 |

**Title:** ***Implementing Arrangement #1 Under the Memorandum of Understanding between the United States Department of Energy and the Russian Academy of Sciences on Cooperation in Science and Technology - Geologic Analogues, Migration and Accumulation of Radionuclides in Geologic Media***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 590 | 488 | 5/16/2000 | 9/20/2002 | Tertiary DOE | | 565 | Secondary DOE | Environmental Restoration and Waste Management | Appendix D - Uranium Mass Transport Phenomena |

**Title:** ***Appendix D Implementing Arrangement #1 of the U.S. Department of Energy/Russian Academy of Sciences Memorandum of Understanding Uranium Mass Transport Phenomena in Fractured Welded Tuffs***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 593 | 488 | 5/18/2000 | 9/30/2003 | Tertiary DOE | | 565 | Secondary DOE | Civilian Radioactive Waste Management | Appendix G - Interaction of Actinides and Fission Products |

**Title:** ***Appendix G Implementing Arrangement #1 of the U.S. Department of Energy/Russian Academy of Science Memorandum of Understanding The Interaction of Actinides and Fission Products with Environmental Matrices***

**Comment:**

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 594 | 488 | 5/18/2000 | 9/30/2003 | Tertiary DOE | | 565 | Secondary DOE | Civilian Radioactive Waste Management | Appendix H - Actinide Speciation |

**Title:** ***Appendix H Implementing Arrangement #1 of the U.S. Department of Energy/Russian Academy of sciences Memorandum of Understanding Actinide Speciation in the Environment to Support Safety Assessment of Geologic Repositories and for the Remediation of Contaminated Sites***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 566 | 489 | 5/15/2000 | 3/24/2004 | Secondary DOE | | 518 | Primary DOE | Environmental Restoration and Waste Management | DOE/RAS Implementing Arrangement 2 |

**Title:** ***Implementing Arrangement #2 Under the Memorandum of Understanding between the United States Department of Energy and the Russian Academy of Sciences on Cooperation in Science and Technology - Risk Assessment and Advanced Modeling Regarding Geologic Disposal***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 589 | 489 | 6/2/2000 | 9/30/2003 | Tertiary DOE | | 566 | Secondary DOE | Civilian Radioactive Waste Management | Appendix C - Contaminant Transport Processes in Unsaturated Rocks |

**Title:** ***Appendix C Implementing Arrangement #2 of the U.S. Department of Energy/Russian Academy of Sciences Memorandum of Understanding Interdisciplinary Fundamental Research to Further Develop the Methods of Describing and Modeling Contaminant Transport Process in Unsaturated Rocks***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 591 | 489 | 5/31/2000 | 9/30/2002 | Tertiary DOE | | 566 | Secondary DOE | Environmental Restoration and Waste Management | Appendix D- Annex A - Chara. Of Contaminated Territories |

**Title:** ***Annex A of Appendix D Implementing Arrangement #2 of the U.S. Department of Energy/Russian Academy of Sciences Memorandum of Understanding Characterization of Contaminated Territories, Monitoring Network Optimization, and Cost Minimization***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 592 | 489 | 5/31/2000 | 9/30/2002 | Tertiary DOE | | 566 | Secondary DOE | Environmental Restoration and Waste Management | Appendix D - Annex B - Uncertainty Assessment |

**Title:** ***Annex B of Appendix D Implementing Arrangement #2 under the DOE-RAS Memorandum of Understanding Uncertainty Assessment Through Incorporation of Mathematical Geology in Development of Inverse Flow and Transport Models***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 605 | 500 | 4/25/2001 | 4/25/2004 | Secondary DOE | | 518 | Primary DOE | Science and Technology | Appendix K w/ the Russian Academy of Sciences |

**Title:** ***Appendix K Under Implementing Arrangement #1 of the Memorandum of Understanding Between the U.S. Department of Energy and Russian Academy of Sciences on Cooperation in Science and Technology***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 606 | 501 | 10/1/2000 | 10/1/2002 | Secondary DOE | | 518 | Primary DOE | Uranium Mass Transport Phenomena in Fractured Welded Tuffs | Appendix D of Implementing Arrangement #1w/ Russian Academy of Sciences MOU |

**Title:** ***Appendix D Implementing Arrangement #1 of The U.S. Department of Energy/Russian Academy of Sciences Memorandum of Understanding Uranium Mass Transport Phenomena in Fractured Welded Tuffs***

**Comment:**

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 52 | 302 | 3/18/1992 | | Statement of Intent | | | None | Information and/or Personnel Exchange | Electric Power Technologies |
| | **Title:** | ***U.S.-Russia Task Force on Cooperation in Electric Power Technologies Joint Statement of Intent*** | | | | | | | |
| | **Comment:** | Exchange information on developments in the electric power industries and encourage more extensive contacts among experts in this field in both countries. | | | | | | | |
| 537 | 481 | 7/24/1998 | 7/24/2003 | Intergovernmental | | | None | Arms Control and Nonproliferation | Plutonium Management |
| | **Title:** | ***Agreement between the Government of the United States of America and the Government of the Russian Federation on Scientific and Technical Cooperation in the Management of Plutonium that has been withdrawn from Nuclear Military Programs*** | | | | | | | |
| | **Comment:** | DOE is the Executive Agent for the US. The agreement establishes the U.S.-Russian Joint Steering Committee on Plutonium Management | | | | | | | |
| 619 | 514 | 6/30/2000 | 6/30/2005 | Secondary DOE | | 607 | Primary DOE | Civilian Radioactive Waste Management | Protocol extending the agreement between DOE and Russia |
| | **Title:** | ***Protocol Extending the Agreement between the Department of Energy of the United States of America and the Federal Nuclear, and Radiation Safety Authority of Russia for Cooperation on Enhancing the Safety of Russian Nuclear Fuel Cycle Facilities and Research Reactors*** | | | | | | | |
| | **Comment:** | Extending the agreement mention above for five years until June 30, 2005. | | | | | | | |
| 641 | 536 | 6/26/200 | 6/30/2005 | Secondary DOE | | 607 | Primary DOE | Arms Control and Nonproliferation | Extension bet. DOE federal Nuclear and Radiation Safety Authority of Russia |
| | **Title:** | ***Protocol Extending the Agreement between the Department of Eneryg of the United States of America and the Federal Nuclear and Radiation Safety Authority of Russia to Cooperate on National Protection, Control and Accounting of Nuclear Materials*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 636 | 531 | 4/23/2002 | | Statement of Intent | | | None | Science and Technology | Joint Statement of Intent between DOE and Dubna |
| | **Title:** | ***Joint Statement of Intent between the Department of Energy of the United States of America and the Joint Institute for Nuclear Research at Dubna*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 658 | 553 | 5/8/2002 | | Primary DOE | | | None | *Other - Purchases of Pu-238 for Peaceful Purposes | Purchases of Pu-238 for Peaceful Purposes |
| | **Title:** | ***Joint Announcement by the United States Department of Energy and the Russian Federation Ministry for Atomic Energy Concerning Continued Purchases of Pu-238 for Peaceful Purposes*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 659 | 554 | 7/16/2001 | 7/16/2006 | Secondary DOE | | 210 | Primary DOE | Civilian Radioactive Waste Management | Annex VI |
| | **Title:** | ***Annex VI to the Memorandum of Agreement between the Department of the United States of America and the International Science and Technology Center in the Russian Federation Concerning Implementation of Projects of the Office of Civilian Radioactive Waste Management*** | | | | | | | |
| | **Comment:** | | | | | | | | |

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|

## Country: *Senegal*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 479 | 433 | 4/2/1998 | | Statement of Intent | | None | Energy Research and Development | | SOI - Energy R&D |

**Title:** ***Memorandum of Understanding between the Republic of Senegal and the United States of America for Cooperation on Energy Policy, Science and Technology, and Research and Development***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 516 | 462 | 3/19/1999 | 3/19/2004 | Primary DOE | | None | Energy Research and Development | | Energy Policy, S and T, and R and D |

**Title:** ***Agreement between the Department of Energy and the Ministry of Energy, Mines and Industry of the Republic of Senegal on Cooperation in Energy Policy, Science and Technology, Research and Development***

**Comment:** The objective of this Agreement is to facilitate and establish cooperative activities by the Parties.

## Country: *South Africa*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 20 | 368 | 12/4/1997 | 12/4/2022 | Intergovernmental | | None | Nuclear Energy | | Peaceful Uses of Nuclear Energy |

**Title:** ***Agreement for Cooperation between the United States of America and the Republic of South Africa Concerning Peaceful Uses of Nuclear Energy***

**Comment:** Cooperate in the development, use and control of peaceful uses of nuclear energy which must be undertaken with a view to protecting the international environment from radioactive, chemical and thermal contamination. Agreement was signed on 8/25/95 ratified by exchange of diplomatic notes on 12/4/97.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 230 | 369 | 8/25/1995 | | Primary DOE | | None | Energy Research and Development | | Sustainable Energy Development Committee |

**Title:** ***Terms of Reference on the Sustainable Energy Development Committee of the U.S. - South Africa Binational Commission***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 231 | 371 | 8/25/1995 | | Primary DOE | | None | Energy Research and Development | | Sustainable Development Resource Center |

**Title:** ***Memorandum of Understanding between the World Wildlife Fund-South Africa, EarthKind International, U.S. Department of Energy and U.S. Agency for International Development on Creating the Sustainable Development Resource Center***

**Comment:** Cooperate on the creation of the Sustainable Development Resource enter to advance policies and programs on the use of renewable energy and energy efficiency technologies and participation by nongovernmental organization in the decision making process. Other signatories are EarthKind Intl (Jan Hartke) and USAID (Larry Byrne)

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 232 | 372 | 8/25/1995 | | Primary DOE | | None | Energy Efficiency and Renewable Energy | | Renewable and Energy Efficiency Technologies |

**Title:** ***Memorandum of Understanding***

**Comment:** Promotion of renewable energy and energy efficient technologies as a cost-effective means of increasing access to energy of the majority of South Africa disadvantaged population (w/USAID as a partner).

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 233 | 374 | 8/25/1995 | | Primary DOE | | None | Energy Efficiency and Renewable Energy | | Electrification of Rural Clinics (Cape Town) |

**Title:** ***Memorandum of Understanding between Sandia National Laboratories of Albuquerque New Mexico, USA and the Independent Development Trust Cape Town, Republic of South Africa***

**Comment:** Sandia National Lab, as signatory of this MOU, has agreed to co-fund the Independent Development Trust model clinic electrification program and to provide other technical assistance as agreed by mutual consent.

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 234 | 381 | 12/5/1995 | 12/5/2000 | Primary DOE | | | None | Energy Research and Development | Energy Policy, S&T and Development |

**Title:** ***Implementing Agreement between the United States Department of Energy and the Department of Mineral and Energy Affairs of South Africa on Collaboration on Energy, Policy, Science, Technology and Development***

**Comment:** Facilitate and establish cooperative activities in energy policy, science, technology, development and commercialization activities in such areas as: fossil energy, including clean coal; energy planning, efficiency, renewable energy; environmental management; environment enhancing energy technologies; and private power project development

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 55 | 423 | 8/25/1995 | | Statement of Intent | | | None | Information and/or Personnel Exchange | Energy Information Exchange |

**Title:** ***Joint Statement of Intent between the Department of Energy of the United States of American and the Department of Mineral and Energy Affairs of the Republic of South Africa on an Energy Information Exchange***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 56 | 370 | 8/25/1995 | | Statement of Intent | | | None | Energy Research and Development | Energy Policy, S&T and Development |

**Title:** ***Joint Statement of Intent between the Department of Energy of the United States of American and the Department of Mineral and Energy Affairs of the Republic of South Africa on Energy Policy, Science and Technology, and Development***

**Comment:** Facilitate joint activities related to energy policy, S&T, development and commercialization in an environmentally and economically sound manner.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 57 | 373 | 8/25/1995 | | Statement of Intent | | | None | Energy Efficiency and Renewable Energy | Renewable Energy (Guguletu Township) |

**Title:** ***Joint Statement of Intent for Integrated Industrial/Educational Development in Guguletu Township between the United States Department of Energy, United States Department of Energy National Laboratories, and the Guguletu RDP Forum***

**Comment:** Establishment of a light industrial part in Guguletu Township.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 58 | 375 | 8/25/1995 | | Statement of Intent | | | None | Energy Efficiency and Renewable Energy | Renewable Energy (The Csir, South Africa) |

**Title:** ***Statement of Intent on Renewable Energy Technologies between the National Renewable Energy Laboratory, U.S.A. and Sandia national Laboratories, U.S.A. and the CSIR (Council for Scientific and Industrial Research), Republic of South Africa***

**Comment:** NREL and Sandia, by being signatories of this Statement, have agreed to exchange experience and views on opportunities for the appropriate utilization of renewable energy technologies with The Csir, Republic of South Africa. Witnessed by Secretary O'Leary.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 59 | 383 | 12/5/1995 | | Statement of Intent | | | None | Fossil Energy | Mitigation of Greenhouse Gases |

**Title:** ***Statement of Intent concerning Cooperation in Sustainable Energy Development and the Mitigation of Greenhouse gases between the Republic of South Africa and the United States of America***

**Comment:** Investigate pilot studies the feasibility of the development of projects which could achieve additional mitigation of climate change by addressing anthropogenic emissions by sources and removal by sinks in an environmentally sound and socially and economically equitable fashion through deployment of greenhouse gas mitigation technologies; education/training programs; diversification of energy sources; conservation, restoration and enhancement of natural carbon sinks, etc.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 60 | 382 | 12/5/1995 | | Statement of Intent | | | None | Energy Research and Development | South Africa/Provincial Gov'ts Cooperation Agreement - Statement of Intent |

**Title:** ***Cooperative Agreement between Provincial Governments of the Republic of South Africa on Regional Cooperation in Energy***

**Comment:** Intention to cooperate in a manner which will facilitate joint activities related to energy development in an environmentally and economically sound way with the following provincial governments of South Africa: Province of the Free State; Northern Cape Province; Eastern Cape Province

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|

## Country: ***Spain***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 100 | 404 | 9/15/1997 | 9/15/2007 | Primary DOE | | | None | Environmental Safety Health | Research on Radiological Evaluations |

**Title:** ***Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Industry and Energy of the Kingdom of Spain on Cooperation in Research on Radiological Evaluations***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 307 | 404 | 9/15/1997 | 9/15/2007 | Secondary DOE | | 100 | Primary DOE | Environmental Safety Health | Annex 1 |

**Title:** ***Project Annex 1 - cooperation on research in radiological evaluations***

**Comment:** Related to radioactive waste management.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 171 | 12/12/198 | | Primary DOE | | | None | Science and Technology | Science & Technology |

**Title:** ***Agreement between the United States Department of Energy and the United States-Spain Joint Committee for Scientific and Technological Cooperation***

**Comment:** Establish responsibilities, guidelines and procedures for evaluating, funding and coordinating research proposals, projects and related activities in the field of energy selected and funded by the US-Spain Joint Committee for S&T Cooperation.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 596 | 491 | 7/15/2000 | 7/15/2006 | Primary DOE | | | None | Energy Research and Development | MOU for Energy Cooperation |

**Title:** ***Memorandum of Understanding Between The Ministry of Science and Technology of the Kingdom of Spain and The Department of Energy of the United States of America Concerning Cooperation in Energy***

**Comment:**

## Country: ***Sweden***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 218 | 235 | 2/11/1988 | | Primary DOE | | | None | *Other - Classified | Subject and Umbrella contents are classified |

**Title:** ***Subject and Umbrella contents are classified***

**Comment:** Description not available in History

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 580 | 442 | 10/23/199 | 10/23/200 | Primary DOE | | | None | Civilian Radioactive Waste Management | Radioactive Waste Management |

**Title:** ***Agreement between the United States Department of Energy and the Swedish Nuclear Fuel and Waste Management Company Concerning a Cooperative Program in the Field of Radioactive waste Management***

**Comment:**

## Country: ***Switzerland***

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 225 | 418 | 12/23/199 | 12/23/200 | Primary DOE | | | None | Civilian Radioactive Waste Management | Radioactive Waste Management |

**Title:** ***Agreement between the Department of Energy of the United States of America and the National Cooperative for the Disposal of Radioactive Waste in Switzerland in the Field of Radioactive Waste Management***

**Comment:** Auto extension for 5 yr. Periods.

## Country: ***Thailand***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 227 | 400 | 3/20/1997 | | Primary DOE | | | None | Arms Control and Nonproliferation | Lab-to-Lab arrangement |

**Title:** ***Arrangement for the Exchange of Technical Information and for Cooperation in the Field of Peaceful Uses of Nuclear Energy between the Office of Atomic Energy for Peace of Thailand and the United States Department of Energy***

**Comment:** Open ended.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 538 | 400 | 3/6/2000 | | Secondary DOE | | 227 | Primary DOE | Arms Control and Nonproliferation | Action Sheet 1 - Preliminary Safety Anaysis Report |

**Title:** ***Action Sheet 1 between the Office of Atomic Energy for Peace of Thailand and the United States Department of Energy for Preliminary Safety Analysis Report Review***

**Comment:**

## Country: ***Turkey***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 624 | 519 | 3/20/2002 | 3/20/2007 | Primary DOE | | | None | Science and Technology | Cooperation in Energy Technology |

**Title:** ***Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Energy and Natural Resources of the Republic of Turkey for Cooperation in Energy Technology***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 625 | 520 | 3/20/2002 | 3/20/2002 | Secondary DOE | | 624 | Primary DOE | Science and Technology | Annex 2 - Cooperation in the Field of Coal and Power Systems |

**Title:** ***Annex 2 to the Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Energy and Natural Resources of the Republic of Turkey for Cooperation in the Field of Coal and Power Systems***

**Comment:**

## Country: ***Ukraine***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 507 | 454 | 4/26/1996 | | Intergovernmental | | | None | *Other - Radioactive Waste | Chornobly Center |

**Title:** ***Memorandum of Understanding on Participation In and Support of the Activities of the International Chornobyl Center on Nuclear Safety, Radioactive Waste and Radioecology***

**Comment:**

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 508 | 455 | 7/22/1998 | 7/22/2003 | Intergovernmental | | | None | *Other - Radioactive Waste | Int'l Radioecology Lab |
| | **Title:** | ***Agreement between the Government of the United States of America and the Government of Ukraine Concerning the International Radioecology Laboratory of the International Chornobly Center on Nuclear Safety, Radioactive Waste and Radioecology*** | | | | | | | |
| | **Comment:** | Department of Energy is the Executive Agent | | | | | | | |
| 510 | 457 | 5/6/1998 | 5/4/2028 | Intergovernmental | | | None | Nuclear Energy | US-Ukraine PNC |
| | **Title:** | ***Agreement for Cooperation between the United States of America and Ukraine Concerning Peaceful Uses of Nuclear Energy*** | | | | | | | |
| | **Comment:** | | | | | | | | |
| 54 | 330 | 4/8/1994 | | Statement of Intent | | | None | Nuclear Energy | Shutdown Chernobyl Nuclear Power Plant |
| | **Title:** | ***Joint Statement About Paths to the Soonest Possible Shutdown of the Chernobyl Nuclear Power Plant*** | | | | | | | |
| | **Comment:** | Undertake near-term joint analysis of options for earliest possible closure of the Chernobyl power plant. | | | | | | | |

## Country: ***United Kingdom***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 41 | 364 | 7/25/1995 | | Statement of Intent | | | None | Environmental Restoration and Waste Management | Nuclear Clean-Up |
| | **Title:** | ***Heads of Agreement for Cooperation Between the United States Department of Energy and the United Kingdom Department of Trade and Industry on their Perspective Program for Nuclear Clean-up*** | | | | | | | |
| | **Comment:** | Cooperate, through sharing of information, on similar issues associated with nuclear decommissioning and clean-up | | | | | | | |
| 42 | 390 | 9/5/1996 | | Statement of Intent | | | None | Environmental Restoration and Waste Management | Environmental Restoration and Waste Management |
| | **Title:** | ***Statement of Intent between the United States Department of Energy and the United Kingdom Department of Trade and Industry*** | | | | | | | |
| | **Comment:** | Establish framework for cooperation in R&D of technologies for the treatment, packaging, disposal of aluminum-based spent nuclear fuel. | | | | | | | |
| 598 | 493 | 11/6/2000 | 11/6/2010 | Primary DOE | | | None | Energy Research and Development | MOU on Energy Research and Development |
| | **Title:** | ***Memoruandum of Understanding Between The Department of Energy of the United States of America and The Department of Trade and Industry of the United Kingdom of Great Britain and Northern Ireland on Collaboration in Energy Research and Development*** | | | | | | | |
| | **Comment:** | Provides for cooperation in Fossil Energy, Energy Efficiency, Renewable Energy and the waste-related management and the environment. | | | | | | | |
| 634 | 529 | 11/17/200 | 11/17/200 | Secondary DOE | | 598 | Primary DOE | Environmental Management | AEA Technology plc |
| | **Title:** | ***Implementing Arrangement between the Department of Energy of the United States of America and AEA Technology plc Under the Memorandum of Understanding on Energy R&D between the Department of Energy of the United States of America and the Department of Trade and Industry of the United Kingdom of Great Britain and Northern Ireland*** | | | | | | | |
| | **Comment:** | | | | | | | | |

## All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 611 | 506 | 9/17/2001 | 9/17/2006 | Primary DOE | | | None | Nuclear Verification Technologies | MOU between DOE and the Department of Trade and Industry of the United Kingdom |

**Title:** ***Memorandum of Understanding between the Department of Energy of the United States of America and the Department of Trade and Industry of the United Kingdom of Great Britain and Northern Ireland Concerning the Development and Implementation of Nuclear Verification Technologies***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 637 | 532 | 7/25/2002 | 7/25/2007 | Primary DOE | | | None | Science and Technology | Implementing Agreement between DOE and Great Britain |

**Title:** ***Implementing Arrangement between the Department of Energy of the United States of America and the Secretary of State for Defence of the United Kingdom of Great Britain and Northern Ireland for Cooperation in Research and Development of Chemical and Biological Weapons Detection and Protection-Related Technologies***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 638 | 533 | 7/3/2002 | 7/3/2007 | Primary DOE | | | None | Science and Technology | Gov't to Gov't agreement between US and Great Britain |

**Title:** ***Agreement between the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland for Cooperation in Research and Development of Weapons Detection and Protection-Related Technologies***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 652 | 547 | 3/10/2003 | 3/10/2008 | Primary DOE | | | None | Fossil Energy | Cooperation in the Field of Fossil Energy |

**Title:** ***Implementing Arrangement between the Department of Energy of the United States of America and the Department of Trade and Industry of the United Kingdom of Great Britain and Northern Ireland to Cooperate in the Field of Fossil Energy Technology***

**Comment:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 143 | 278 | 6/11/1990 | 6/11/2000 | Primary DOE | | | None | Energy Research and Development | Energy R&D |

**Title:** ***Memorandum of understanding between the U.S. Department of Energy and the Department of energy of the United Kingdom of Great Britain and Northern Ireland on collaboration in energy research and development***

**Comment:** To continue and maximize cooperation in energy research and development.

## Country: ***Uzbekistan***

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 628 | 523 | 3/12/2002 | | Primary DOE | | | None | Arms Control and Nonproliferation | Proliferation of Nuclear Materials and Technologies |

**Title:** ***Agreement between the Department of Energy of the United States of America and the Ministry of Foreign Affairs of the Republic of Uzbekistan Concerning Cooperation in the area of Prevention of Proliferation of Nuclear Materials and Technologies***

**Comment:**

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|

## Country: ***Venezuela***

228 408 10/13/199 10/13/200 Primary DOE None Energy Research and Development Energy Cooperation

**Title:** ***Agreement for Energy Cooperation between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela***

**Comment:** Supersedes the March 6, 1980 Energy R&D agreement

443 73 7/10/1980 10/13/200 Secondary DOE 228 Primary DOE Fossil Energy Project Annex 1 - Crude Characterization

**Title:** ***Project Annex I between the Department of Energy of the United States of America and the Ministry of Energy and Mines of Venezuela for the Joint Characterization of Heavy Crude Oils***

**Comment:** Exchange published technical information and jointly modify or develop new techniques for the characterization of heavy crude oil and heavy ends.

444 82 9/29/1980 10/13/200 Secondary DOE 228 Primary DOE Fossil Energy Project Annex 4 - Enhanced Oil Recovery Thermal Processes

**Title:** ***Project Annex IV between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela in the Area of Enhanced Oil Recovery Thermal Process***

**Comment:** Cooperate in the application of additives to steam injection for the recovery of heavy oil thereby further efforts on the understanding of the thermal processes and the reservoir and its fluids where these processes are conducted.

445 137 3/14/1984 10/13/200 Secondary DOE 228 Primary DOE Fossil Energy Project Annex 10 - Training of Petroleum Engineers

**Title:** ***Project Annex X between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela for On-Site Training of Petroleum Engineers***

**Comment:** Training of Venezuelan petroleum engineers at Elks Hills Naval Petroleum Facility.

446 264 2/16/1989 10/13/200 Secondary DOE 228 Primary DOE Fossil Energy Project Annex 14 - Exchange of Energy-Related Personnel

**Title:** ***Project Annex XIV between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela for the Exchange of Energy-Related***

**Comment:** DOE and MEMV shall cooperate in using their good offices and taking all reasonable steps to facilitate the exchange of energy-related personnel between Venezuela and the U.S. in the areas of fossil

447 333 4/26/1994 10/13/200 Secondary DOE 228 Primary DOE Fossil Energy Project Annex 15 - Oil Recovery Information and Tech. Transfer

**Title:** ***Implementing Agreement XV to the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela in the Area of "Oil Recovery Information and Technology Transfer"***

**Comment:** Evaluate past and ongoing improved oil recovery projects in US and Venezuela; Data base compilation and exchange

# All In Force Bilateral Agreements

| ID | File# | Start Date | End Date | Agreement Type | Legally Binding | Parent ID | Parent Type | Subject | Brief Description |
|---|---|---|---|---|---|---|---|---|---|
| 499 | 448 | 8/15/1995 | 10/13/200 | Secondary DOE | | 228 | Primary DOE | Fossil Energy | Annex 16 - Oil and Petrochemical Ecology and Environmental Research |

**Title:** ***Implementing Agreement XVI to the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela in the Area of Oil and Petrochemistry Ecology and Environmental Research***

**Comment:** Information exchange, biotechnology update and analysis of industrial and environmental trends.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 500 | 449 | 9/7/1995 | 10/13/200 | Secondary DOE | | 228 | Primary DOE | Fossil Energy | Annex 17 - Drilling Technology |

**Title:** ***Implementing Agreement XVII to the Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela in the Area of Drilling Technology***

**Comment:** Exchange information and training of personnel on drilling technologies for more efficient and cost-effective methods drilling.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 633 | 528 | 8/9/2001 | 8/9/2006 | Secondary DOE | | 228 | Primary DOE | Fossil Energy | Project Annex No. XVIII - Natural Gas Technologies |

**Title:** ***Project Annex No. XVIII to the Agreement for Energy Cooperation between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Bolivarian Republic of Venezuela in the area of Natural Gas Technologies***

**Comment:**

United States Department of Energy
Agreement Listing

Listing of Agreements Under the Aegis of: IEA

| Exp Date | DOE Office | Agreement # | Title |
|---|---|---|---|
| 1/2050 | EE | 000011 | International Energy Agency Implementing Agreement on Solar Heating and Cooling Program |
| 9/30/94 | EE | 000012 | International Energy Agency Implementing Agreement on Solar Heating and Cooling Program - Annex 12: Building Energy Analysis and Design Tools for Solar Applications |
| 8/31/94 | EE | 000013 | International Energy Agency Solar Heating and Cooling Program - Annex 13: Advanced Low Energy Buildings |
| 1/2050 | EE | 000018 | International Energy Agency Hydrogen Agreement: Implementing Agreement for a Program of Research and Development on the Production and Utilization of Hydrogen |
| 12/31/94 | EE | 000024 | International Energy Agency Implementing Agreement on Solar Heating and Cooling Program |
| 1/1/2050 | EE | 000025 | International Energy Agency Annex 1: Improvement of Thermohydraulic Design and Performance in Heat Transfer Equipment |
| 1/1/2050 | EE | 000026 | International Energy Agency Implementing Agreement on Improved Structural Design and Reliability of Heat Transfer Equipment |
| 1/1/2050 | EE | 000030 | International Energy Agency Implementing Agreement for Cooperation in R&D of Wind Turbine Systems |
| 1/1/2050 | EE | 000033 | International Energy Agency Implementing Agreement - Annex 1: Combustion System Modeling and Diagnostics |
| 1/1/2050 | EE | 000034 | International Energy Agency Implementing Agreement - Annex 2: Optimal Design of Heat Exchanger Networks |
| 1/1/94 | EE | 000039 | International Energy Agency Implementing Agreement for a Program of R&D on Advanced Heat Pump Systems |
| 1/1/2050 | EE | 000045 | International Energy Agency Implementing Agreement on High Temperature Materials for Automotive Engines |
| 1/1/2050 | EE | 000049 | International Energy Agency Implementing Agreement for a Program of Research and Development on Energy |

United States Department of Energy
Agreement Listing

Listing of Agreements Under the Aegis of: IEA

| Exp Date | DOE Office | Agreement # | Title |
|---|---|---|---|
| | | | Conservation in Buildings and Community Systems |
| 1/1/2050 | EE | 000053 | International Energy Agency Implementing Agreement for Pulp and Paper Industry |
| 1/1/2050 | EE | 000055 | International Energy Agency Alcohol and Alcohol Blends as Motor Fuel (Umbrella Agreement) including Annex 1: A Common Study |
| 1/1/2050 | EE | 000058 | International Energy Agency Implementing Agreement for Program on Bioenergy Research and Development |
| 1/1/2050 | ER | 000107 | International Energy Agency Implementing Agreement for a Program of Research and Development on Superconducting Magnets for Fusion Power |
| 7/31/95 | ER | 000108 | International Energy Agency Implementing Agreement on a Cooperative Fusion Program for the Investigation of Toroidal Physics in, and Plasma Technologies of, Tokomaks with Poloidal Divertors |
| 7/31/95 | ER | 000109 | International Energy Agency Implementing Agreement - Annex I: Joint Fusion Work on the Investigation of Toroidal Physics and Plasma Technologies in Asdex-Upgrade |
| 12/31/97 | ER | 000110 | International Energy Agency Implementing Agreement for Fusion Program of R&D on Plasma Wall Interaction in Textor |
| 10/21/94 | ER | 000115 | International Energy Agency Implementing Agreement for Program of R&D on Radiation Damage in Fusion Materials |
| 10/21/95 | ER | 000116 | International Energy Agency Implementing Agreement for Program of R&D on Radiation Damage on Fusion Materials - Annex 2: Experimentation on Radiation Damage in Fusion Materials |
| 1/14/96 | ER | 000118 | International Energy Agency Implementing Agreement on Fusion Cooperation Among the Three Large Tokomak Facilities (JET, JT-60, and TFTR) |
| 4/2/2000 | ER | 000119 | International Energy Agency Implementing Agreement - Annex 2: Joint Fusion Work on the Investigation of Plasma Confinement Physics and Technology in Reversed Field |

United States Department of Energy
Agreement Listing

Listing of Agreements Under the Aegis of: IEA

| Exp Date | DOE Office | Agreement # | Title |
|---|---|---|---|
| | | | Pinches (RFP) |
| 4/2/2000 | ER | 000123 | International Energy Agency Implementing Agreement for a Fusion Program of R&D on Reversed Field Pinches (RFP) |
| 4/2/2000 | ER | 000124 | International Energy Agency Annex 1: Coordination of Fusion R&D Work on Research Field Pinches (RFP) |
| 7/6/97 | ER | 000266 | International Energy Agency Implementing Agreement on a Cooperative Program on Environmental Safety and Economic Aspects of Fusion Power |
| 1/1/2050 | FE | 000154 | International Energy Agency Coal Research Service Center Project |
| 1/1/2050 | FE | 000159 | International Energy Agency Implementing Agreement for Performance of Research, Development and Demonstration on Enhanced Recovery of Oil |
| 1/1/2049 | FE | 000181 | International Energy Agency Implementing Agreement for Program of Research on Coal Liquid Mixtures |
| 6/21/90<br>6/20/95 | | | International Energy Agency Implementing Agreement for Cooperative Programme for Assessing the Impacts of High-Temperature Superconductivity on the Electric Power Sector |

# DEPARTMENT OF ENERGY RESEARCH AND DEVELOPMENT MULTI-LATERAL AGREEMENTS
## All Active Agreements

| Term of Agreement | Countries | Type of Agreement | Agreement Subject Area | DOE Record # |
|---|---|---|---|---|
| 3/20/74<br>9/16/96 | Australia, Austria, Belgium, Canada, Denmark, Commission of the Euratom, Finland, France, Germany (unified), Greece, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom | Umbrella | Nuclear data and computer programs | 90 |
| 11/18/74<br>Indefinite | Australia, Austria, Belgium, Canada, Denmark, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Spain, Sweden, Switzerland, Turkey, United Kingdom | Umbrella/annex | Establishment of International Energy Program through implementation of an International Energy Agency | |
| 1/1/75<br>Indefinite | Australia, Austria, Belgium, Canada, Denmark, Commission of the Euratom, Finland, Germany (unified), Italy, Japan, Netherlands, Spain, Sweden, United Kingdom | Implementing/ project | Coal research | 154 |
| 7/28/75<br>Indefinite | Australia, Belgium, Canada, Denmark, Finland, Germany (unified), Greece, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, Turkey, United Kingdom | Implementing/ project | Energy conservation in buildings and community systems | 49 |
| 11/20/75<br>Indefinite | Austria, Belgium, Germany, Italy, Netherlands, Spain, Sweden, Turkey, United Kingdom | Implementing/ project, annex | Establishment of the Coal Technical Information Service | 154 |
| 12/31/75<br>Indefinite | Australia, Austria, Belgium, Canada, Denmark, Finland, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Spain, Sweden, United Kingdom (DOI/USGS, DOE and BLM) | Establishment of Coal Research Service | This Agreement incorporates four previous implementing agreements on: Mining Technology Clearinghouse (DOI BLM), Coal Economic Assessment Services (DOE), Coal Technical Information Services (DOE, DOI/ USGS), and World Coal Resources and Reserves Data Bank (DOI/USGS) | 154 |
| 12/20/76<br>Indefinite | Australia, Austria, Belgium, Canada, Commission of the Euratom, Denmark, Germany (unified), Greece, Italy, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom | Implementing/ project, annexes | Solar heating and cooling systems | 11 |
| 3/16/77<br>Indefinite | Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom | Implementing/ project, annex | Energy conservation/ emissions reduction in | |

# DEPARTMENT OF ENERGY RESEARCH AND DEVELOPMENT MULTI-LATERAL AGREEMENTS
## All Active Agreements

| Term of Agreement | Countries | Type of Agreement | Agreement Subject Area | DOE Record # |
|---|---|---|---|---|
| | | | combustion | |
| 3/16/77 Indefinite | Austria, Germany, Sweden, Switzerland | Implementing/ project, annex | Energy conservation through energy cascading | |
| 3/16/77 Indefinite | Canada, Germany (unified), Italy, Japan, Norway, Sweden, Switzerland, United Kingdom | Annex | Combustion system modeling and diagnostics | 33 |
| 6/28/77 4/00/97 | Germany, Netherlands, Norway, Sweden, Switzerland, United Kingdom | Implementing/ project, annex | Energy conservation in heat transfer and heat exchangers | 26 |
| 10/6/77 12/31/96 | Germany, Israel, Spain, Switzerland | Implementing/ project, annexes | Solar power and chemical energy systems | |
| 10/6/77 12/31/97 | Canada, Commission of the Euratom, Japan, Switzerland, Turkey | Implementing/ project, annex | Fusion energy, plasma wall interaction in Textor | 110 |
| 10/6/77 Indefinite | Germany, Japan, Sweden, Switzerland, United Kingdom | Implementing/ project, annex | Man-made geothermal energy systems | |
| 10/6/77 Indefinite | Austria, Canada, Denmark, Germany (unified), Italy, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, United Kingdom | Implementing/ project, annexes | Wind turbine systems | 30 |
| 10/6/77 Indefinite | Germany (unified), Japan, Switzerland | Implementing/ project, annex | Superconducting magnets for fusion power | 107 |
| 10/6/77 Indefinite | Belgium, Canada, EEC, Germany, Italy, Japan, Netherlands, Sweden, Switzerland | Implementing/ project, annexes | Production of hydrogen from water | 18 |
| 4/00/78 Indefinite | Belgium, Canada, Ireland, Sweden | Implementing/ project, annex | Forestry energy | |
| 4/13/78 Indefinite | Canada, Ireland, Japan, United Kingdom | Implementing/ project, annex | Wave power R&D | |
| 5/24/78 Indefinite | Belgium, Ireland, Sweden, United Kingdom | Implementing/ project, | Biomass conversion technical information service | 58 |
| 7/27/78 Indefinite | Germany, New Zealand, Sweden, United Kingdom | Implementing/ project, annex | Energy conservation in cement manufacture | |
| 7/27/78 Indefinite | Austria, Belgium, Canada, Denmark, Germany (unified), Italy, Japan, Netherlands, Spain, Sweden, Switzerland, United Kingdom | Implementing/ project, annex | Advanced heat pump systems | 39 |

# DEPARTMENT OF ENERGY RESEARCH AND DEVELOPMENT MULTI-LATERAL AGREEMENTS
## All Active Agreements

| Term of Agreement | Countries | Type of Agreement | Agreement Subject Area | DOE Record # |
|---|---|---|---|---|
| 9/22/78 Indefinite | Belgium, EEC, Denmark, Germany, Netherlands, Sweden, Switzerland | Implementing/ project, annexes | Energy conservation through energy storage | 60 |
| 1/1/79 Indefinite | Canada, Venezuela | Other | Heavy crude and tar sands | 160 |
| 5/22/79 6/30/97 | Germany, Japan, Sweden | Implementing/ project, annexes | High temperature materials for automotive engines | |
| 5/22/79 Indefinite | Australia, Austria, Canada, Denmark, Egypt, France, Germany, Japan, Norway, United Kingdom | Implementing/ project, annex | Enhanced recovery of oil | 159 |
| 5/22/79 Indefinite | Italy, Mexico, New Zealand | Implementing/ project, annex | Geothermal equip-ment | |
| 10/21/80 10/21/94 | Canada, EEC, Japan, Switzerland | Ongoing Agreement | Radiation Damage in Fusion Materials | 115 |
| 11/13/80 Indefinite | Australia, Belgium, Denmark, EEC, Germany, Italy, Norway, Sweden, Switzerland | Implementing/ project, annexes | Energy technology systems analysis | 268 |
| 2/18/81 Indefinite | Belgium, Canada, Japan, Netherlands, Norway, Spain, Sweden, United Kingdom | Implementing/ project, annexes | Energy conservation in the pulp and paper industry | 53 |
| 1/1/81 1/1/2049 | Canada, Japan, Netherlands, Spain, Sweden, United Kingdom | Implementing/ project, annex | Coal/oil liquid mixtures | 181 |
| 12/17/82 Indefinite | Commission of the Euratom | Letters of Cooperation: Information Exchange | Renewable energy sources | 277 |
| 12/31/84 Indefinite | Belgium, Canada, Finland, France, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, United Kingdom | Implementing/ project, annexes | Alternative motor fuels | 55 |
| 3/27/85 Indefinite | Australia, Canada, Denmark, Finland, Germany, Italy, Netherlands, Sweden, United Kingdom | | Coal Combustion Sciences | 136 |
| 12/15/86 12/15/96 | Commission of the Euratom | | Magnetic fusion power system | 103 |
| 1/26/87 Indefinite | Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom | | Energy technology data exchange | 3 |
| 3/15/87 3/15/93 | Canada, Norway, United Kingdom | Ongoing Agreement | Fossil Fuel Multiphase Flow Sciences | 174 |
| 3/18/88 3/18/98 | Australia, Belgium, Canada, Denmark, Finland, Italy, Japan, Korea, Netherlands, New Zealand, Norway, | Implementing/ project, annexes | Information Center for the Analysis and | 44 |

# DEPARTMENT OF ENERGY RESEARCH AND DEVELOPMENT MULTI-LATERAL AGREEMENTS
## All Active Agreements

| Term of Agreement | Countries | Type of Agreement | Agreement Subject Area | DOE Record # |
|---|---|---|---|---|
| | Sweden, Switzerland, United Kingdom | | Dissemination of Demonstrated Energy Technologies (CADDET) | |
| 1/1/89<br>Indefinite | Austria, Belgium, Canada, Denmark, Finland, Ireland, Italy, Japan, New Zealand, Norway, Sweden, United Kingdom | Implementing/ project, annex | Bioenergy research and development | 58 |
| 4/3/90<br>4/2/00 | Commission of the Euratom, Japan | Implementing/ project | Fusion Energy/ Reversed Field Pinches (RFP) | 123 |
| 4/3/90<br>4/2/00 | Commission of the Euratom, Japan | Annex 1 | Fusion Energy/ Reversed Field Pinches (RFP) | 124 |
| 4/3/90<br>4/2/00 | Commission of the Euratom, Japan | Annex 2 | Fusion Energy/ Reversed Field Pinches (RFP) | 119 |
| 7/5/91<br>7/4/96 | Russia, Former Soviet Union | MOU/MOC | Magnetic confinement fusion | 91 |
| 10/1/91<br>10/1/96 | France, Germany (unified), United Kingdom | Umbrella | Liquid metal cooled fast breeder reactors | 200 |
| 10/22/91<br>10/22/96 | Czech Republic, Slovak Republic | Science and Technology Agreement | Fusion energy | 259 |
| 11/20/91<br>11/19/01 | Canada, Denmark, Commission of the Euratom, Finland, Italy, Japan, Netherlands, Norway, Spain, Sweden, United Kingdom | Implementing/ project, annex | Greenhouse gases derived from fossil fuel use | 231 |
| 7/6/92<br>7/6/97 | Canada, Commission of the Euratom, Japan | Implementing/ project, annexes | Environmental safety and economic aspects of fusion power | 232 |
| 7/6/92<br>7/6/97 | Canada, Commission of the Euratom, Japan | Umbrella | Environmentally economic aspects of fusion power | 266 |
| 7/21/92<br>7/20/98 | EEC, Germany, Japan, the former Soviet Union | | Controlled thermonuclear fusion | 233 |
| 11/24/92<br>11/11/98 | Austria, Canada, Denmark, EEC, Finland, France, Germany, Israel, Italy, Japan, Korea, Netherlands, Portugal, Sweden, Switzerland, Turkey, United Kingdom | Implementing/ project, annexes | Photovoltaic power systems | |
| 6/13/94<br>6/13/99 | Canada, Japan | Implementing/ project, annex | Nuclear technology of fusion reactors | |
| 7/12/94<br>7/12/99 | Austria, Canada, France, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom | Implementing/ project, annexes | Electric vehicle (EV) technologies | |

# DEPARTMENT OF ENERGY RESEARCH AND DEVELOPMENT MULTI-LATERAL AGREEMENTS

## All Active Agreements

| Exp Date | DOE Office | Agreement # | Title |
|---|---|---|---|
| 9/19/95 | EM | 000083 | Memorandum of Cooperation in the Fields of Environmental Restoration and Waste Management between the United States of America and the Union of Soviet Socialist Republics |
| 7/4/96 | ER | 000091 | Memorandum of Cooperation in the Field of Magnetic Confinement Fusion Between U.S. Department of Energy and the Former Soviet Union Ministry of Atomic Power and Industry |
| 7/4/96 | ER | 000126 | Memorandum of Cooperation in the Field of Research on Fundamental Properties of Matter between the U.S. Department of Energy and the Ministry of Atomic Power and Industry of the Former Soviet Union |
| 1/1/2050 | FE | 000160 | U.S. Department of Energy, Canada and Venezuela Agreement for Unitar/UNDP Information Center for Heavy Crude and Tar Sands |
| 10/1/96 | NE | 000200 | U.S. Department of Energy, German Ministry of Research and Technology, Commission of Atomic Energy of France, and United Kingdom Atomic Energy Agency on Exchange of Information and Cooperation in Field of R&D of Liquid Metal Cooled Fast Breeder Reactors |
| | NE | 000250 | Proposed New Agreement - United States, Russian Federation and Ukraine Lisbon Initiative on the Review and Assessment of Russian Nuclear Reactor Design and Safety |
| 10/22/96 | PO | 000259 | U.S., Czech Republic and Slovak Republic Science and Technology Agreement |

**U.S. Department of Energy**

**and**

**Brookhaven Science Associates, LLC**

# ATTACHMENT J.11

# APPENDIX K

# RESERVED

**Applicable to the Operation of**
**The Brookhaven National Laboratory**

**Contract No. DE-AC02-98CH10886**
**Modification No. M253**

# U.S. Department of Energy

# and

# Brookhaven Science Associates, LLC

## ATTACHMENT J.12

## APPENDIX L

## COMPUTATION OF FEE
## FY2010

## Applicable to the Operation of
## The Brookhaven National Laboratory

## Contract No. DE-AC02-98CH10886

**Modification M365 – Fee determined and annotated to Appendix L**

**Modification M253 – Fee calculation established**

# APPENDIX L
## FY2010 FEE COMPUTATION
## FEE BASIS

For FY2010, the performance measure model has one class of performance measures in Appendix B of the Prime Contract that is directly associated with fee (fee bearing). This reflects the approved FY2010 Performance Goals, Objectives, Measures and Targets for Science & Technology and Management and Operations. The FY2010 fee structure is in consonance with the following guidelines:

1. The maximum fee is to be in consonance with fees paid for the operation of similar FFRDC laboratories and will have a single tier structure;

2. While there are no current integrated subcontractor(s), the fees for integrated subcontractor(s), when and if they are again added to the BSA management structure, are included in the total fee set forth in Section B.3 for the second quarter FY10 through the fourth quarter of FY10;

3. The fee structure is to be based on individual Target outcomes and their associated weights as determined separately;

4. The Performance Goal of Science and Technology will act as a "gate," in that a final Grade of C (1.8) or above is required; there will be no fee if either Performance Goal outcome is D (1.0) or below.

**Maximum Fee**

The maximum fee that BSA can earn under this matrix for the period of October 1, 2009 through September 30, 2010 is established at $7,400,000 if the performance goal for Science & Technology is scored 4.1 or above and Management and Operations is scored 3.1 or above. The scoring process is described in Appendix B.

**Fee Matrix (Table 1)**

Appendix B of the Prime Contract describes the scoring system for BSA's performance. The "Percent S&T Fee Earned" from Appendix B is multiplied by the "M&O Fee multiple" from Appendix B to arrive at the total earned fee percentage. That percentage is then multiplied by the total available fee to arrive at BSA's earned fee. See Fee Matrix below.

| | **Table 1** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Overall Fee Determination** | | | | | | | | | | |
| **Period** | **Percent S&T Fee Earned from Appendix B, Table C.** | | **M&O Fee Multiplier from Appendix B, Table C.** | | **Overall Earned Performance-Based Fee** | | **Maximum Performance Fee** | | **Earned Fee** | | |
| 10/1/09 – 1/4/10 | 94 | % | X | 100 % | = | 94 % | X | $ 1,850,000 | = | $ 1,739,000 | |
| 1/5/10 – 9/30/10 | 94 | % | X | 100 % | = | 94 % | X | $ 5,550,000 | = | $5,217,000 | |

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## ATTACHMENT J.12

## APPENDIX L

## COMPUTATION OF FEE
## FY2011

## Applicable to the Operation of
## The Brookhaven National Laboratory

## Contract No. DE-AC02-98CH10886

**Modification No. M436 – Fee determined and annotated to Appendix L**

**Modification No. M338 – Fee calculation established**

# APPENDIX L
## FY2011 FEE COMPUTATION
## FEE BASIS

For FY2011, the performance measure model has one class of performance measures in Appendix B of the Prime Contract that is directly associated with fee (fee bearing). This reflects the approved FY2011 Performance Goals, Objectives, Measures and Targets for Science & Technology and Management and Operations. The FY2011 fee structure is in consonance with the following guidelines:

1. The maximum fee is to be in consonance with fees paid for the operation of similar FFRDC laboratories and will have a single tier structure;

2. While there are no current integrated subcontractor(s), the fees for integrated subcontractor(s), when and if they are again added to the BSA management structure, are included in the total fee set forth in Section B.3 for the second quarter FY11 through the fourth quarter of FY11;

3. The fee structure is to be based on individual Target outcomes and their associated weights as determined separately;

4. The Performance Goal of Science and Technology will act as a "gate," in that a final Grade of C (1.8) or above is required; there will be no fee if either Performance Goal outcome is D (1.0) or below.

**Maximum Fee**

The maximum fee that BSA can earn under this matrix for the period of October 1, 2010 through September 30, 2011 is established at $7,400,000 if the performance goal for Science & Technology is scored 4.1 or above and Management and Operations is scored 3.1 or above. The scoring process is described in Appendix B.

**Fee Matrix (Table 1)**

Appendix B of the Prime Contract describes the scoring system for BSA's performance. The "Percent S&T Fee Earned" from Appendix B is multiplied by the "M&O Fee multiple" from Appendix B to arrive at the total earned fee percentage. That percentage is then multiplied by the total available fee to arrive at BSA's earned fee. See Fee Matrix below.

| | **Table 1**<br>**Overall Fee Determination** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Period** | **Percent S&T Fee Earned from Appendix B, Table C.** | | **M&O Fee Multiplier from Appendix B, Table C.** | | **Overall Earned Performance-Based Fee** | | **Maximum Performance Fee** | | **Earned Fee** |
| 10/1/10 – 9/30/11 | 91% | X | 100% | = | 91% | X | $ 7,400,000 | = | $6,734,000 |

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## APPENDIX L

## COMPUTATION OF FEE
## FY2012

## Applicable to the Operation of
## The Brookhaven National Laboratory

## Contract No. DE-AC02-98CH10886
## Modification No. M509

**Modification No. M509 – Fee determined and annotated to Appendix L**

**Modification No. M422 – Fee calculation established**

# APPENDIX L
## FY2012 FEE COMPUTATION
## FEE BASIS

For FY2012, the performance measure model has one class of performance measures in Appendix B of the Prime Contract that is directly associated with fee (fee bearing). This reflects the approved FY2012 Performance Goals, Objectives, Measures and Targets for Science & Technology and Management and Operations. The FY2012 fee structure is in consonance with the following guidelines:

1. The maximum fee is to be in consonance with fees paid for the operation of similar FFRDC laboratories and will have a single tier structure;

2. While there are no current integrated subcontractor(s), the fees for integrated subcontractor(s), when and if they are again added to the BSA management structure, are included in the total fee set forth in Section B.3 for the second quarter FY12 through the fourth quarter of FY12;

3. The fee structure is to be based on individual Target outcomes and their associated weights as determined separately;

4. The Performance Goal of Science and Technology will act as a "gate," in that a final Grade of C (1.8) or above is required; there will be no fee if either Performance Goal outcome is D (1.0) or below.

**Maximum Fee**

The maximum fee that BSA can earn under this matrix for the period of October 1, 2011 through September 30, 2012 is established at $7,400,000 if the performance goal for Science & Technology is scored 4.1 or above and Management and Operations is scored 3.1 or above. The scoring process is described in Appendix B.

**Fee Matrix (Table 1)**

Appendix B of the Prime Contract describes the scoring system for BSA's performance. The "Percent S&T Fee Earned" from Appendix B is multiplied by the "M&O Fee multiple" from Appendix B to arrive at the total earned fee percentage. That percentage is then multiplied by the total available fee to arrive at BSA's earned fee. See Fee Matrix below.

| | **Table 1** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Overall Fee Determination** | | | | | | | | |
| **Period** | **Percent S&T Fee Earned from Appendix B, Table C.** | | **M&O Fee Multiplier from Appendix B, Table C.** | | **Overall Earned Performance-Based Fee** | | **Maximum Performance Fee** | | **Earned Fee** |
| 10/1/11 – 9/30/12 | 91% | X | 95% | = | 86.45 % | X | $7,400,000 | = | $6,397,300 |

| **Earned Fee** | | **Conditional Payment of Fee Adjustment** | | **Final Fee** |
|---|---|---|---|---|
| $6,397,300 | - | $959,595 | = | $5,437,705 |

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## ATTACHMENT J.12

## APPENDIX L

## COMPUTATION OF FEE
## FY2013

## Applicable to the Operation of
## The Brookhaven National Laboratory

## Contract No. DE-AC02-98CH10886
## Modification No. M542

**Modification No. M542 – Fee determined and annotated to Appendix L**

**Modification No. M500 – Fee calculation established**

# APPENDIX L
## FY2013 FEE COMPUTATION
## FEE BASIS

For FY2013, the performance measure model has one class of performance measures in Appendix B of the Prime Contract that is directly associated with fee (fee bearing). This reflects the approved FY2013 Performance Goals, Objectives, Measures and Targets for Science & Technology and Management and Operations. The FY2013 fee structure is in consonance with the following guidelines:

1. The maximum fee is to be in consonance with fees paid for the operation of similar FFRDC laboratories and will have a single tier structure;

2. While there are no current integrated subcontractor(s), the fees for integrated subcontractor(s), when and if they are again added to the BSA management structure, are included in the total fee set forth in Section B.3 for the second quarter FY13 through the fourth quarter of FY13;

3. The fee structure is to be based on individual Target outcomes and their associated weights as determined separately;

4. The Performance Goal of Science and Technology will act as a "gate," in that a final Grade of C (1.8) or above is required; there will be no fee if either Performance Goal outcome is D (1.0) or below.

**Maximum Fee**

The maximum fee that BSA can earn under this matrix for the period of October 1, 2012 through September 30, 2013 is established at $7,400,000 if the performance goal for Science & Technology is scored 4.1 or above and Management and Operations is scored 3.1 or above. The scoring process is described in Appendix B.

**Fee Matrix (Table 1)**

Appendix B of the Prime Contract describes the scoring system for BSA's performance. The "Percent S&T Fee Earned" from Appendix B is multiplied by the "M&O Fee multiple" from Appendix B to arrive at the total earned fee percentage. That percentage is then multiplied by the total available fee to arrive at BSA's earned fee. See Fee Matrix below.

| | **Table 1**<br>**Overall Fee Determination** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Period** | **Percent S&T Fee Earned from Appendix B, Table C.** | | **M&O Fee Multiplier from Appendix B, Table C.** | | **Overall Earned Performance-Based Fee** | | **Maximum Performance Fee** | | **Earned Fee** |
| 10/1/12 – 9/30/13 | 91 % | X | 100% | = | 91% | X | $ 7,400,000 | = | $6,734,000 |

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## ATTACHMENT J.12

## APPENDIX L

## COMPUTATION OF FEE
## FY 2014

## Applicable to the Operation of
## The Brookhaven National Laboratory

## Contract No. DE-AC02-98CH10886
## Modification No. M570

**Modification No. M570 – Fee determined and annotated to Appendix L**

**Modification No. M533 – Fee calculation established**

# APPENDIX L
## FY2014 FEE COMPUTATION
## FEE BASIS

For FY2014, the performance measure model has one class of performance measures in Appendix B of the Prime Contract that is directly associated with fee (fee bearing). This reflects the approved FY2014 Performance Goals, Objectives, and Notable Outcomes for Science & Technology and Management and Operations. The FY2014 fee structure is in consonance with the following guidelines:

1. The maximum fee is to be in consonance with fees paid for the operation of similar FFRDC laboratories and will have a single tier structure;

2. While there are no current integrated subcontractor(s), the fees for integrated subcontractor(s), when and if they are again added to the BSA management structure, are included in the total fee set forth in Section B.3.

3. The fee structure is to be based on individual outcomes and their associated weights as determined separately;

4. The Performance Goal of Science and Technology will act as a "gate," in that a final Grade of C (1.8) or above is required; there will be no fee if either Performance Goal outcome is D (1.0) or below.

**Maximum Fee**

The maximum fee that BSA can earn under this matrix for the period of October 1, 2013 through September 30, 2014 is established at $7,400,000 if the performance goal for Science & Technology is scored 4.1 or above and Management and Operations is scored 3.1 or above. The scoring process is described in Appendix B.

**Fee Matrix (Table 1)**

Appendix B of the Prime Contract describes the scoring system for BSA's performance. The "Percent S&T Fee Earned" from Appendix B is multiplied by the "M&O Fee multiple" from Appendix B to arrive at the total earned fee percentage. That percentage is then multiplied by the total available fee to arrive at BSA's earned fee. See Fee Matrix below.

| | **Table 1** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Overall Fee Determination** | | | | | | | | |
| **Period** | **Percent S&T Fee Earned from Appendix B, Table C.** | | **M&O Fee Multiplier from Appendix B, Table C.** | | **Overall Earned Performance-Based Fee** | | **Maximum Performance Fee** | | **Earned Fee** |
| 10/1/13 – 9/30/14 | 94 % | X | 100% | = | 94% | X | $ 7,400,000 | = | $6,956,000 |

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## ATTACHMENT J.12

## APPENDIX L

## COMPUTATION OF FEE
## FY 2015

## Applicable to the Operation of
## The Brookhaven National Laboratory

## Contract No. DE-AC02-98CH10886
## Modification No. M572

## Modification No. M572 – Fee determined and annotated to Appendix L

# APPENDIX L
## FY2015 FEE COMPUTATION
## FEE BASIS

For FY 2015, the performance measure model has one class of performance measures in Appendix B of the Prime Contract that is directly associated with fee (fee bearing). This reflects the approved FY 2015 Performance Goals, Objectives, and Notable Outcomes for Science & Technology and Management and Operations. The FY 2015 fee structure is in consonance with the following guidelines:

1. The maximum fee is to be in consonance with fees paid for the operation of similar FFRDC laboratories and will have a single tier structure;

2. While there are no current integrated subcontractor(s), the fees for integrated subcontractor(s), when and if they are again added to the BSA management structure, are included in the total fee set forth in Section B.3.

3. The fee structure is to be based on individual outcomes and their associated weights as determined separately;

4. The Performance Goal of Science and Technology will act as a "gate," in that a final Grade of C (1.8) or above is required; there will be no fee if either Performance Goal outcome is D (1.0) or below.

**Maximum Fee**

The maximum fee that BSA can earn under this contract, for the period of October 1, 2014 through January 4, 2015, is established at $1,850,000. In order to obtain the maximum fee, the Science & Technology performance goal must be scored 4.1 or above and the Management and Operations goal must be scored 3.1 or above. The scoring process is described in Appendix B.

**Fee Matrix (Table 1)**

Appendix B of the Prime Contract describes the scoring system for BSA's performance. The "Percent S&T Fee Earned" from Appendix B is multiplied by the "M&O Fee multiple" from Appendix B to arrive at the total earned fee percentage. That percentage is then multiplied by the total available fee to arrive at BSA's earned fee. See Fee Matrix below.

| | **Table 1**<br>**Overall Fee Determination** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Period** | **Percent S&T Fee Earned from Appendix B, Table C.** | | **M&O Fee Multiplier from Appendix B, Table C.** | | **Overall Earned Performance-Based Fee** | | **Maximum Performance Fee** | | **Earned Fee** |
| 10/1/14 – 1/4/15 | 94 % | X | 100% | = | 94% | X | $1,850,000 | = | $1,739,000 |

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**Brookhaven Science Associates, LLC**

# ATTACHMENT J.13

# APPENDIX M

# CONTRACT GUIDANCE FOR PREPARATION OF DIVERSITY PLAN

**Applicable to the Operation of**
**The Brookhaven National Laboratory**

**Contract No. DE-AC02-98CH10886**
**Modification No. M253**

# Appendix M

## Contract Guidance for Preparation of Diversity Plan

This Guidance is to assist the Contractor in understanding the information being sought by the Department for each of the Diversity elements and where these issues may already be addressed in the contract. To the extent these issues are already addressed in a contract, the Contractor need only cross reference the location.

### Work Force

This contract includes clauses on Equal Opportunity and Affirmative Action. The Contractor should discuss its policies and plans for implementation of these clauses in its operations. If the Contractor already has procedures in place, these should be discussed and copies provided.

### Educational Outreach

The Contractor should outline or discuss any programs already provided, or which it intends to provide, which will provide employees an opportunity to improve their employment skills and opportunities. These programs may already be discussed in the proposal submitted for this contract or in the contract itself and could include: educational assistance allowances, provision for outside training programs either during or outside regular work hours, and executive training programs for non-executive employees. The Contractor should also discuss any plans to participate in any programs supporting Historically Black Colleges and Universities, Hispanic Serving Institutions and Native American Institutions.

### Community Involvement and Outreach

An offeror's proposal or this contract may include a section dealing with community involvement and outreach activities. In that event, those sections may be cross referenced and do not need to be repeated. Contractor community relations activities could include support for the following activities: support for science, mathematics and engineering education; support for community service organizations; assistance to governmental and community service organizations and for equal opportunity activities; and community assistance in connection with work force reduction plans. The Contractor may provide support to these activities through direct sponsorship or making individual employees available to work with the specific community activity. The Contractor's Diversity Plan should discuss the Contractor's existing and planned activities promoting community involvement of its employees as well as the corporation.

Subcontracting

The contract contains FAR 52.219-9, “Small Business Subcontracting Plan” and other small business related clauses. The Contractor should briefly summarize its subcontracting plan. If the Contractor is participating, or plans to participate, in the Department’s Mentor-Protégé Program, this involvement, or planned involvement, should be summarized. Information concerning its subcontracting plans already submitted and approved do not need to be redeveloped or renegotiated.

Economic Development (Including Technology Transfer)

Many of the Department’s contracts include clauses dealing with technology transfer. Planning or activities developed under such clauses may apply to this element of the Contractor’s Diversity Plan. Additionally, some of the subcontracting activities planned by the Contractor with small business, veteran-owned small business, service –disabled veteran-owned small business, HUBZone small business concerns, small disadvantaged businesses, or woman-owned small businesses may be entered into for the purpose of assisting the economic development of or transferring technology to such a business. The Contractor’s Diversity Plan should outline and discuss its planned activities promoting economic diversification of the local community.