U.S. Department of Energy

and

Brookhaven Science Associates, LLC

Prime Contract No. DE-AC02-98CH10886

as of January 4, 2010

Applicable to the Operation of
BROOKHAVEN NATIONAL LABORATORY

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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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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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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 which was last modified in whole in Modification No. M120, effective September 29, 2004.

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), and shall perform in a quality, timely, and cost-effective manner the Statement of Work (SOW) set forth in Part I, Section C.4 of this contract.

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.104 - DEAR 970.5232-4 - Obligation of Funds (DEC 2000). Other financial limitations are also specified in Clause I.104 - DEAR 970.5232-4 - Obligation of Funds (DEC 2000).

B.3 - PERFORMANCE AND OTHER INCENTIVE FEES

In fulfillment of Clause I.82, 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 October 1, 2003 are as follows:

October 1, 2003 through September 30, 2004 - $7,000,000.00
October 1, 2004 through September 30, 2005 - $7,400,000.00
October 1, 2005 through September 30, 2006 - $7,400,000.00
October 1, 2006 through September 30, 2007 - $7,400,000.00
October 1, 2007 through September 30, 2008 - $7,400,000.00
October 1, 2008 through September 30, 2009 - $7,400,000.00
October 1, 2009 through January 4, 2010 - $1,850,000.00

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

PART I

SECTION C

DESCRIPTION/SPECS./WORK STATEMENT

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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) (the Laboratory). Brookhaven Science Associates, LLC (BSA) (the Contractor) shall, in accordance with the provisions of this contract, accomplish the missions and programs authorized by the U.S. Department of Energy (DOE) and manage and operate the Laboratory. The Laboratory is one of the DOE's Office of Science (SC) multi-program 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 DEAR 917.6.

This contract reflects the Department's effort to enable the Contractor to achieve more 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 more 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/outcomes and minimize "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 federal line management focused on a system-based approach to federal oversight with increased reliance on the results obtained from certified, nationally recognized experts and other independent reviewers.
Moreover, science and technology have improved peer review metrics, and incentives to achieve extraordinary results.

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 and safety 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., 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 develop a compelling plan to implement the DOE's SC strategic mission for the Laboratory, as defined below in C.4(b)(1) "Laboratory Goals." Within this Plan, the Contractor will map the Laboratory's core competencies to this Laboratory mission. The Contractor will highlight the unique roles the Laboratory fills in SC's capability to accomplish its missions and, more broadly, that of the Department. Upon approval by the Department, the Plan shall be captured within the Brookhaven Strategic Plan, which shall be updated annually in accordance with instructions to be issued by the BHSO Site Manager.

The Performance Evaluation and Measurement Plan, as called for within the clause entitled, "Standards of Contractor Performance Evaluation," identifies performance outcomes and indicators, 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.

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 is expected to 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 a Laboratory vision and long-term strategic plan that addresses 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 financially viable portfolio of research programs that generates the resources required to renew and enhance Laboratory research capabilities over time.

(e) Maintain a positive relationship with the broader 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 is expected to effectively and efficiently manage and operate the Laboratory through best-in class management practices designed to enable research while assuring the protection and proper maintenance of DOE research and information assets, the health and safety of Laboratory staff and the public, and the environment. The Contractor is expected to operate the Laboratory so as to meet all applicable laws, regulations, and requirements. The Contractor is expected to manage the Laboratory cost-effectively, striving to provide the greatest possible research output per dollar of research investment, and, accordingly, to develop and deploy management systems and practices that are designed to enhance research productivity and mission accomplishment consistent with meeting operational requirements.

C.3.2 - Performance Evaluation Expectations

The performance expectations of this contract are broadly set forth in this Section and reflect the DOE's minimum needs and expectations for Contractor performance. Specific performance work statements, performance standards (measures applied to results/outputs), acceptable performance levels (performance expectations), acceptable quality levels (permissible deviations from performance expectations), and related incentives shall be established annually, or

at other such intervals determined by the DOE to be appropriate. The related incentives may be monetary, or where monetary incentives are not desirable or considered effective, the Contractor's performance may be used as a factor which directly affects the past performance report card, or a factor in a decision to reduce or increase DOE oversight or Contractor reporting, as appropriate.

In performance under this contract, the Contractor shall be evaluated within the following general performance goals and expectations:

(a) Science and Technology - The Contractor will deliver innovative, forefront science and technology aligned with DOE strategic goals in a safe, environmentally sound, and efficient manner, and will conceive, design, construct, and operate world-class user facilities.

(1) Quality of Science and Technology: Produce original, creative scientific output that advances science and technology while achieving sustained scientific progress and impact that is recognized by the technical community.

(2) Relevance to DOE Missions and National Needs: Conduct quality scientific research that advances the missions of DOE and other national programs and contributes to U.S. leadership in international scientific and technical communities.

(3) Success in Constructing and Operating Research Facilities & Equipment: Provide quality strategic planning for facilities/equipment needed to insure the Laboratory can meet its S&T missions today and in the future, while effectively and efficiently maintaining current S&T facilities and equipment and providing effective, efficient operation of user facilities.

(4) Effectiveness and Efficiency of Research Program Management: Provide for effective capability stewardship, expert delivery, and success in relationship and risk management.

(b) Environmental Management - The Contractor will deliver "Best-In-Class" solutions in conducting the environmental management program and support DOE in its decision making for environmental cleanup. The Contractor is committed to completing the superfund portion of the cleanup by FY 2005 or subsequent DOE approved baseline. The cleanup will be protective of the environment, risk based, cost effective, and performed in an open exchange with the community, regulators, and other stakeholders. The Contractor will continue to keep the commitments agreed to in the

Memorandum of Understanding signed by Dr. Marburger and Mr. Holland on May 4, 2001 or as subsequently updated and/or superceded.

(c) Laboratory Management and Operations - The Contractor will manage and enhance operations and management processes to provide an effective and efficient work environment that enables the execution of the BNL mission in a manner responsive to customer and stakeholder expectations.

C.3.3 - Performance Objectives and Measures

The results-oriented performance objectives of this contract are stated in the Performance Evaluation and Measurement Plan (Appendix B), and/or in the Work Authorization Directives issued annually in accordance with the special clause entitled, “Long-Range Planning, Program Development and Budgetary Administration”. The Contractor shall develop a five-year Brookhaven Strategic Plan for the overall direction of the Laboratory and for the accomplishment of these objectives. The Plan shall be actively maintained and annually updated in accordance with strategic planning instructions issued by the DOE Site Office. The objectives shall be accomplished within an overall framework of management and operational performance requirements and standards contained elsewhere in this contract. To the maximum extent practicable, these requirements and standards have also been structured to reflect performance-based contracting concepts, including the clause entitled, “Application of DOE Contractor Requirement Documents”, which permits the Contractor to propose to the Contracting Officer alternative and/or tailored approaches based on national, commercial or industrial standards and best business practices to meet the outcomes desired by the Government.

DOE’s Quality Assurance/Surveillance Plan (QASP) for evaluating the Contractor’s performance under the contract shall consist primarily of the Performance Evaluation and Measurement Plan (PEMP) as called for within the Part II, Section I contract clause entitled, “Total Available Fee: Base Fee Amount and Performance Fee Amount”. The QASP establishes the process DOE shall use to ensure that the Contractor has performed in accordance with the performance standards and expectations. The QASP shall summarize the performance standards, expectations and acceptable quality levels for each task; describe how performance will be monitored and measured; describe how the results will be evaluated; and state how the results will affect contract payment.

The Contractor shall develop and implement a Laboratory assurance process, acceptable to the Contracting Officer, which provides reasonable assurance that the objectives of the Contractor’s management systems are being accomplished and that the systems and controls will be effective and efficient. The Contractor’s

assurance process shall reflect an understanding of the risks, maintain mechanisms for eliminating or mitigating the risks, and maintain a process to ensure that the management systems and their attendant assurance process(es) meet contract requirements.

C.4 - Statement of Work

(a) General

The Contractor shall provide the intellectual leadership and management expertise necessary and appropriate to manage, operate, and staff the Brookhaven National Laboratory (BNL, or the Laboratory); to accomplish the missions assigned by the Department of Energy (DOE or the Department) to the Laboratory; and to perform all other work described in this Statement of Work. 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 Statement is not intended to be all-inclusive or restrictive, but is intended to provide a broad framework and general scope of the work to be performed at the Laboratory. This Statement 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.

Work under this contract shall be conducted in a manner that protects the environment and assures the safety and health 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 depth to manage activities and projects throughout the life of a program; utilize appropriate technologies to reduce costs and improve performance; and maintain Laboratory facilities as necessary to accomplish assigned missions.

(b) Mission and Major Programs

The Laboratory's mission statement will be documented annually and updated as necessary in the Brookhaven Strategic Plan. In support of major DOE sponsor organizations, the central mission of the Laboratory is to provide national scientific leadership and technological innovation to support DOE's objectives and programs.

BNL is dedicated to basic and applied investigation in a multitude of scientific disciplines, including experimental and theoretical physics, medicine, chemistry, biology, environmental research, and engineering.

Major BNL facilities include:

Relativistic Heavy Ion Collider

A recently completed accelerator designed to collide intersecting beams of heavy ions in the search for a state of matter called quark-gluon plasma.

Alternating Gradient Synchrotron
An 843 ft. diameter particle accelerator used to propel protons and heavy ions to high energies for physics research. Auxiliary facilities include the 200-MeV Linac, AGS Booster, and Booster Applications Facility.

National Synchrotron Light Source
The National Synchrotron Light Source (NSLS) is one of the principal DOE synchrotron sources. It will continue to be an essential tool for research in many disciplines. The NSLS is devoted to producing synchrotron radiation, developing new radiation sources, and developing new applications of this radiation. It will continue to provide high-intensity infrared, ultraviolet, and x-ray radiation to approximately 70 user beamlines and serve a user community of more than 2400 users from over 400 national and international institutions.

Tandem Van de Graaff
The Tandem Van de Graaff accelerators are used to bombard materials with ions for manufacturing and testing purposes. They are also used to supply RHIC with heavy ions.

High-Field MRI Facility
Used for human medical imaging studies, this facility houses a nuclear magnetic resonance instrument with a 4 Tesla whole-body magnet capable of generating one of the highest field strengths in the world for human study.

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

Positron Emission Tomograpahy (PET) Facility
The PET facility is used to image the brain for studies on the treatment of human addiction, the aging process and drug research and development.

Laser Electron Accelerator Facility (LEAF)
A picosecond laser-electron accelerator facility at BNL's Center for Radiation Chemistry Research.

Cyclotrons
Operated by the Chemistry Department, the 60-inch cyclotron and 40-inch "medical cyclotron" are used for the production of radiotracers for use in PET and MRI studies.

Transmission Electron Microscope
Operated by the Energy Sciences & Technology Department, this 300 kV field emission electron microscope is a unique probe for materials characterization.

Scanning Transmission Electron Microscope
Operated by the Biology Department, this is a custom-built electron microscope optimized for imaging unstained biological molecules with minimal radiation damage.

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) Laboratory Goals

The Laboratory's mission addresses four distinct goals: (i) performance of research in High Energy and Nuclear Physics, in Condensed Matter Physics, Chemical, and Materials Sciences, in Plant, Structural, and Environmental Biology, in Nuclear Medicine and Positron Emissions Tomography (PET) and Magnetic Resonance Imaging (MRI), and in Energy and Environmental Sciences. The Laboratory will also contribute significantly to the DOE's applied missions in Energy Resources, Environmental Quality, and National Security; (ii) development and safe and effective operation of unique national experimental facilities that are available to qualified investigators; (iii) assistance in the education and training of future generations of scientists and engineers to promote national science and education goals; and (iv) transfer of knowledge and technological innovations and fostering of productive relationships among Laboratory research programs, universities, and industry to promote national economic competitiveness. The Contractor shall provide for the participation of the community and other stakeholders in the performance of its mission.

(2) Primary Program Sponsors

Work under this contract includes scientific and technical programs sponsored by major DOE organizations. The primary sponsor of work at BNL is the Office of Science (SC), DOE. Other DOE organizations that sponsor work at BNL include:

Nonproliferation and National Security
Environmental Management
Energy Efficiency and Renewable Energy
Nuclear Energy
National Nuclear Security Administration
Counter Intelligence
Fossil Energy
Environment, Safety and Health

Additionally, the Contractor may be authorized to pursue other DOE and non-DOE missions [most notably those of the Department of Homeland Security (DHS), Nuclear Regulatory Commission (NRC), the National Institutes of Health (NIH), and the National Aeronautics Space

Administration (NASA)] that derive from the Laboratory's missions and utilize the Laboratory's core competencies.

A summary of current Laboratory programs follows. Descriptions of major programs are to be updated annually in the Brookhaven Strategic Plan.

(3) Office of Science Programs

(i) Nuclear Physics

Perform frontier research in theoretical and experimental 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 Office of Science, Nuclear Physics program; operate the National Nuclear Data Center and carry out construction projects in the nuclear physics area as assigned.

In support of this mission, the contractor will operate large user facilities (AGS and RHIC) and carries on an in-house program of research in theoretical and experimental nuclear physics. Support of RHIC computing is provided by the RHIC Computing Facility at BNL. The National Nuclear Data Center is based at BNL. 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

Perform frontier research in theoretical and experimental 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 Office of Science, High Energy Physics program and carry out construction projects in the high energy physics area as assigned.

In support of this mission, the contractor will operate accelerator facilities (AGS and ATF) for high energy physics users and carries out an in-house program of research in theoretical and experimental high energy physics plus accelerator science. BNL collaborates in the D0 experiment at Fermi National Laboratory. BNL is the Host Laboratory for the US ATLAS Detector Project & Research Program and operates the ATLAS Tier-1 Computing Center. 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 conduct forefront research in broad areas of materials sciences, chemical sciences, 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, the Laser Electron Accelerator Facility, and the forthcoming Center for Functional Nanomaterials – 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.

(iv) Biological and Environmental Research. The Contractor shall conduct programs on structural biology, nuclear medicine and functional imaging, molecular and cellular biology, climate, atmospheric and carbon sciences, and environmental remediation science and bioremediation that build on the unique facilities and expertise available at the Laboratory.

(v) Computational and Technology Research. The Contractor shall conduct computational research including applied mathematical sciences, computer sciences, and computational sciences. The research shall emphasize both excellence and relevance, such that advances in mathematics and computer science help the Department to 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 the best researchers, irrespective of where they are located, be that within the Laboratory, at other laboratories, or at universities, within the U.S. or around the world.

The Contractor shall conduct programs in technology research, employing various modes of working with industrial partners, such as multi-year, cost-shared, cooperative research and development agreements and quick response projects which allow access by small businesses to the Laboratory's research capabilities. These projects are implemented through a variety of flexible mechanisms, such as personnel exchanges and technical assistance to and consultations with small businesses. Research topics shall be chosen that emphasize both excellence in basic research and relevance to industrial partners. The Contractor shall also conduct innovative research to explore the scientific feasibility of novel energy-related concepts in a principal-investigator mode. In this case, research topics shall be chosen such that within three years they can be taken from basic concept to the point that choices can be made about their value for development.

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.

(4) <u>Environmental Management</u>

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 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, implementability, schedule and public acceptability.

Specific responsibilities include:

Environmental Restoration. 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 Listing. Contractor support shall be provided to DOE as requested by the Contracting Officer.

(5) Technology Transfer Programs

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 energy science and technology R&D. Such cooperation may include 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;

(6) University and Science Education Program

The Contractor shall work with colleges and universities, with special emphasis on Historically Black Colleges and Universities/Minority Institutions, and initiate new programs to enhance science and mathematics education at all levels. The Contractor shall encourage participation by a diverse group of faculty and students in Laboratory programs to bring their talents to bear on important research problems and contribute to the education of future scientists and engineers. The Contractor shall also conduct programs for students and faculty to enrich mathematics and science education. A particular purpose of these programs is to encourage members of under-represented societal groups to enter careers in science and engineering.

The Contractor shall maintain its programs of cooperation with the academic and educational community and with nonprofit research institutions for the purpose of promoting research and education in scientific and technical fields of interest to DOE's programs. This cooperation may include, but is not limited to, such activities as: (i) joint experimental programs with colleges, universities, and nonprofit research institutions; (ii) interchange of college and university faculty and Laboratory staff; (iii) student/teacher educational research programs at the pre-collegiate and collegiate level; (iv) post-doctoral programs; (v) arrangement of regional, national, or international professional meetings or symposia; (vi) use of special Laboratory facilities by colleges, universities, and nonprofit research institutes; or, (vii) provision of unique experimental materials to colleges, universities, or nonprofit research institutions or to qualified members of their staffs.

(7) International Collaboration

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

(8) 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.

(c) Administration and Operation of the Laboratory

The Contractor is responsible for the operation, including management and maintenance, 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, from time to time by DOE. 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.35 or as otherwise authorized by the Contracting Officer.

(1) Strategic Planning

The Contractor shall perform overall integrated planning, including strategic planning and the development of an annual strategic plan, covering all programs, issues and needs including, acquisition, upgrades, and management of Government-owned, leased or controlled facilities, supporting infrastructure and real property located at the site.

(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. Accordingly, the Contractor shall: (i) Take necessary actions, to minimize injuries and/or fatalities and prevent worker exposures and environmental releases in excess of established limits; (ii) Establish clear environmental, safety, and health priorities and manage activities in proactive ways that effectively increase protection to the environment and to public and worker safety and health; and, (iii) Carry out all activities in a manner that complies with health, safety and environmental regulations; minimizes wastes; and complies with DOE Directives.

The Contractor shall maintain a system that clearly communicates the roles, responsibilities, and authorities of line managers, and that holds line managers accountable for work practices and performance in a manner that ensures protection of workers, the public and the environment. Specifically, (i) the Laboratory Director shall hold direct reports accountable for strong leadership and management of risks within their area of responsibility; (ii) line managers shall be responsible for understanding the hazards associated with, and controls necessary for, safe performance of work; and (iii) the ES&H program shall be operated as an integral, but visible, part of how the organization conducts business, including prioritizing work and allocating resources based on risk reduction.

The Contractor shall maintain an effective management systems to identify deficiencies, resolve them in a timely manner, ensure that corrective actions are implemented (addressing the extent of conditions, root causes, and measures to prevent recurrence), and prioritize and track commitments and actions.

The Contractor shall maintain a structured, standards-based approach to planning and control of work including identification and implementation of ES&H standards and requirements that are appropriate for the work to be performed and related hazards.

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, 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/elimination of workplace hazards. Contractor shall, similarly, assure that subcontractor employees are trained and qualified on job tasks, hazards, and DOE and BNL Departmental safety policies, expectations, and requirements, and shall flow applicable ES&H requirements down to subcontractors.

The Contractor must ensure that a Chronic Beryllium Disease Prevention Program (CBDPP) is prepared for the facility that meets the general CBDPP requirements specified in 10 CFR Part 850 – Final Rule issued December 8, 1999.

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/communications program).

(ii) Continued indications of agreement within the community that their substantive concerns (e.g., groundwater contamination) have been or are being adequately addressed.

(iii) Evidence of the community's increased understanding and respect for the Laboratory mission and contribution to science and technology.

(iv) Reports 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 Science Communications objectives.

(vi) Evaluations of the success of community involvement through periodic surveys.

In furtherance of the foregoing objectives, DOE and the Contractor agree to continue to carryout communications and community involvement activities to achieve the following:

- Brookhaven's and DOE's vision, mission, performance and contributions to science, technology and national competitiveness in the global marketplace are recognized and valued;

- Brookhaven and DOE are trusted and trusting, both internally and externally;

- Brookhaven and DOE internal and external communications are timely, open and of high quality;

- Brookhaven and DOE listen and respond to stakeholders, customers and partners in a fair and open process that encourages participation;

- All members of the Brookhaven and DOE families serve the communications needs of their internal and external stakeholders and customers knowledgeably and responsively; and

- All members of the Brookhaven and DOE family see themselves as part of a community of service sharing a common vision and applying core values.

Refer to Clause I.64 - DEAR 952.204-75 - Public Affairs, for more detail.

(4) Maintenance

In accordance with DOE standards, the Contractor shall maintain physical assets in a manner which ensures continuity of operation, fulfillment of program requirements, and ensures the property will satisfy the requirements of current use and DOE guidance.

(5) Business Management

(i) Human Resources Management. The Contractor shall establish and maintain human resource systems which attract and retain outstanding employees, and continually motivate them to achieve high productivity in scientific research and Laboratory operations.

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 which 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.

(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 and may, but only when authorized by DOE, enter into subcontracts for the performance of any part of the work under this Contract.

(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.

(v) Other Administrative Services. The Contractor shall provide other administrative services, including logistics support to the DOE Brookhaven Site Office.

(6) Safeguards and Security. The Contractor shall provide a safeguards and security program for the protection of Laboratory assets. The level of protection must be appropriate and cost-effective in response to the value of the assets, the potential threat and DOE directives and standards. The Contractor shall provide all the personnel necessary for a protective force consisting of uniformed guards and security inspectors.

(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; labor relations; and litigation and claims.

(8) Emergency Management. The Contractor shall maintain an emergency management system to include emergency preparedness plans and procedures, and occurrence notification and reporting system, operation of an Emergency Operations Center and emergency response capabilities for local, regional, and national missions to include a Radiological Assistance Program.

(9) 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. 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.

(10) 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 the DOE, EM and CH 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.

(11) Self-Assessment Program. The Contractor shall conduct an ongoing self-assessment process that continually samples and validates actual program practice with prescribed DOE and Laboratory policies, standards and procedures.

(12) 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.

(d) General Responsibilities of the Parties

(1) DOE Responsibilities

DOE is responsible for all activities conducted under this contract and for assuring that Government funds are properly and effectively utilized. Accordingly, the proper discharge of such responsibilities requires that DOE shall have the authority to:

(i) exercise appropriate general control over the contract work;

(ii) have full access to information concerning performance of such work;

(iii) conduct periodic and other appraisals of programmatic, project and managerial objectives and milestones and consult with the Contractor regarding these and other matters of mutual interest; and

(iv) in accordance with other provisions of the contract, have the authority to review and approve major policies and procedures affecting administrative and operating areas.

(2) Contractor Responsibilities

The Contractor shall be responsible for the diligent and vigorous performance of the contract work in accordance with its best scientific, technical, managerial and administrative judgments. Accordingly, the proper discharge of such responsibility requires that the Contractor shall:

(i) formulate and establish Laboratory policies and programs;

(ii) exercise appropriate managerial control over the programmatic and operational activities of the Laboratory;

(iii) respond, in a timely manner, to recommendations made by DOE as a result of its appraisals;

(iv) have the right to be kept continually advised, where pertinent, of DOE's current short- and long-term objectives, and to confer with

DOE with respect thereto and in connection with the formulation of plans or policies which may have a significant effect upon the Laboratory;

(v) establish policies and objectives for cooperative research and educational programs between the scientific and technological community and the Laboratory; and

(vi) cooperate in every reasonable way with individuals or groups whose expert or consultative services DOE may choose to use to review and evaluate the scientific, technical, or other aspects of the contract work.

C.5 - PLANS AND REPORTS

The Contractor shall prepare, submit, or disseminate otherwise public financial, schedule, scientific, and technical performance plans and reports; and other information and deliverables consistent with the needs of the various programmatic sponsors and other customers, or as required elsewhere in this Contract or as specifically required by the Contracting Officer. These periodic plans and reports shall be submitted at the intervals, and 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 is 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

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 Science (BES)

A. This modification increases the obligation of American Recovery and Reinvestment Act of 2009 funds by $759,000.00 from $157,810,000.00 to a revised total of $158,569,000.00. The value of each project is indicated separately below.

B. Clause I.104 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

C. The specific work funded by this modification is 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.

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 Project Code 2005010	Basic Energy Science – NSLS-II

2. Nanoscale Science Research Centers ($4.810M + $.759M = revised 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

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 and Rev 01 Project Code 2005040	Basic Energy Science – 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

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 Project Code 2005045	Basic Energy Science – Light Source Improvements

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, 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.

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. This modification increases the obligation of American Recovery and Reinvestment Act of 2009 funds by $17,973,000.00 from $19,200,000.00 to a revised total of $37,173,000.00. The increased obligation is for the SLI ISB project. The value of each project is indicated separately below.

B. Clause I.104 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

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

Science Laboratories Infrastructure - General Plant Projects (GPP)

Statement of Work

1. Mission Critical Building Roofing ($5.5M + $3.5M = revised TEC $9.0M)

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).

2. Mission Critical Building Mechanical & Electrical Upgrades ($5.4M + $1.6M = Revised TEC $7.0M)

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).

3. Chemistry, Bldg 555, Fire Safety Corrections (unchanged TEC $2.5M)

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.

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 Project Code 2005380	Science Laboratories Infrastructure - General Plant Projects (GPP)

Science Laboratories Infrastructure - SLI Construction, Interdisciplinary Science Building (ISB)

Statement of Work

1. **Interdisciplinary Science Building (ISB), Phase I ($0.7M + $17.973M = Revised TEC $18.673M)**

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

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

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 and Rev 02 Project Code 2005370	Science Laboratories Infrastructure - SLI Construction, Interdisciplinary Science Building (ISB), Ph.I

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.

Note: Paragraph F pertains to the ISB, Ph.I 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.6.3 –Recovery Act Project Category 3:
Environmental Management (EM)
Accelerated Cleanup of Surplus Nuclear Facilities

A. This modification increases the obligation of American Recovery and Reinvestment Act of 2009 funds by $8,355,000.00 from $34,000,000.00 to a revised total of $42,355,000.00 for the EM project activities listed below.

B. Clause I.104 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

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

3. Environmental Management Projects ($34M + $8.355M = TEC $42.355M)

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 of the high Flux Beam Reactor stack and fan house, and isolation of Building 750*
- *Removal of the A/B waste lines*
- *Removal of the Brookhaven Graphite Research Reactor graphite pile*

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
FY09 – EM BNL ARRA Rev EM-0001-9 Project Code 2002010	Accelerated Cleanup of Surplus Nuclear Facilities

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. 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 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.

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.

G. FUNDING CONSTRAINT**:** Brookhaven Science Associates (BSA) is to begin work immediately. However, BSA is authorized to incur costs **not to exceed 30%** ($10.2M) of the initial funding placed on the contract for Recovery Act. The Contractor shall notify the Contracting Officer 45 calendar days prior to costing 30% of the initial funding placed on the contract for Recovery Act. Once DOE has decided whether or not the Recovery Act work should continue, the Contracting Officer shall either notify the Contractor by letter authorizing the Contractor to proceed or will notify the Contractor in sufficient time to allow orderly succession of work.

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

A. This modification increases the obligation of American Recovery and Reinvestment Act of 2009 funds by $1,808,000.00 from $10,758,000.00 to a revised total of $12,566,000.00. This modification also revises Attachment A of Work Authorization to PHENIX Silicon Vertex MIE, revises the Statement of Work to Enhanced Utilization of Isotope Facilities, and adds a new project entitled "Nuclear Science Workforce." The value of each project is indicated separately below.

B. Clause I.104 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

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

1. PHENIX Silicon Vertex MIE ($0.225M + $.025M = revised 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.

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 and Rev 01 and Rev 02 Project Code 2005200	Nuclear Physics – PHENIX Silicon Vertex MIE

2. PHENIX Forward Vertex Detector MIE ($.767M + $.2M = revised TEC $.967M)

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

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 and Rev 01 and Rev 02 Project Code 2005210	Nuclear Physics – PHENIX Forward Vertex Detector MIE

3. <u>Enhanced AIP Funding at NP User Facilities ($7.2M + $.8M = revised TEC $8M)</u>

<u>Statement of Work</u>: 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 RHIC.

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 and Rev 01 Project Code 2005220	Nuclear Physics – Enhanced AIP Funding at NP User Facilities

4. <u>Enhanced Utilization of Isotope Facilities ($.225M + $1.316M = revised TEC $1.541M)</u>

<u>Statement of Work</u>: These funds are provided under ST-60-0103 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.

In addition, 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 PI is Leonard Mausner. 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 PI is Dmitri G. Medvedev. The project period is October 2009 – October 2011.

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 Project Code 2005230	Nuclear Physics – Enhanced Utilization of Isotope Facilities

5. Nuclear Science Workforce ($1.808M)

Statement of Work: These funds ($1.4M) 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 ($.408M) 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.

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 Project Code 2005270	Nuclear Physics – Nuclear Science Workforce

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

A. This modification increases the obligation of American Recovery and Reinvestment Act of 2009 funds by $772,800.00 from $115,000.00 to a revised total of $887,800.00. The value of each project is indicated separately below.

B. Clause I.104 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

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

1. Federal Lab Support for Recovery Act Transactions FY09 ($50K + $65K = Revised TEC $115K)

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.

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 and Rev 01 Project Code 2004040	Federal Lab Support for Recovery Act Transactions FY09

2. <u>EGS R&D ($772.8K)</u>

<u>Statement of Work:</u>

Original Scope: 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. ($200.4K)

Rev 01: 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. ($347.4K)

Rev 02: 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. ($225K)

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 and Rev 01 and Rev 02 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. This modification increases the obligation of American Recovery and Reinvestment Act of 2009 funds by $6,000,000.00 from $55,000.00 to a revised total of $6,055,000.00. The value of each project is indicated separately below.

B. Clause I.104 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

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

1. Advanced Technology R&D Augmentation ($.055M)

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 KACH139 submitted 05/15/2009.

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 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.

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 and Rev 01 Project Code 2005175	High Energy Physics – Long Baseline Neutrino Experiment

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

A. This modification obligates American Recovery and Reinvestment Act of 2009 funds in the amount of $8,000.00 for the ARPA-E Project listed below.

B. Clause I.104 DEAR 970.5232-4 "Obligation of Funds" has been adjusted accordingly.

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

1. <u>Brookhaven National Laboratory (BNL) – Reviewer for ARPA-E ($.008M)</u>

<u>Statement of Work:</u> 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 their review findings to the responsible Assistant Secretary, (acting) Director, or other senior program official.

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 Project Code 2010000	Brookhaven National Laboratory (BNL) Reviewer for ARPA-E

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.

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SECTION D

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SECTION D - PACKAGING AND MARKING

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.

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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

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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

(a) Certification –

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.

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SECTION F

DELIVERIES OR PERFORMANCE

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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, 2010, 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 - 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

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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.73A - 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.73A - 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
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.

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SECTION H

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SPECIAL CONTRACT REQUIREMENTS

CLAUSE H.1 - LABORATORY FACILITIES

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

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

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

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

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 - DEAR 970.70 AGREEMENTS TO PERFORM NON-DOE ACTIVITIES

(a) Subject to the prior written approval of the Contracting Officer, and in compliance with applicable requirements imposed by the Contracting Officer pursuant to clause I.79 - Laws, Regulations, and DOE Directives, the Contractor may, through the Laboratory, perform non-DOE activities which are consistent with and complementary to the DOE's mission and the Laboratory's mission under the contract, involving the use of Laboratory equipment, facilities, or personnel. Such proposed work may be for non-Federal entities or other Federal agencies. The request for such approval shall set forth, in detail, the nature of the outside work to be performed, the Laboratory equipment, facilities or personnel required, and the financial and contractual arrangements proposed to pay for the cost of such work. The Contracting Officer shall consider such a request, being guided, among other factors, by the current or future needs of DOE's programs for the equipment, facilities, or personnel to be utilized in the performance of such outside work. Primary considerations in approving such work are that the proposed work will not place the Laboratory in direct competition with domestic non-Federal entities, will not adversely impact execution of the Laboratory's assigned programs, and will not create a potentially detrimental future burden on commitment of DOE resources. If the Contracting Officer approves such a request, the Contractor and DOE shall agree upon the terms and conditions which would apply to such work. This agreement may provide for receipt by the Government of all or part of such sum as represents the payment to be received by the Contractor for such outside work; provided, however, that DOE may contribute the use of certain equipment, facilities, or personnel to the Laboratory for the performance of such outside work if it determines that it desires to foster the activity in some measure. Except as otherwise approved by DOE, all clauses of this contract shall be deemed to be

applicable to the performance of such work. This Clause shall not be construed as amending or superseding the requirements of clause C.4, Statement of Work, set forth in Part I, Section C.

(b) The Contractor shall promptly advise the Contracting Officer of any advance notices of, or solicitations for, a major system acquisition requirement received from other Federal agencies pursuant to FAR 34.005 which would logically involve DOE facilities or resources operated or managed by the Contractor. The Contractor shall not respond to or otherwise propose to participate in response to the requirements of such solicitations unless the Contractor has obtained written approval of the Contracting Officer.

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) Costs incurred or expenditures made by the Contractor, as directed, approved or ratified by the Contracting Officer and not unallowable under any other provisions of this contract.

(g) 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.

(h) Pursuant to Clause I.11 - 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.

(i) The Contractor may use space at Brookhaven National Laboratory, rent free, for the maintenance of a corporate office. The cost of normal support for the office, including, without limitation, furniture, equipment, supplies, maintenance, custodial services, utilities, accounting, procurement, fiscal, and other support services shall be deemed allowable costs under the contract. Nothing herein shall be construed as making a cost specifically unallowable under any other terms of this contract allowable. Furthermore, should it appear that there will be a substantial increase in the space required for the corporate office, or in the expense of the support functions as described above, the Contractor will bring such increase to the attention of DOE and the matter will be subject to reexamination by DOE and the Contractor. Also, the allocation of the cost of Contractor corporate staff for travel expenditures directly incurred for work performed under the contract shall be allowable costs under the contract.

(j) Pursuant to Clause I.81 - 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.

(k) Pursuant to Clause I.107 - DEAR 970.5232-7 - Financial Management System (DEC 2000), the financial management system covered in Clause I.107 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.

(l) DOE and the Contractor have agreed on the following Brookhaven National Laboratory (BNL) Fiscal Office Cashier's policy regarding the cashing of personal checks:

Drafts for BNL payroll, travel advances, travel expense reimbursement, and honoraria/stipends drawn on the JP Morgan Chase Bank (or other contracted DOE Special Financial Institution), are honored by the Teacher's Federal Credit Union at the on site branch office for anyone presenting an employee or guest identification card. Therefore, the BNL Cashier will cash such drafts only during such hours that the Credit Union is not open for business. These instances will include, for example, but not necessarily be limited to, the cashing of drafts for BNL shift workers.

Visitors and guests of the Laboratory can cash personal checks at the BNL Cashier, if they are drawn on financial institutions other than Teachers Federal Credit Union, up to a single check maximum limit of $200. In certain unusual circumstances, at the discretion and with the approval of the Laboratory Fiscal Officer or Acting Fiscal Officer, personal checks of employees as well as checks in excess of $200, as required by the circumstances, may be cashed by the BNL Cashier.

Such instances of check cashing for employees, visitors and guests shall be performed at no cost to those persons, and the incidental operating costs related thereto shall be deemed allowable costs under the contract.

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.

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 - CARE OF LABORATORY ANIMALS

(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).

(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.

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

(b) ”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.

(c) 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).

(d) The term "DOE Directive" means DOE Orders and Notices, Modifications thereto, and other forms of directives, 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) The term “DOE” means the Department of Energy, “FERC” means the Federal Energy Regulatory Commission and “NNSA” means the National Nuclear Security Administration.

(f) "CH" means the DOE Office of Science, Chicago Office.

(g) "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.

(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 "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.

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.114 – 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-HEALY 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 $10,000.00 and is otherwise subject to the Walsh-Healy 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 – RESERVED

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, and a formal self-evaluation report to the DOE at year-end. Specific due dates and formats for the above-mentioned briefings and reports shall be agreed to by the Laboratory Director and the DOE Area Office/Site Manager. In addition, the year-end report must provide:

(i) an overall summary of performance for the performance period;

(ii) performance ratings for each PEMP element and the Laboratory overall; and

(iii) a summary of key strengths and opportunities for improvement.

(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., OIG, GAO, 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.

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.

The Government may contact, as necessary, Jeffery Wadsworth, serving as Chair of Brookhaven Science Associates Board, the responsible corporate official who is accountable for the Contractor regarding Contractor performance issues.
ractor regarding Contractor performance issues.

CLAUSE H.21 - CONTRACTOR COMPENSATION, BENEFITS AND PENSION

The Contractor shall develop, implement and maintain formal policies, practices and procedures to be used in the administration of its compensation system including a compensation system self-assessment plan consistent with 48 CFR 31.205-6, "Compensation for personal services." The Contractor's compensation system and methods shall be fully documented, consistently applied, and acceptable to DOE in accordance with 48 CFR 31.205-6 and DEAR 970.3102-05-6, Compensation for Personal Services.

Until DOE has approved the Contractor's compensation system, the Contractor shall submit the following to the Contracting Officer for a determination of cost reimbursement under the contract:

(a) Any additional Compensation System self-assessment data that may be needed to validate and approve the Compensation System.

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

(c) Annual Compensation Increase Plan (CIP).

(d) Individual compensation actions, as required in the contract including initial and proposed changes to base salary and or payments under an Executive Incentive Compensation Plan submitted on the Application for Contractor Compensation Approval, DOE F 3220.5.

(e) Any proposed establishment of an incentive compensation plan.

The Contractor shall provide the Contracting Officer with the following reports:

(a) 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.

(b) At the time of contract award and upon any change thereafter, a list of the top five most highly compensated executives and their salaries.

(c) Annual Report of Contractor Expenditures for Employee Supplemental Compensation through the Department Workforce Information System (WFIS), compensation and benefits module.

(d) A Self-Assessment of the total compensation program using mutually agreed to compensation system performance measures that include performance targets in the following areas: customer, financial, internal business, and learning and growth.

DOE will conduct periodic appraisals of Contractor performance with respect to compensation system implementation. Such appraisals when approved by the Contracting Officer, will be conducted by either DOE validation of contractor self assessments of compensation system performance, or third party expert review.

(a) Benefit Programs

The Contractor shall implement an employee benefits program that supports at a reasonable cost the effective recruitment and retention of highly skilled workforce at the Department facility. No presumption of allowability will exist when the Contractor implements changes to its existing employee benefits program until the Contracting Officer makes a determination of cost reimbursement for reasonable changes to the program.

(1) Submit to the Contracting Officer for a determination of cost reimbursement a periodic evaluation of the Contractor's Employee Benefits Program based on two professionally recognized performance measure:

(i) An Employee Benefits Value Study (ben-val) Measure every two years which is an actuarial study of the relative value (RV) of the benefits programs offered by the Contractor measured against the RV of benefit programs offered by comparator companies approved by the Contracting Officer. To the extent that the value study does not address post-retirement benefits (PRB) other than pension, the Contractor shall provide separate PRB cost and plan design data comparison with external benchmarks for nationally recognized and Contracting Officer approved survey sources.

(ii) An Employee Benefits Cost Survey Comparison (cost survey) Method every year that analyzes the Contractor's employee benefits cost 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. Chamber of

Commerce (CoC) Annual Employee Benefits Cost Survey or other Contracting Officer approved broad based national survey.

(2) When net benefit value and/or per capita cost exceed the comparator group by more than 5 percent, submit corrective action plans to achieve a net benefit value and per capita cost not to exceed the comparator group by more than 5 percent.

(3) When required by the Contracting Officer, submit an analysis of the specific plan costs that are above the per capita cost range and a corrective action plan to achieve conformance with a Contracting Officer directed per capita cost range.

(4) Implement corrective action plans determined to be reimbursable by the Contracting Officer to align employee benefit programs with the target in paragraph (a).

(5) Annually submit the Report of Contractor Expenditures for Employee Supplemental Compensation.

(b) Retirement Plans

(1) Employees of the Brookhaven National Laboratory (BNL) may participate in the defined contribution retirement plans as described in items (i) and (ii) below. With respect to the plans, the Contractor and the Department of Energy (DOE) agree as follows:

The DOE will reimburse the Contractor for necessary and reasonable costs involved in implementing, administering, by the Contractor and Service providers and funding these approved retirement plans. Any change in plan benefits and/or costs not required to maintain qualification under Section 401 of the Internal Revenue Code will require Contracting Officer approval. The Contractor will notify the DOE of any change required solely to maintain qualification under Section 401 of the Internal Revenue Code.

Provisions of this section are subject to successful negotiations with the Program's service providers including, but not limited to investment organizations, insurance companies, etc. Further, these provisions will be subject to and superseded by any law or regulation with which they might conflict.

While it is expected that this Plan will continue indefinitely, the BSA Board of Directors reserves the right to modify or discontinue them at any time, provided, however, that such modification or discontinuance shall not be

applicable to this contract unless approved by the Department of Energy. Any discontinuance or modification of the Plan shall not affect the benefits accrued by participants prior to the date of discontinuance or modification.

(i) "Regular Retirement Plan." BSA will provide its eligible employees with a defined contribution type retirement plan, with BSA contributions being made at the participants' election to one or more of the following investment organizations: Teachers Insurance and Annuity Association (TIAA) and the College Retirement Equities Fund (CREF), Fidelity Investment Service Company, and the Vanguard Group.

Effective 1-1-07, employees who were not participating in the plan on December 31, 2006 will be enrolled upon the earlier of (a) attainment of age 21 and the completion of one year of continuous service or (b) the attainment of age 30 and the completion of 6 months of continuous service, and is not a part-time or temporary employee. Employees who work on a part-time, temporary or irregular basis must complete 1000 hours of service each year to be credited with a year of service. Prior service credit for participation shall be given for comparable eligible service with Associated Universities Incorporated (AUI) and for employees who transfer directly to BSA from Research Foundation of State University of New York (RFSUNY), the University of Stony Brook (USB), and Battelle Memorial Institute (BMI).

BSA shall contribute for each participant an amount equal to 10 percent of base pay.

BSA shall make its contributions to TIAA and/or CREF, Fidelity Investments, or Vanguard in such percentages as the participant may elect. The percentages of the combined sum may be changed by the participant on a monthly basis.

Contracts issued by the investment organizations as part of the Retirement Plan shall be issued to the participant. The rights and benefits of each participant shall be those set forth in the contracts.

The contracts of each employee whose employment by BSA is terminated (other than by death) shall remain in force. Participants who terminate employment from BSA are entitled to have the investment organization repurchase their contracts in accordance with the rules and regulations in effect at the time of termination.

Upon retirement, a number of annuity settlements are available to the employee, as described in the various investment organizations' booklets. In addition, a retirement option of a lump-sum settlement up to the maximum provided by the contract provisions of the various investment organizations is permitted.

(ii) "Voluntary 401(k) Retirement Plan." Employees may elect to make voluntary contributions to one or more of the 401(k) program options, to the extent permitted by law, in order to supplement the retirement income available to them from Social Security and from the BSA Regular Retirement Plan. Options include: a 401(k) individual accounts with Teachers Insurance Annuity Association (TIAA) and/or the College Retirement Equities Fund (CREF); and/or a 401(k) accounts invested in regulated investment companies (mutual funds). These voluntary retirement income programs, and the manner in which employee funds may be automatically transmitted to them by the Payroll Office, are described below.

Contributions by Salary Reduction. The 409(a)plan allow employees to elect a deferred income tax option rather than, or in addition to, the salary deduction provision. The option allows for the deferral of income tax payments on the employee's contributions until after the elected deferral period. Under this option, each employee may elect to have base salary reduced by an amount that is not more than the maximum permitted by the Internal Revenue Code. At the election of the participant, the amount of the reduction shall be transmitted by BSA, on behalf of the employee, either to a TIAA and/or CREF retirement annuity, and/or to an eligible investment account, in such proportion as the participant may designate.

TIAA and/or CREF retirement annuities may be purchased through the deferred income tax option as well as through the salary deduction program. The 401(k) plan allows employees who elect to make voluntary contributions through payroll deduction to invest such funds in TIAA and/or CREF retirement annuities, in such percentages as the participant may elect, to the maximum percent permitted by the Internal Revenue Code. These 401(k) percentages may be changed by the participant on a monthly basis. Contributions to TIAA/CREF retirement annuities purchased through payroll deduction will be in separate accounts from annuities purchased under the BSA Retirement Plan.

(2) The Contractor shall submit to the DOE copies of each IRS Form 5500 and accompanying schedules, an annual accounting report and other information

concerning the defined contribution plans which the Contracting Officer may require. The annual accounting report shall include a development of aggregate forfeitures and all plan data for individuals generating those forfeitures.

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 to be incurred are consistent with the Contractor's documented Human Resources total compensation and benefits program and are deemed allowable pursuant to FAR 31.205-6, as supplemented by DEAR 970.3102-05-6.

(A) For proposed changes to pension plans and pension plan funding, an analysis of the impact of any proposed changes on actuarial accrued liabilities and an analysis of relative benefit value; and,

(B) The Contractor shall obtain the advance written approval of the Contracting Officer for any non-statutory pension plan changes that may increase costs or liabilities, and any proposed special programs (including, but not limited to, plan-loan features, employee contribution refunds, or ancillary benefits) and shall provide DOE with an analysis of the impact of special programs on the actuarial accrued liabilities of the pension plan, and on relative benefit value, if applicable.

The Contractor shall not terminate any DOE reimbursed benefit plan without the DOE's approval. It is the intention of the DOE not to entertain any enhancements in these programs after the Contractor announces the intention not to renew the Contract.

Cost reimbursement for 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.

(c) Post-Contract Responsibilities for Pension and Benefit Plans

(1) Upon contract termination, the individual employee accounts in the defined contribution plans shall be handled in accordance with the provisions of the Employee Retirement Income Security Act of 1974 (ERISA) as amended, and the accounts will vest in accordance with the applicable vesting schedule. The Contractor shall inform the plan participants of (a) their right to roll these accounts over into a successor contractor's qualified deferred

compensation plan, if such a plan exists, and (b) the consequences of failing to do so, and (c) other applicable rights based on regulatory requirements.

(2) If this contract expires or terminates without a follow-on contract, notwithstanding any other obligations and requirements concerning expiration or termination under any other clause of this contract, the following actions shall occur:

(i) The Contractor shall continue as plan sponsor of all existing and follow-on pension and welfare benefit plans covering site personnel with responsibility for management and administration of the plans, as directed by DOE, at DOE's sole discretion.

(ii) In accordance with DOE-approved Contractor welfare benefit plans, the Contractor shall provide benefit continuation on a funding basis acceptable to DOE.

(iii) The DOE, subject to the availability of appropriated funds, will make available to the Contractor in a timely manner sufficient funds so that the Contractor has no out-of-pocket expenditures from corporate funds to cover all liabilities incurred under this Contract, relating to Contracting Officer-approved Retirement Plans.

(iv) During the final 12 months of this contract, the Contracting Officer shall provide written direction regarding post-contract responsibilities for pension and welfare benefit plans.

(v) Notwithstanding termination for convenience or default, the contract may be extended as appropriate for purposes deemed necessary by the Contracting Officer, including, but not limited to, obligating funds to pay the Contractor for costs incurred for the Contractor's existing and, if applicable, follow-on, site pension and welfare benefit plans. Such costs shall continue to be allowable in accordance with applicable laws and regulations.

(vi) Pension plan contributions, plan asset management costs, and plan administration costs will continue to be allowable and fully reimbursed under this contract, on a funding basis acceptable to DOE, unless other arrangements have been approved by the Contracting Officer.

(d) Severance pay benefits are not payable to an employee under this contract if the employee:

i. Resigns (unless approved for voluntary layoff),

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.

CLAUSE H.22 - 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.23 - 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.24 - WORKERS' COMPENSATION

The Laboratory will maintain workers compensation insurance coverage pursuant to the requirements of FAR 28.307-2, FAR 28.308 and DEAR 970.2803-1. The insurance program must be approved by the Contracting Officer and cover all eligible employees of the Laboratory and comply with applicable Federal and State workers' compensation and occupational disease statutes.

The Laboratory will obtain approval from the Contracting Officer before making any significant change to its workers compensation coverage and will furnish reports as may be required from time to time by the Contracting Officer.

CLAUSE H.25 - LABOR RELATIONS

The Laboratory will seek to obtain 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 Statutes.

The Laboratory is authorized to enter into and administer its labor agreements in accordance with their negotiated terms.

The Laboratory 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 and labor arbitrations and settlement agreements and will discuss economic parameters before the start of any labor negotiations.

The Laboratory will furnish reports as may be required from time to time by the Contracting Officer.

CLAUSE H.26 - 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.27- 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.28 - 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.29 - PERFORMANCE BASED MANAGEMENT AND OVERSIGHT

(a) Performance-based management shall be the key enabling mechanism for establishing the DOE-Contractor expectations on oversight and accountability. DOE expectations (outside of individual program performance and requirements of laws and regulations) and performance targets shall be established through the Performance Evaluation and Measurement Plan (PEMP) pursuant to the clause entitled "Standards of Contractor Performance Evaluation". This PEMP shall establish the expected strategic results in the areas of mission accomplishment, stewardship and operational excellence. Mission performance goals shall be established by agreement with each major customer of the Laboratory, and customer evaluation will be the primary means of evaluating mission performance. Stewardship and operational goals shall be established by agreement with DOE. Contractor self-assessment, third party certification, and Contractor and DOE independent oversight, as appropriate, shall be the primary means for assessing stewardship and operational performance. Routine DOE oversight of Contractor performance will be conducted at the systems level.

(b) The performance-based management system shall be the primary vehicle for addressing issues associated with performance expectations. In the event of a substantive performance shortfall in any area, the appropriate improvement expectations and targets will be incorporated into the PEMP and tracked through self-assessment and independent oversight, as appropriate.

(c) Compliance with applicable Federal, State and local laws and regulations, and permits and licenses, shall be primarily determined by the cognizant regulatory agency and DOE will primarily rely upon the determination of the external regulators in assessing Contract compliance. DOE oversight will be achieved through periodic assessments at the management system level, including review of Contractor self-assessments and assessments by independent third parties.

CLAUSE H.30 - LOBBYING RESTRICTION (ENERGY AND WATER ACT 2004)

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.31 - LOBBYING RESTRICTION (INTERIOR ACT 2004)

The Contractor agrees that none of the funds obligated on this award shall be made available for any activity or the publication or distribution of literature that in any way tends to promote public support or opposition to any legislative proposal on which Congressional action is not complete. This restriction is in addition to those prescribed elsewhere in statute and regulation.

CLAUSE H.32 - LOBBYING RESTRICTION (ENERGY AND WATER DEVELOPMENT APPROPRIATIONS ACT, 2003)

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 - LOBBYING RESTRICTION (DEPARTMENT OF INTERIOR AND RELATED AGENCIES APPROPRIATIONS ACT, 2003)

The Contractor agrees that none of the funds obligated on this award shall be made available for any activity or the publication or distribution of literature that in any way tends to promote public support or opposition to any legislative proposal on which Congressional action is not complete. This restriction is in addition to those prescribed elsewhere in statute and regulation.

CLAUSE H.34 - 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 as reflected in Clause I.63 - DEAR 952.204-70 - CLASSIFICATION/ DECLASSIFICATION, or elsewhere in this contract.

CLAUSE H.35 - 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 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.

CLAUSE H.36 - LOBBYING RESTRICTION (ENERGY AND WATER ACT 2005)

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.37 - LOBBYING RESTRICTION (INTERIOR ACT 2005)

The contractor agrees that none of the funds obligated on this award shall be made available for any activity or the publication or distribution of literature that in any way tends to promote public support or opposition to any legislative proposal on which

Congressional action is not complete. This restriction is in addition to those prescribed elsewhere in statute and regulation.

CLAUSE H.38 - ELECTRONIC SUBCONTRACTING REPORTING SYSTEM (AL 2006-01)

The requirement for the submittal of paper versions of the Standard Form (SF) 294, Subcontracting Reports for Individual Contracts, and SF 295, Summary Subcontract Reports, as provided in FAR 52.219-9(j) is hereby deleted and is replaced with the electronic submittal of data under the Electronic Subcontract Reporting System (eSRS).

The offeror's subcontracting plan shall include assurances that the offeror will (1) submit the Individual Subcontracting Reports and Summary Subcontracting Reports under the eSRS and (2) ensure that its subcontractors agree to submit Individual Subcontracting Reports and Summary Subcontracting Reports at all tiers, in eSRS.

The contractor or subcontractor shall provide such information that will allow applicable lower tier subcontractors to fully comply with the statutory requirements of FAR 19.702.

CLAUSE H.39 – INFORMATION TECHNOLOGY AQUISITIONS

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.40 - OPTION TO EXTEND THE TERM OF THE CONTRACT

The Department of Energy, at its sole discretion, has the option to unilaterally extend the term of this contract for up to an additional twelve (12) months. Said option may be exercised in any combination of increments of at least one month in duration and said option may be exercised more than once; however, the sum total of all option exercise(s) shall not exceed twelve (12) months. The initial option exercise shall be made, if at all, not later than January 4, 2009. Any subsequent option exercise(s) shall be made, if at all, not later than the last day of that current contract performance period.

CLAUSE H.41 – LOBBYING RESTRICTION (ENERGY AND WATER ACT, 2006)

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.42 - 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.43 - 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/esa/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.

PART II

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Contract Clauses

CLAUSE I.1 - FAR 52.202-1 -- DEFINITIONS (JULY 2004)

(a) 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--

The solicitation, or amended solicitation, provides a different definition;

The contracting parties agree to a different definition;

The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning; or

The word or term is defined in FAR Part 31, for use it the cost principles and procedures.

(b) The FAR Index is a guide to words and terms the FAR defines and shows where each definition is located. The FAR Index is available via the Internet at http://www.acqnet.gov at the end of the FAR, after the FAR Appendix.

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) above, 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 (APR 1984)

(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, in its discretion, 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 nor 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.

(c) Subcontracts and Purchase Orders. Unless otherwise authorized by the Contracting Officer, in writing, the Contractor shall cause provisions similar to the foregoing to be inserted in all subcontracts and purchase orders entered into under this contract.

CLAUSE I.4 - FAR 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (SEPT 2006)

(a) Except as provided in paragraph (b) below, 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 paragraph (a) above 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 (JUL 1995)

(a) Definitions.

(1) "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, directly or indirectly, 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.

(2) "Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

(3) "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.

(4) "Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

(5) "Prime Contractor Employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

(6) "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.

(7) "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.

(8) "Subcontractor Employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), 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 Department of Justice.

(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 subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract.

CLAUSE I.6 - FAR 52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) If the Government receives information that a Contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by Section 4304 of the National Defense Authorization Act for Fiscal Year 1996 (Pub.L. 104-106), 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 constitutes a violation of subsection 27 (a) or (b) of the Act 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 constituting an offense punishable under subsection 27 (e)(1) of the Act.

(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 (JAN 1997)

(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 Subsection 27(a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), 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 Act 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 (SEP 2007)

(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.

(b) *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.

(c) *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.

(d) *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.

(e) *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.

(f) *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.

(g) *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 $100,000 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 $100,000.

CLAUSE I.8A - <u>FAR 52.203-13 – CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT (DEC 2008)</u>

(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 subsidiary, 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 the violation relates to an order against a Government-wide 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.8B - 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.

CLAUSE I.9 - FAR 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

(a) Definitions. As used in this clause --

"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material." For paper and paper products, postconsumer material means "postconsumer fiber" defined by the U.S. Environmental Protection Agency (EPA) as --

(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.

"Printed or copied double-sided" means printing or reproducing a document so that information is on both sides of a sheet of paper.

"Recovered material," for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as "recovered fiber" and means the following materials:

(1) Postconsumer fiber; and

(2) Manufacturing wastes such as --

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

(b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.

(c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards.

CLAUSE I.9A - FAR 52.204-7 CENTRAL CONTRACTOR REGISTRATION (JUL 2006)

(a) Definitions. As used in this clause—

"Central Contractor Registration (CCR) database" means the primary Government repository for Contractor information required for the conduct of business with the Government.

"Data Universal Numbering System (DUNS) number" means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

"Data Universal Numbering System+4 (DUNS+4) number" means the DUNS number means the 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 CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see the FAR at Subpart 32.11) for the same parent concern.

"Registered in the CCR database" means that—

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database; and

(2) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS), and has marked the record "Active". The Contractor will be required to provide consent for TIN validation to the Government as a part of the CCR registration process.

(b)

(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS or DUNS+4 number that identifies the offeror's name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number—

(i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at http://www.dnb.com; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR 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 CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(g)

(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 CCR database;

(B) Comply with the requirements of Subpart 42.12 of the FAR;

(C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR 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 CCR 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 CCR database. Information provided to the Contractor’s CCR 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.

(h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the Internet at http://www.ccr.gov or by calling 1-888-227-2423, or 269-961-5757.

CLAUSE I.9B – FAR 52.204-9 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (SEP 2007)

(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 insert this clause in all subcontracts when the subcontractor is required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system.

CLAUSE I.9C - FAR 52.208-8 REQUIRED SOURCES FOR HELIUM AND HELIUM USAGE DATA (APR 2002)

(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.nm.blm.gov/www/amfo/amfo_home.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.10 - FAR 52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (SEPT 2006)

(a) The Government suspends or debars Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of $30,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.

(b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed $30,000, 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.

(c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the Excluded Parties List System). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being in the Excluded Parties List System.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion in the Excluded Parties List System.

(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.

CLAUSE I.11 - 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.12 - 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.13 - FAR 52.215-12 SUBCONTRACTOR COST OR PRICING DATA (OCT 1997)

(a) Before awarding any subcontract expected to exceed the threshold for submission of 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 cost or pricing data at FAR 15.403-4, the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), 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 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 cost or pricing data for the subcontract; or

(2) The substance of the clause at FAR 52.215-13, Subcontractor Cost or Pricing Data--Modifications.

CLAUSE I.14 - FAR 52.215-13 SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(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 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 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 cost or pricing data at FAR 15.403-4, the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), 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 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.14A -FAR 52.219-4 NOTICE OF PRICE EVALUATION FOR HUBZONE SMALL BUSINESS CONCERNS (JUL 2005)

(a) *Definition*. HUBZone small business concern, as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(b) *Evaluation preference*.

(1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except—

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference; and

(ii) Otherwise successful offers from small business concerns.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer. These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

(c) *Waiver of evaluation preference*. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.

__ Offer elects to waive the evaluation preference.

(d) *Agreement.* A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns; or

(4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.

(e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants;

(f) A HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

CLAUSE I.15 - FAR 52.219-8 -- UTILIZATION OF SMALL BUSINESS CONCERNS (MAY 2004)

(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-onwed small business concerns shall have the maximum practicable opportunity to participate in performing contracts let 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) It has received certification as a small disadvantaged business concern consistent with 13 CFR 124, Subpart B;

(2) No material change in disadvantaged ownership and control has occurred since its certification;

(3) 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

(4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

“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) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteranj-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern, a small disadvantaged business concern, or a women-owned small business concern.

CLAUSE I.16 - <u>FAR 52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (NOV 2007)</u>

(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).

"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 Contrator. 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 Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), 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 PRO-Net 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 PRO-Net 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 $550,000 ($1,000,000 for construction of any public facility) 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 Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with the paragraph (j) of this clause. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, women-owned

small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.

(iv) Ensure that its subcontractors agree to submit SF 294 and 295.

(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., PRO-Net), 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 $100,000, 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 organizaions.

(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 Central Contractor Registration (CCR) 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.

(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. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.

(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) 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.

(j) The Contractor shall submit the following reports:

(1) *Standard Form 294, Subcontracting Report for Individual Contracts*. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.

(2) *Standard Form 295, Summary Subcontract Report*. This report encompasses all the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor’s format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. 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.17 - 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.18 - <u>FAR 52.219-25 SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM-DISADVANTAGED STATUS AND REPORTING (OCT 1999)</u>

(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 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 identified as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net) or by contacting the SBA's Office of Small Disadvantaged Business Certification and Eligibility.

(b) *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, or in the Contractor's own format providing the same information. This report is required for each contract containing SDB participation targets. If this contract contains an individual Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, reports may be submitted with the final Subcontracting Report for Individual Contracts (Standard Form 294) at the completion of the contract.

CLAUSE I.19 - FAR 52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

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.20 - FAR 52.222-3 CONVICT LABOR (JUN 2003)

(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.21 - FAR 52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT -- OVERTIME COMPENSATION (JUL 2005)

(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 payment of the overtime wages required by the Contract Work Hours and Safety Standards Act.

(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 Act.

(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 Davis-Bacon Act.

(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 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 subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

CLAUSE I.22 - <u>FAR 52.222-11 SUBCONTRACTS (LABOR STANDARDS) (JUL 2005)</u>

(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, Davis-Bacon Act 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 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, Davis-Bacon Act, 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 or subcontractor shall insert in any subcontracts for construction, alterations and repairs within the United States the clauses entitled—

(1) Davis-Bacon Act;
(2) Contract Work Hours and Safety Standards Act -- 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 Davis-Bacon and Related Act 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 Acknowledgment, for each subcontract for construction within the United States, including the subcontractor's signed and dated acknowledgment 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.23 - <u>FAR 52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)</u>

(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.24 - 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.25 - 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.26 - FAR 52.222-35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEPT 2006)

(a) *Definitions*. As used in this clause –

"All employment openings" means all positions except executive and top management, those positions that will be filled from within the Contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days duration, and part-time employment.

"Executive and top management" means any employee -

(1) Whose primary duty consists of the management of the enterprise in which the individual is employed or of a customarily recognized department or subdivision thereof;

(2) Who customarily and regularly directs the work of two or more other employees;

(3) Who has the authority to hire or fire other employees or whose suggestions and recommendations as to the hiring or firing and as to the advancement and promotion or any other change of status of other employees will be given particular weight;

(4) Who customarily and regularly exercises discretionary powers; and

(5) Who does not devote more than 20 percent or, in the case of an employee of a retail or service establishment, who does not devote more than 40 percent of total hours of work in the work week to activities that are not directly and closely related to the performance of the work described in paragraphs (1) through (4) of this definition. This paragraph (5) does not apply in the case of an employee who is in sole charge of an establishment or a physically separated branch establishment, or who owns at least a 20 percent interest in the enterprise in which the individual is employed.

"Other eligible veteran" means any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized.

"Positions that will be filled from within the Contractor's organization" means employment openings for which the Contractor will give no consideration to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings the Contractor proposes to fill from regularly established "recall" lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization.

"Qualified special disabled veteran" means a special disabled veteran who satisfies the requisite skill, experience, education, and other job-related requirements of the employment position such veteran holds or desires, and who, with or without reasonable accommodation, can perform the essential functions of such position.

"Special disabled veteran" means -

(1) A veteran who is entitled to compensation (or who but for the receipt of military retired pay would be entitled to compensation) under laws administered by the Department of Veterans Affairs for a disability-

(i) Rated at 30 percent or more; or

(ii) Rated at 10 or 20 percent in the case of a veteran who has been determined under 38 U.S.C. 3106 to have a serious employment handicap (*i.e.*, a significant impairment of the veteran's ability to prepare for, obtain, or retain employment consistent with the veteran's abilities, aptitudes, and interests); or

(2) A person who was discharged or released from active duty because of a service-connected disability.

"Veteran of the Vietnam era" means a person who -

(1) Served on active duty for a period of more than 180 days and was discharged or released from active duty with other than a dishonorable discharge, if any part of such active duty occurred -

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases; or

(2) Was discharged or released from active duty for a service-connected disability if any part of the active duty was performed -

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases.

(b) *General*.

(1) The Contractor shall not discriminate against the individual because the individual is a special disabled veteran, a veteran of the Vietnam era, or other eligible veteran, regarding any position for which the employee or applicant for employment is qualified. The Contractor shall take affirmative action to employ, advance in employment, and otherwise treat qualified special disabled veterans, veterans of the Vietnam era, and other eligible veterans without discrimination based upon their disability or veterans' status in all employment practices such as-

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff and rehiring;

(iii) Rate of pay or any other form of compensation and changes in compensation;

(iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(v) Leaves of absence, sick leave, or any other leave;

(vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;

(vii) Selection and financial support for training, including apprenticeship, and on-the-job training under 38 U.S.C. 3687, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

(viii) Activities sponsored by the Contractor including social or recreational programs; and

(ix) Any other term, condition, or privilege of employment.

(2) The Contractor shall comply with the rules, regulations, and relevant orders of the Secretary of Labor issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended (38 U.S.C. 4211 and 4212).

(c) *Listing openings*.

(1) The Contractor shall immediately list all employment openings that exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract, and including those occurring at an establishment of the Contractor other than the one where the contract is being performed, but excluding those of independently operated corporate affiliates, at an appropriate local public employment service office of the State wherein the opening occurs. Listing employment openings with the U.S. Department of Labor's America's Job Bank shall satisfy the requirement to list jobs with the local employment service office.

(2) The Contractor shall make the listing of employment openings with the local employment service office at least concurrently with using any other recruitment source or effort and shall involve the normal obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing of employment openings does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(3) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State public employment agency in each State where it has establishments of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these terms and has so advised the State agency, it need not advise the State agency of subsequent contracts. The Contractor may advise the State agency when it is no longer bound by this contract clause.

(d) *Applicability*. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, the Virgin Islands of the United States, and Wake Island.

(e) *Postings*.

(1) The Contractor shall post employment notices in conspicuous places that are available to employees and applicants for employment.

(2) The employment notices shall -

(i) State the rights of applicants and employees as well as the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified employees and applicants who are special disabled veterans, veterans of the Vietnam era, and other eligible veterans; and

(ii) Be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, Department of Labor (Deputy Assistant Secretary of Labor), and provided by or through the Contracting Officer.

(3) The Contractor shall ensure that applicants or employees who are special disabled veterans are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled veteran, or may lower the posted notice so that it can be read by a person in a wheelchair).

(4) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement, or other contract understanding, that the Contractor is bound by the terms of the Act and is committed to take affirmative action to employ, and advance in employment, qualified special disabled veterans, veterans of the Vietnam era, and other eligible veterans.

(f) *Noncompliance*. If the Contractor does not comply with the requirements of this clause, the Government may take appropriate actions under the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(g) *Subcontracts*. The Contractor shall insert the terms of this clause in all subcontracts or purchase orders 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 Deputy Assistant Secretary of Labor to enforce the terms, including action for noncompliance.

CLAUSE I.27 - FAR 52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)

(a) General.

(1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental disability. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as --

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;

(iii) Rates of pay or any other form of compensation and changes in compensation;

(iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(v) Leaves of absence, sick leave, or any other leave;

(vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;

(vii) Selection and financial support for training, including apprenticeships, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

(viii) Activities sponsored by the Contractor, including social or recreational programs; and

(ix) Any other term, condition, or privilege of employment.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.

(b) Postings.

(1) The Contractor agrees to post employment notices stating -- (i) the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified individuals with disabilities; and (ii) the rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair). The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary), and shall be provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified individuals with physical or mental disabilities.

(c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of $10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

CLAUSE I.28 - FAR 52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEPT 2006)

(a) 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 number of special disabled veterans, the number of veterans of the Vietnam era, and other eligible veterans in the workforce of the Contractor by job category and hiring location; and

(2) The total number of new employees hired during the period covered by the report, and of the total, the number of special disabled veterans, the number of veterans of the Vietnam era, and the number of other eligible veterans; and

(3) The maximum number and the minimum number of employees of the Contractor during the period covered by the report.

(b) The Contractor shall report the above items by completing the Form VETS-100, entitled "Federal Contractor Veterans' Employment Report (VETS-100 Report)".

(c) The Contractor shall submit VETS-100 Reports no later than September 30 of each year beginning September 30, 1988.

(d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. 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).

(e) The Contractor shall base the count of veterans reported according to paragraph (a) of this clause on voluntary disclosure. Each Contractor subject to the reporting requirements at 38 U.S.C. 4212 shall invite all special disabled veterans, veterans of the Vietnam era, and other eligible veterans who wish to benefit under the affirmative action program at 38 U.S.C. 4212 to identify themselves to the Contractor. The invitation shall state that -

(1) The information is voluntarily provided;

(2) The information will be kept confidential;

(3) Disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment; and

(4) The information will be used only in accordance with the regulations promulgated under 38 U.S.C. 4212.

(f) The Contractor shall insert the terms of this clause in all subcontracts or purchase orders of $100,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor.

CLAUSE I.28A - FAR 52.222-39 – NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES (DEC 2004)

(a) Definition. As used in this clause--

"United States" 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) Except as provided in paragraph (e) of this clause, during the term of this contract, the Contractor shall post a notice, in the form of a poster, informing employees of their rights concerning union membership and payment of union dues and fees, in conspicuous places in and about all its plants and offices, including all places where notices to employees are customarily posted. The notice shall include the following information (except that the information pertaining to National Labor Relations Board shall not be included in notices posted in the plants or offices of carriers subject to the Railway Labor Act, as amended (45 U.S.C. 151-188)).

Notice to Employees

Under Federal law, employees cannot be required to join a union or maintain membership in a union in order to retain their jobs. Under certain conditions, the law permits a union and an employer to enter into a union-security agreement requiring employees to pay uniform periodic dues and initiation fees. However, employees who are not union members can object to the use of their payments for certain purposes and can only be required to pay their share of union costs relating to collective bargaining, contract administration, and grievance adjustment.

If you do not want to pay that portion of dues or fees used to support activities not related to collective bargaining, contract administration, or grievance adjustment, you are entitled to an appropriate reduction in your payment. If you believe that you have been required to pay dues or fees used in part to support activities not related to collective bargaining, contract administration, or grievance adjustment, you may be entitled to a refund and to an appropriate reduction in future payments.

For further information concerning your rights, you may wish to contact the National Labor Relations Board (NLRB) either at one of its Regional offices or at the following address or toll free number:

National Labor Relations Board
Division of Information
1099 14th Street, N.W.
Washington, DC 20570
1-866-667-6572
1-866-316-6572 (TTY)

To locate the nearest NLRB office, see NLRB's website at http://www.nlrb.gov

(c) The Contractor shall comply with all provisions of Executive Order 13201 of February 17, 2001, and related implementing regulations at 29 CFR Part 470, and orders of the Secretary of Labor.

(d) In the event that the Contractor does not comply with any of the requirements set forth in paragraphs (b), (c), or (g), the Secretary may direct that this contract be cancelled, terminated, or suspended in whole or in part, and declare the Contractor ineligible for further Government contracts in accordance with procedures at 29 CFR part 470, Subpart B--Compliance Evaluations, Complaint Investigations and Enforcement Procedures. Such other sanctions or remedies may be imposed as are provided by 29 CFR Part 470, which implements Executive Order 13201, or as are otherwise provided by law.

(e) The requirement to post the employee notice in paragraph (b) does not apply to--

(1) Contractors and subcontractors that employ fewer than 15 persons;

(2) Contractor establishments or construction work sites where no union has been formally recognized by the Contractor or certified as the exclusive bargaining representative of the Contractor's employees;

(3) Contractor establishments or construction work sites located in a jurisdiction named in the definition of the United States in which the law of that jurisdiction forbids enforcement of union-security agreements;

(4) Contractor facilities where upon the written request of the Contractor, the Department of Labor Deputy Assistant Secretary for Labor-Management Programs has waived the posting requirements with respect to any of the Contractor's facilities if the Deputy Assistant Secretary finds that the Contractor has demonstrated that--

(i) The facility is in all respects separate and distinct from activities of the Contractor related to the performance of a contract; and

(ii) Such a waiver will not interfere with or impede the effectuation of the Executive order; or

(5) Work outside the United States that does not involve the recruitment or employment of workers within the United States.

(f) The Department of Labor publishes the official employee notice in two variations; one for contractors covered by the Railway Labor Act and a second for all other contractors. The Contractor shall--

(1) Obtain the required employee notice poster from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW, Room N-5605, Washington, DC 20210, or from any field office of the Department's Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Download a copy of the poster from the Office of Labor-Management Standards website at http://www.olms.dol.gov; or

(3) Reproduce and use exact duplicate copies of the Department of Labor's official poster.

(g) The Contractor shall include the substance of this clause in every subcontract or purchase order that exceeds the simplified acquisition threshold, entered into in connection with this contract, unless exempted by the Department of Labor Deputy Assistant Secretary for Labor-Management Programs on account of special circumstances in the national interest under authority of 29 CFR 470.3(c). For indefinite quantity subcontracts, the Contractor shall include the substance of this clause if the value of orders in any calendar year of the subcontract is expected to exceed the simplified acquisition threshold. Pursuant to 29 CFR Part 470, Subpart B--Compliance Evaluations, Complaint Investigations and Enforcement Procedures, the Secretary of Labor may direct the Contractor to take such action in the enforcement of these regulations, including the imposition of sanctions for noncompliance with respect to any such subcontract or purchase order. If the Contractor becomes involved in litigation with a subcontractor or vendor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

CLAUSE I.28B - FAR 52.222-50 COMBATING TRAFFICKING IN PERSONS (AUG 2007)

(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.

"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 render the Contractor subject to—

(1) Required removal of a Contractor employee or employees from the performance of the contract;

(2) Required subcontractor termination;

(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.

CLAUSE I. 28C - 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 *(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.28D - FAR 52.223-2 -- AFFIRMATIVE PROCUREMENT OF BIOBASED PRODUCTS UNDER SERVICE AND CONSTRUCTION CONTRACTS (DEC 2007)

(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 2902.10 et seq.). For example, some USDA-designated items such as mobile equipment hydraulic fluids, diesel fuel additives, and penetrating lubricants are excluded from the preferred procurement requirement for the application of the USDA-designated item to one or both of the following:

(i) Spacecraft system and launch support equipment.

(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.usda.gov/biopreferred.

CLAUSE I.29 - FAR 52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (AUG 2003) (ALTERNATE I) (AUG 2003)

(a) *Definitions.* As used in this clause –

"Priority chemical" means a chemical identified by the Interagency Environmental Leadership Workgroup or, alternatively, by an agency pursuant to Section 503 of Executive Order 13148 of April 21, 2000, Greening the Government through Leadership in Environmental Management.

"Toxic chemical" means a chemical or chemical category listed in 40 CFR 372.65.

(b) Executive Order 13148 requires Federal facilities 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, priority chemical, and hazardous substance release and use reduction goals of Sections 502 and 503 of Executive Order 13148.

(7) The environmental management system as described in Section 401 of E.O. 13148.

CLAUSE I.29A – <u>FAR 52.223-10 WASTE REDUCTION PROGRAM (AUG 2000)</u>

(a) *Definition*s. 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 701 of Executive Order 13101, 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.29B – RESERVED

CLAUSE I.29C - 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.30 - 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.30A - FAR 52.223-14 TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor-owned or -operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if -

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within the following Standard Industrial Classification Code (SIC) codes or their corresponding North American Industry Classification System sectors:

(i) Major group code 10 (except 1011, 1081, and 1094).

(ii) Major group code 12 (except 1241).

(iii) Major group codes 20 through 39.

(iv) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).

(v) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, *et seq*.)), or 5169, or 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or

(5) The facility is not located in the United States or its outlying areas.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt --

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall --

(i) Submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and

(ii) Continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items as defined in FAR Part 2, the Contractor shall -

(1) For competitive subcontracts expected to exceed $100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding $100,000 (including all options), the substance of this clause, except this paragraph (e).

CLAUSE I.30B - <u>FAR 52.223-16 IEEE STANDARD FOR THE ENVIRONMENTAL ASSESSMENT OF PERSONAL COMPUTER PRODUCTS (DEC 2007)</u>

(a) *Definitions*. As used in this clause—

“Computer monitor” means a video display unit used with a computer.
“Desktop computer” means a computer designed for use on a desk or table.
“Notebook computer” means a portable-style or laptop-style computer system.

"Personal computer product" means a notebook computer, a desktop computer, or a computer monitor, and any peripheral equipment that is integral to the operation of such items. For example, the desktop computer together with the keyboard, the mouse, and the power cord would be a personal computer product. Printers, copiers, and fax machines are not included in peripheral equipment, as used in this definition.

(b) Under this contract, the Contractor shall deliver, furnish for Government use, or furnish for contractor use at a Government-owned facility, only personal computer products that at the time of submission of proposals were EPEAT Bronze registered or higher. Bronze is the first level discussed in clause 1.4 of the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products.

(c) For information about the standard, see www.epeat.net.

CLAUSE I.30C – 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.31 - 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.32 - 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.33 – <u>FAR 52.225-1 BUY AMERICAN ACT-- SUPPLIES (JUN 2003) (DEVIATION)</u>

(a) *Definitions*. As used in this clause -

"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; or

(2) An end product manufactured in the United States, if 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 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.

"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) The Buy American Act (41 U.S.C. 10a - 10d) provides a preference for domestic end products for supplies acquired for use in the United States.

(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 use 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 Act Certificate."

CLAUSE I.33A - FAR 52.225-8 -- DUTY-FREE ENTRY (FEB 2000)

(a) *Definition.* “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 $10,000 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.

(2) 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 $10,000 may be imported into the customs territory of the United States.

CLAUSE I.34 - FAR 52.225-9 BUY AMERICAN ACT–CONSTRUCTION MATERIALS (JAN 2005)

(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. 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; or

(2) A construction material manufactured in the United States, if 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.

"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 the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. 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 the construction material or components listed by the Government as follows: ___None___ [*Contracting Officer to list applicable excepted materials or indicate ``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 Act 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 Act to a particular construction material would be impracticable 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 Act.

(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 Act 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 Act applies, use of foreign construction material is noncompliant with the Buy American Act.

(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 Price Comparison

Construction material description	**Unit of measure**	**Quantity**	**Price (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 and any applicable duty (whether or not a duty-free entry certificate is issued).]*

CLAUSE I.35 - FAR 52.225-13 -- RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (FEB 2006)

(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 subject to the jurisdiction of the United States.

(b) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from 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.36 - 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.36A - 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.37 - 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.38 - FAR 52.230-2 COST ACCOUNTING STANDARDS (APR 1998)

(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 allocating 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 subparagraph (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 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 subparagraph (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 subparagraph (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 of the Internal Revenue Code of 1986 (26 U.S.C. 6621) 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 Part 9904 or a CAS rule or regulation in 48 CFR Part 9903 and as to any cost adjustment demanded by the United States, such failure to agree will constitute a dispute under the Contract Disputes Act (41 U.S.C. 601).

(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 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 $500,000, 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.39 - FAR 52.230-6 -- ADMINISTRATION OF COST ACCOUNTING STANDARDS (APR 2005)

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)), and16.207;

(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 16.203-1(a)(2) at FAR 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 a CAS, or a modification or interpretation thereof, that subsequently becomes 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; 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 clause at FAR 52.230-3, 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 clause at FAR 52.230-3)--

(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 clause at FAR 52.230-3; 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, 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, 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.40 - <u>FAR 52.232-17 INTEREST (JUN 1996)</u>

(a) Except as otherwise provided in this contract under a Price Reduction for Defective 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 (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) 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 Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) 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) 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 consistent with this contract, including any demand resulting from a default termination.

(3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.

(4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.

(c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the Federal Acquisition Regulation in effect on the date of this contract.

CLAUSE I.41 - RESERVED

CLAUSE I.42 - FAR 52.232-24 PROHIBITION OF ASSIGNMENT OF CLAIMS (JAN 1986)

The assignment of claims under the Assignment of Claims Act of 1940, as amended, 31 U.S.C. 3727, 41 U.S.C. 15, is prohibited for this contract.

CLAUSE I.43 - FAR 52.233-1 DISPUTES (JUL 2002) (ALTERNATE I) (DEC 1991)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C.601-613).

(b) Except as provided in the Act, 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 the Act until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, 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 duly authorized to certify the claim on behalf of the Contractor."

(3) The certification may be executed by any person duly 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 the Act.

(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 or relating to the contract, and comply with any decision of the Contracting Officer.

CLAUSE I.44 - 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

(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 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.44A - 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.45 - 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.46 - 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.47 - 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.48 - 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.49 - 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.50 - FAR 52.244-6 – SUBCONTRACTS FOR COMMERCIAL ITEMS (DEC 2008)

(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 (Dec 2008) (Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note).

(ii) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds $550,000 ($1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(iii) 52.222-26, Equal Opportunity (Mar 2007) (E.O. 11246).

(iv) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sept 2006) (38 U.S.C. 4212(a));

(v) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).

(vi) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (Dec 2004) (E.O. 13201). Flow down as required in accordance with paragraph (g) of FAR clause 52.222-39).

(vii) 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) (flow down 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.51- 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.52 - 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.53 - 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.54 - 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.55 - 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.56 - <u>FAR 52.249-14 EXCUSABLE DELAYS (APR 1984)</u>

(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.56A – FAR 52.250-1 INDEMNIFICATION UNDER PUBLIC LAW 85-804 (APR 1984) ALTERNATE I (APR 1984) (DEVIATION)

(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.

(j) The term "a risk defined in this contract as unusually hazardous or nuclear" as used in this clause 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.§2014, 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 this contract:

(1) Providing nuclear materials protection, control, and accounting (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) As requested or approved by the President of the United States, the Secretary of Energy, the Deputy Secretary of Energy, or the Under Secretary of Energy, providing assistance in MPC&A and other

nonproliferation activities (including safeguards activities) outside the United States, other than the work identified in (1) above, provided that the request or approval referred to in this subparagraph specifically makes the indemnity provided by this clause applicable thereto.

CLAUSE I.57 - FAR 52.251-1 GOVERNMENT SUPPLY SOURCES (APR 1984) (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. Such property shall not be considered to be "Government-furnished property," as distinguished from "Government property." The provisions of the clause entitled “Property” shall apply to all property acquired under such authorization.

CLAUSE I.58 - 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.59 - 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.60 - 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.61 - 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.62 - DEAR 952.204-2 SECURITY (MAY 2002)

(a) Responsibility. It is the Contractor's duty to safeguard all classified information, special nuclear material, and other DOE property. The Contractor shall, in accordance with DOE security regulations and requirements, be responsible for safeguarding all classified information and protecting against sabotage, espionage, loss or theft of the classified documents and material in the Contractor's possession in connection with the performance of work under this contract. Except as otherwise expressly provided in this contract, the Contractor shall, upon completion or termination of this contract, transmit to DOE any classified matter 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 types or categories of matter proposed for retention, the reasons for the retention of the matter, 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 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 requirements of DOE in effect on the date of award.

(c) Definition of Classified Information. The term "classified information" means Restricted Data, Formerly Restricted Data, or National Security Information.

(d) Definition of Restricted Data. The term "Restricted Data" means all data concerning (1) design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to Section 142 of the Atomic Energy Act of 1954, as amended.

(e) Definition of Formerly Restricted Data. The term "Formerly Restricted Data" means all data removed from the Restricted Data category under Section 142d. of the Atomic Energy Act of 1954, as amended.

(f) Definition of National Security Information. The term "National Security Information" means any information or material, regardless of its physical form or characteristics, that is owned by, produced for or by, or is under the control of the United States Government, that has been determined pursuant to Executive Order 12356 or prior Orders to require protection against unauthorized disclosure, and which is so designated.

(g) Definition of Special Nuclear Material (SNM). SNM means (1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which pursuant to the provisions of Section 51 of the Atomic Energy Act of 1954, as amended, 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) Security Clearance of Personnel. The Contractor shall not permit any individual to have access to any classified information, except in accordance with the Atomic Energy Act of 1954, as amended, Executive Order 12356, and the DOE's regulations or requirements applicable to the particular level and category of classified information to which access is required.

(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 safeguard any classified information 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, as amended, 42 U.S.C. 2011 et seq.; 18 U.S.C. 793 and 794; and Executive Order 12356.)

(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 Certificate Pertaining to Foreign Interests, Standard Form 328 or the Foreign Ownership, Control or Influence questionnaire executed by the Contractor prior to the 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.

(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 safeguard any classified information or special nuclear material.

(4) The Contractor agrees to insert terms that conform substantially to the language of this clause, including this paragraph, in all subcontracts under this contract that will require subcontractor employees to possess access authorizations. Additionally, the Contractor must require subcontractors to have an existing DOD or DOE Facility Clearance or submit a completed Certificate Pertaining to Foreign Interests, Standard Form 328, required in DEAR 952.204-73 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.

(5) 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 FOCI 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 FOCI and for reasons

other than avoidance of performance of the contract, cannot, or chooses not to, avoid or mitigate the FOCI problem.

CLAUSE I.63 - 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.63A – DEAR 952.204-71 SENSITIVE FOREIGN NATIONS CONTROLS (APR 1994)

(a) In connection with any activities in the performance of this contract, the contractor agrees to comply with the "Sensitive Foreign Nations Controls" requirements attached to this contract, relating to those countries, which may from time to time, be identified to the contractor by written notice as sensitive foreign nations. The contractor shall have the right to terminate its performance under this contract upon at least 60 days' prior written notice to the contracting officer if the contractor determines that it is unable, without substantially interfering with its polices or without adversely impacting its performance to continue performance of the work under this contract as a result of such notification. If the contractor elects to terminate performance, the provisions of this contract regarding termination for the convenience of the Government shall apply.

(b) The provisions of this clause shall be included in any subcontracts.

[49 FR 12042, Mar. 28, 1984; 49 FR 38951, Oct. 2, 1984; 62 FR 2310, Jan. 16, 1997]

CLAUSE I.64 - 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.65 - 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.66 - DEAR 952.209-72 ORGANIZATIONAL CONFLICTS OF INTEREST (JUN 1997) (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 therefor (solicited and unsolicited) which stem directly from the Contractor's performance of work under this contract for a period of five 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 FAR Part 13 and involving the performance of advisory and assistance services as that term is defined at FAR 37.201. 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 DEAR 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.67 - DEAR 952.211-71 PRIORITIES AND ALLOCATIONS (DOMESTIC ENERGY SUPPLIES) (ALTERNATE I) (JUN 1996)

(a) This contract may be eligible for priorities and allocations support, as provided for by section 101(c) of the Defense Production Act of 1950, as amended by the Energy Policy and Conservation Act (Pub. L. 94-163, 42 U.S.C. 6201 et seq.) if its purpose is determined to be to maximize domestic energy supplies. Eligibility is

dependent on an executive decision on a case-by-case basis with the decision being jointly made by the Departments of Energy and Commerce.

(b) DOE regulations regarding material allocations and priority performance under contracts or orders to maximize domestic energy supplies can be found at Part 216 of Title 10 of the Code of Federal Regulations (10 CFR Part 216).

(c) Additional guidance is provided by DOE Publication MA-0192, "Priorities and Allocations Support for Energy: Keeping Energy Programs on Schedule," dated August 1985, as it may from time to time be revised. Copies may be obtained by written request to: Department of Energy, Office of Scientific and Technical Information (OSTI), Post Office Box 62, Oak Ridge, Tennessee 37830.

CLAUSE I.68 - DEAR 952.211-71 PRIORITIES AND ALLOCATIONS (ATOMIC ENERGY) (JUN 1996)

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.69 - 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.70 - DEAR 952.217-70 ACQUISITION OF REAL PROPERTY (APR 1984)

(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, and the Government assumes liability for, or will otherwise pay for the obligation under the lease 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 an 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.71 - 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.72 - DEAR 952.224-70 PAPERWORK REDUCTION ACT (APR 1994)

(a) In the event that it subsequently becomes a contractual requirement to collect or record information calling either for answer to identical questions from ten (10) or more persons other than Federal employees, or information from Federal employees which is to be used for statistical compilations of general public interest, the Federal Reports Act will apply to this contract. No plan,

questionnaire, interview guide, or other similar device for collecting information (whether repetitive or single-time) may be used without first obtaining clearance from the Office of Management and Budget (OMB).

(b) The Contractor shall request the required OMB clearance from the Contracting Officer before expending any funds or making public contacts for the collection of data. The authority to expend funds and to proceed with the collection of data shall be, in writing, by the Contracting Officer. The Contractor must plan at least ninety (90) days for OMB clearance. Excessive delay caused by the Government which arises out of causes beyond the control and without the fault or negligence of the Contractor will be considered in accordance with the clause entitled "Excusable Delays", if such clause is applicable. If not, the period of performance may be extended pursuant to this Clause if approved by the Contracting Officer.

CLAUSE I.73 - 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.73A - 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.73B - 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.

(d) 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.

(e) 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.74 - DEAR 952.247-70 FOREIGN TRAVEL (DEC 2000)

Contractor foreign travel shall be conducted pursuant to the requirements contained in DOE Order 551.1, Official Foreign Travel, or any subsequent version of the order in effect at the time of award.

CLAUSE I.74A - RESERVED

CLAUSE I.74B – DEAR 952.250-70 NUCLEAR HAZARDS INDEMNITY AGREEMENT (OCT 2005)

(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.75 - DEAR 952.251-70 CONTRACTOR EMPLOYEE TRAVEL DISCOUNTS (DEC 2000)

(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. The Military Traffic Management Command (MTMC) 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.76 - 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.77 - 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.78 - <u>DEAR 970.5203-3 CONTRACTOR'S ORGANIZATION (DEC 2000) (DEVIATION)</u>

(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.78A – DEAR 970.5204-1 COUNTERINTELLIGENCE (DEC 2000)

(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 5670.3, Counterintelligence Program; Executive Order 12333, U.S. Intelligence Activities; and other pertinent national and Department 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.79 - 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.80 - DEAR 970.5204-3 ACCESS TO AND OWNERSHIP OF RECORDS (JUL 2005)

(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.81 - <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.81A – 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.82 - DEAR 970.5215-1 TOTAL AVAILABLE FEE: BASE FEE AMOUNT AND PERFORMANCE FEE AMOUNT (DEC 2000) (ALTERNATES II AND III) (DEC 2000)

(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 the Manager, Brookhaven Area Office. 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, or Incentives" 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 shall submit a self-assessment 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.83 - DEAR 970.5215-3 CONDITIONAL PAYMENT OF FEE, PROFIT, AND OTHER INCENTIVES – FACILITY MANAGEMENT CONTRACTS (JAN 2004)

(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.)

(B) 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 232.1A 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.83A – 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.84 - 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.85 - 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.86 - DEAR 970.5223-1 INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO WORK PLANNING AND EXECUTION (DEC 2000)

(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.87 - <u>DEAR 970.5223-2 AFFIRMATIVE PROCUREMENT PROGRAM (MAR 2003)</u>

(a) In the performance of this contract, the Contractor shall comply with the requirements of Executive Order 13101 and the U.S. Department of Energy (DOE) Affirmative Procurement Program Guidance. This guidance includes requirements concerning environmentally preferable products and services, recycled content products and biobased products. This guidance is available on

the Internet.

(b) In complying with the requirements of paragraph (a) of this clause, the Contractor shall coordinate its activities with the DOE Recycling Coordinator. Reports required by paragraph (c) of this clause shall be submitted through the DOE Recycling Coordinator.

(c) The Contractor shall prepare and submit reports, at the end of the Federal fiscal year, on matters related to the acquisition of items designated in EPA's Comprehensive Procurement Guidelines that Federal agencies and their Contractors are to procure with recovered/recycled content.

(d) If the Contractor subcontracts a significant portion of the operation of the Government facility which includes the acquisition of items designated in EPA's Comprehensive Procurement Guidelines, the subcontract shall contain a clause substantially the same as this clause. The EPA Comprehensive Procurement Guidelines identify products which Federal agencies and their Contractors are to procure with recycled content pursuant to 40 CFR 247. Examples of such a subcontract would be operation of the facility supply function, construction or remodeling at the facility, or maintenance of the facility motor vehicle fleet. In situations in which the facility management contractor can reasonably determine the amount of products with recovered/recycled content to be acquired under the subcontract, the facility management contractor is not required to flow down the reporting requirement of this clause. Instead, the facility management contractor may include such quantities in its own report and include an agreement in the subcontract that such products will be acquired with recovered/recycled content and that the subcontractor will advise if it is unable to procure such products with recovered/recycled content because the product is not available:

(i) Competitively within a reasonable time,

(ii) At a reasonable price; or,

(iii) Within the performance requirements.

If reports are required of the subcontractor, such reports shall be submitted to the facility management contractor. 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.

(e) When this clause is used in a subcontract, the word "Contractor" will be understood to mean "subcontractor" and the term "DOE Recycling Coordinator"

will be understood to mean "Contractor Recycling Coordinator."

CLAUSE I.88 - DEAR 970.5223-4 WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (DEC 2000)

(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.

(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.88A - DEAR 970.5223-5 DOE MOTOR VEHICLE FLEET FUEL EFFICIENCY (OCT 2003)

When managing Government-owned vehicles for the Department of Energy, the Contractor will conduct operations relating to such vehicles in accordance with the goals and requirements of *Executive Order 13149, Greening the Government through Federal Fleet and Transportation Efficiency,* and implementing guidance contained in the

document entitled *U.S. Department of Energy Compliance Strategy for Executive Order 13149* (April 2001) and future revisions of this compliance strategy that are identified in writing by the Contracting Officer. Section 506 of Executive Order 13149 exempts military tactical, law enforcement, and emergency vehicles from the requirements of the order.

CLAUSE I.89 - 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.89A - 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.90 - 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.91 - 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 TechnicalArticles).*

(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 FacilityUser, 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.92 - 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.93 - 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.94 - 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.95 - 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.96 - 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.97 - <u>DEAR 970.5227-10 PATENT RIGHTS - MANAGEMENT AND OPERATING CONTRACTS, NONPROFIT ORGANIZATION OR SMALL BUSINESS FIRM CONTRACTOR (AUG 2002)</u>

(a) <u>DEFINITIONS</u>.

(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) <u>SUBCONTRACTS</u>.

(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.98 - DEAR 970.5228-1 INSURANCE--LITIGATION AND CLAIMS (MAR 2002) (DEVIATION)

(a) The contractor may, with the prior written authorization of the contracting officer, and shall, upon the request of the Government, initiate litigation against third parties, including proceedings before administrative agencies, in connection with this contract. The contractor shall proceed with such litigation in good faith and as directed from time to time by the contracting officer.

(b) The contractor shall give the contracting officer immediate notice in writing of any legal proceeding, including any proceeding before an administrative agency, filed against the contractor arising out of the performance of this contract. Except as otherwise directed by the contracting officer, in writing, the contractor shall furnish immediately to the contracting officer copies of all pertinent papers received by the contractor with respect to such action. The contractor, with the prior written authorization of the contracting officer, shall proceed with such litigation in good faith and as directed from time to time by the contracting officer.

(c) (1) Except as provided in paragraph (c)(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; 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.

(d) 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.

(e) Except as provided in subparagraphs (g) and (h) 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 or otherwise without regard to and as an exception to the clause of this contract entitled, “Obligation of Funds.”

(f) The Government's liability under paragraph (e) 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.

(g) Notwithstanding any other provision of this contract, the contractor shall not be reimbursed for liabilities (and expenses incidental to such liabilities, including litigation costs, counsel fees, judgment and settlements)--

(1) Which are otherwise unallowable by law or the provisions of this contract; or

(2) 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.

(h) In addition to the cost reimbursement limitations contained in 48 CFR Part 31, as supplemented by 48 CFR 970.31, and notwithstanding any other provision of this contract, the contractor's liabilities to third persons, including employees but excluding costs incidental to worker’s compensation actions, (and any expenses incidental to such liabilities, including litigation costs, counsel fees, judgments and settlements) shall not be reimbursed if such liabilities were caused by contractor managerial personnel's --

(1) Willful misconduct,

(2) Lack of good faith, or

(3) 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.

(i) The burden of proof shall be upon the contractor to establish that costs covered by paragraph (h) of this clause are allowable and reasonable if, after an initial

review of the facts, the contracting officer challenges a specific cost or informs the contractor that there is reason to believe that the cost results from willful misconduct, lack of good faith, or failure to exercise prudent business judgment by contractor managerial personnel.

(j) (1) All litigation costs, including counsel fees, judgments and settlements shall be differentiated and accounted for by the contractor so as to be separately identifiable. 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 (g)(1) of this clause is not allowable.

(4) The term “contractor's managerial personnel” is defined in the Property clause in this contract.

(k) 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 unreimbursable costs incurred in connection with contract performance.

(l) If any suit or action is filed or any claim is made against the contractor, the cost and expense of which may be reimbursable to the contractor under this contract, and the risk of which is then uninsured or is insured for less than the amount claimed, the contractor shall --

(1) Immediately notify the contracting officer and promptly furnish copies of all pertinent papers received;

(2) Authorize Department representatives to collaborate with: in-house or DOE-approved outside counsel in settling or defending the claim; or counsel for the insurance carrier in settling or defending the claim if the amount of the liability claimed exceeds the amount of coverage, unless precluded by the terms of the insurance contract; and

(3) Authorize Department representatives to settle the claim or to defend or represent the contractor in and/or to take charge of any litigation, if required by the Department, if the liability is not insured or covered by bond. In any action against more than one Department contractor, the Department may require the contractor to be represented by common

counsel. Counsel for the contractor may, at the contractor's own expense, be associated with the Department representatives in any such claim or litigation.

CLAUSE I.99 - 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.100 - 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.101 - 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.102 - 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.103 - <u>DEAR 970.5232-3 ACCOUNTS, RECORDS, AND INSPECTION (JUN 2007)</u>

(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, 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 current 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 General Accounting 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 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.104 - 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 $5,915,284,596.32. 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.105 - 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.106 - 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.107 - 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.108 - 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.109 - DEAR 970.5235-1 FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER SPONSORING AGREEMENT (DEC 2000)

(a) Pursuant to 48 CFR 35.017-1, this contract constitutes the sponsoring agreement between the Department of Energy 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 DOE Order 481.1, Work for Others (Non-Department of Energy Funded Work) (see current version).

(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.

CLAUSE I.110 - 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.111 - RESERVED

CLAUSE I.112 - DEAR 970.5242-1 PENALTIES FOR UNALLOWABLE COSTS (DEC 2000)

(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 Department's 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.113 - 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.114 - DEAR 970.5244-1 CONTRACTOR PURCHASING SYSTEM (MAY 2006) (includes modifications in final rule dated 3/31/06) (DEVIATION)

(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 970.44. The contractor's purchasing system and methods shall be fully documented, consistently applied, and acceptable to 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 48 CFR 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 970.3102-3-21(b).

(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 nonconstruction 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 (MAY 2002), as amended by AL 2002-06 and 48 CFR 52.225-9 (MAY 2002), as amended by AL 2002-06. The contractor shall forward determinations of nonavailability of individual items to the DOE contracting officer for approval. Items in excess of $100,000 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 nonavailability for individual items valued at $100,000 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 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 8.11 and 48 CFR 908.11.

(n) RESERVED

(o) Management, Acquisition and Use of Information Resources. Requirements for automatic data processing resources and telecommunications facilities, services, and equipment, shall be reviewed and approved in accordance with applicable DOE Orders and regulations regarding information resources.

(p) Priorities, Allocations and Allotments. Priorities, allocations and allotments shall be extended to appropriate subcontracts in accordance with the clause or clauses of this contract dealing with priorities and allocations.

(q) Purchase of Special Items. Purchase of the following items shall be in accordance with the following provisions of 48 CFR 908.71 and the Federal Property Management Regulations, 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 908.7108
(6) Fuels and packaged petroleum products--48 CFR 908.7109
(7) Coal--48 CFR 908.7110
(8) Arms and Ammunition--48 CFR 908.7111
(9) Heavy Water--48 CFR 908.7121(a)
(10) Precious Metals--48 CFR 908.7121(b)
(11) Lithium--48 CFR 908.7121(c)

(12) Products and services of the blind and severely handicapped--41 CFR 101-26.701
(13) Products made in Federal penal and correctional institutions--41 CFR 101-26.702

(r) Purchase vs. Lease Determinations. Contractors shall determine whether required equipment and property should be purchased or leased, and establish appropriate thresholds for application of lease vs. 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).

(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.115 - DEAR 970.5245-1 PROPERTY (DEC 2000) (ALTERNATE I) (DEC 2000)

(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 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) Employee personal responsibility and accountability for Government-owned property;

(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).

Notwithstanding the above, the term “Contractor’s managerial personnel” means the Contractor’s Board of Directors, corporate officers, Laboratory Director, Deputy Laboratory Directors, Associate Laboratory Directors, Assistant Laboratory Directors, RHIC Project Director, and General Counsel, or someone acting as the Laboratory Director or for other positions named herein.

(k) The contractor shall include this clause in all cost reimbursable subcontracts.

ARRA CLAUSES

CLAUSE I.116 - FAR 52.203-15 - WHISTLEBLOWER PROTECTIONS UNDER THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (MAR 2009)

(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).

(b) The Contractor shall include the substance of this clause including this paragraph (b) in all subcontracts.

CLAUSE I.117 - FAR 52.204-11 - AMERICAN RECOVERY AND REINVESTMENT ACT – REPORTING REQUIREMENTS (MAR 2009)

(a) Definitions. As used in this clause--

Contract, as defined in FAR 2.101, means a mutually binding legal relationship obligating the seller to furnish the supplies or services (including construction) and the buyer to pay for them. It includes all types of commitments that obligate the Government to an expenditure of appropriated funds and that, except as otherwise authorized, are in writing. In addition to bilateral instruments, contracts include (but are not limited to) awards and notices of awards; job orders or task letters issued under basic ordering agreements; letter contracts; orders, such as purchase orders, under which the contract becomes effective by written acceptance or performance; and bilateral contract modifications. Contracts do not include grants and cooperative agreements covered by 31 U.S.C. 6301, et seq. For discussion of various types of contracts, see FAR Part 16.

First-tier subcontract means a subcontract awarded directly by a Federal Government prime contractor whose contract is funded by the Recovery Act.

Jobs created means an estimate of those new positions created and filled, or previously existing unfilled positions that are filled, as a result of funding by the American Recovery and Reinvestment Act of 2009 (Recovery Act). This definition covers only prime contractor positions established in the United States and outlying areas (see definition in FAR 2.101). The number shall be expressed as ``full-time equivalent'' (FTE), calculated cumulatively as all hours worked divided by the total number of hours in a full-time schedule, as defined by the contractor. For instance, two full-time employees and one part-time employee working half days would be reported as 2.5 FTE in each calendar quarter.

Jobs retained means an estimate of those previously existing filled positions that are retained as a result of funding by the American Recovery and Reinvestment Act of 2009 (Recovery Act). This definition covers only prime contractor positions established in the United States and outlying areas (see definition in FAR 2.101). The number shall be expressed as ``full-time equivalent'' (FTE), calculated cumulatively as all hours worked divided by the total number of hours in a full-time schedule, as defined by the contractor. For instance, two full-time employees and one part-time employee working half days would be reported as 2.5 FTE in each calendar quarter.

Total compensation means the cash and noncash dollar value earned by the executive during the contractor's past fiscal year of 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 Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

(3) Earnings for services under non-equity incentive plans. 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. For example, severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property if the value for the executive exceeds $10,000.

(b) This contract requires the contractor to provide products and/or services that are funded under the American Recovery and Reinvestment Act of 2009 (Recovery Act). Section 1512(c) of the Recovery Act requires each contractor to report on its use of Recovery Act funds under this contract. These reports will be made available to the public.

(c) Reports from contractors for all work funded, in whole or in part, by the Recovery Act, and for which an invoice is submitted prior to June 30, 2009, are due no later

than July 10, 2009. Thereafter, reports shall be submitted no later than the 10th day after the end of each calendar quarter.

(d) The Contractor shall report the following information, using the online reporting tool available at http://www.FederalReporting.gov.

(1) The Government contract and order number, as applicable.

(2) The amount of Recovery Act funds invoiced by the contractor for the reporting period. A cumulative amount from all the reports submitted for this action will be maintained by the government's on-line reporting tool.

(3) A list of all significant services performed or supplies delivered, including construction, for which the contractor invoiced in this calendar quarter.

(4) Program or project title, if any.

(5) A description of the overall purpose and expected outcomes or results of the contract, including significant deliverables and, if appropriate, associated units of measure.

(6) An assessment of the contractor's progress towards the completion of the overall purpose and expected outcomes or results of the contract (i.e., not started, less than 50 percent completed, completed 50 percent or more, or fully completed). This covers the contract (or portion thereof) funded by the Recovery Act.

(7) A narrative description of the employment impact of work funded by the Recovery Act. This narrative should be cumulative for each calendar quarter and only address the impact on the contractor's workforce. At a minimum, the contractor shall provide--

(i) A brief description of the types of jobs created and jobs retained in the United States and outlying areas (see definition in FAR 2.101). This description may rely on job titles, broader labor categories, or the contractor's existing practice for describing jobs as long as the terms used are widely understood and describe the general nature of the work; and

(ii) An estimate of the number of jobs created and jobs retained by the prime contractor, in the United States and outlying areas. A job cannot be reported as both created and retained.

(8) Names and total compensation of each of the five most highly compensated officers of the Contractor for the calendar year in which the contract is awarded 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) and cooperative agreements; and

(B) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

(ii) The public does not have access to information about the compensation of the senior 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.

(9) For subcontracts valued at less than $25,000 or any subcontracts awarded to an individual, or subcontracts awarded to a subcontractor that in the previous tax year had gross income under $300,000, the Contractor shall only report the aggregate number of such first tier subcontracts awarded in the quarter and their aggregate total dollar amount.

(10) For any first-tier subcontract funded in whole or in part under the Recovery Act, that is over $25,000 and not subject to reporting under paragraph 9, the contractor shall require the subcontractor to provide the information described in (i), (ix), (x), and (xi) below to the contractor for the purposes of the quarterly report. The contractor shall advise the subcontractor that the information will be made available to the public as required by section 1512 of the Recovery Act. The contractor shall provide detailed information on these first-tier subcontracts as follows:

(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) The applicable North American Industry Classification System (NAICS) code.

(vi) Funding agency.

(vii) 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.

(viii) Subcontract number (the contract number assigned by the prime contractor).

(ix) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district if applicable.

(x) Subcontract primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district if applicable.

(xi) Names and total compensation of each of the subcontractor's five most highly compensated officers, for the calendar year in which the subcontract is awarded if--

(A) In the subcontractor's preceding fiscal year, the subcontractor received--

(l) 80 percent or more of its annual gross revenues in Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; and

(2) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; and

(B) The public does not have access to information about the compensation of the senior 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.

The following clause is only applicable to projects funded by the Recovery Act:

CLAUSE I.118 - FAR 52.225-21 – REQUIRED USE OF AMERICAN IRON, STEEL, AND OTHER MANUFACTURED GOODS-BUY AMERICAN ACT—CONSTRUCTION MATERIALS (MAR 2009)

(a) Definitions. As used in this clause—

"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. Materials purchased directly by the Government are supplies, not construction material.

"Domestic construction material" means—

(1) An unmanufactured construction material mined or produced in the United States; or

(2) A construction material manufactured in the United States.

"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 iron, steel, and other manufactured goods used as construction material in the project are produced in the United States; and

(ii) The Buy American Act (41 U.S.C. 10a-10d) by providing a preference for unmanufactured domestic construction material.

(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:

[Contracting Officer to list applicable excepted materials or indicate "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 iron, steel, or other manufactured goods used as 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 unmanufactured construction material is unreasonable when the cost of such material exceeds the cost of foreign 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; or

(iii) The application of the restriction of section 1605 of the Recovery Act or the Buy American Act to a particular construction material would be inconsistent with the public interest.

(c) Request for determination of inapplicability of Section 1605 of the Recovery Act or the Buy American Act.

(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 Act 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 Act applies, use of foreign construction material is noncompliant with section 1605 of the American Recovery and Reinvestment Act or the Buy American Act.

(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.]

SECTION/ CLAUSE NO.	FAR/DEAR REFERENCE	TITLE OF SECTION/CLAUSE

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 2006 Mod M138
- FY 2007 Mod M153
- FY 2008 Mod M175
- FY 2009 Mod M190
- FY 2010 Mod M237

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 2006 Mod M144
- FY 2007 Mod M159
- FY 2008 Mod M175
- FY 2008 Mod M182 (updated)
- FY 2009 Mod M190
- FY 2010 Mod M245

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 2006 Mod M178
- FY 2007 Mod M178
- FY 2008 Mod M196
- FY 2009 Mod M245
- FY 2010 Mod M237

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

U.S. Department of Energy

and

Brookhaven Science Associates, LLC

ATTACHMENT J.1

APPENDIX A

ADVANCE UNDERSTANDINGS ON HUMAN RESOURCES

Applicable to the Operation of
The Brookhaven National Laboratory

Contract No. DE-AC02-98CH10886
Modification No. M237

Part III – List of Documents, Exhibits, and Other Attachments

Section J

Appendix A

Advance Understandings on Human Resources

Introduction

This Advance Understanding (AU) is intended to document the Contractor Human Resource Management (CHRM) self-assessment policies, processes and measures, which sets forth the principles for evaluation of Contractor's Human Resource Management (CHRM) programs. BNL CHRM policies, practices, and plans are located in the BNL Standards-Based Management System (SBMS).

BNL CHRM 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 HR programs, including but not limited to Compensation, Health and Welfare Benefits, Pension Plans, Training and Development, Employee Morale, Professional Society Memberships, Employee and Labor Relations, Diversity/Equal Employment Opportunity/Affirmative Action, Recruitment and Relocation. The Contractor shall use effective management review procedures and internal controls to assure compliance with the FAR and DEAR.

Either party may request that this AU be revised and the parties hereto agree to give consideration in good faith to any such request. Revisions to this AU shall be accomplished by executing an AU modification as approved by the DOE Contracting Officer.

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.

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.

I. Human Resources Strategy, Business Planning and Performance Management

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 Performance Evaluation and Measures Plan, which is updated and negotiated annually and included in Appendix B of this contract. A Human Resources Balanced Scorecard (BSC) approach will be developed.

CHRM performance objectives and targets will align with, and facilitate the achievement of the Laboratory mission and 5-Year Work Plan; be limited in number; focus on strategic results and systems-based measures; be developed annually and mutually agreed upon by the Contractor and DOE in accordance with Appendix B and the BSC process; 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 BNL mission, strategy and objectives.

II. Personnel Policies and Procedures

Personnel-related costs will be in accordance with the FAR and DEAR cost principles. To the extent that the contractor identifies such costs found in the Laboratory SBMS and not cited in this Appendix, that are not consistent with the FAR cost principles, the contractor will have 30 days from execution of this contract modification to submit to the contracting officer those items for consideration and allowability.

III. Certification of Compensation System

The contractor and DOE acknowledge that national compensation system standards currently do not exist. Further, the development of such standards requires a system-wide effort by DOE and DOE contractors, which may include assistance from outside experts, to identify/develop national compensation system certification standards and metrics.

Until such time as the DOE CO notifies BNL that national compensation system standards are recognized by the DOE, the contractor evaluates its compensation system against the standards outlined in Appendix B and the BSC. A goal of this contract will be for BSA to obtain DOE's certification for its compensation system. Until such time as BSA achieves a certified compensation system, CO determination of reimbursement for the annual Compensation Increase Plan and salaries in excess of $120,000 are required.

IV. Determination of Cost Reimbursement

Advance Understandings, regarding specific items of reimbursable cost, are in the best interest of both the contractor and the government. Such items specific to this contract are described below.

1. Definitions

Service. Except as provided below, employment with the Contractor from date of hire. Unpaid leaves of absence will not be counted. Prior service will not be credited if there has been a break in service over three years, or as otherwise specified in this Appendix. Those employees transferring to Brookhaven Science Associates (BSA) from the State University of New York at Stony Brook (USB), Research Foundation of State University of New York, Battelle Memorial Institute, or Associated Universities, Inc. or the subsidiaries or affiliates of these organizations shall receive credit for their service in any of those organizations when determining total BSA service. There shall be no transfers of money or liability with respect to any benefit plans when any such transfers occurs.

2. Overtime

a. Nonexempt employees

A nonexempt employee may be paid at 1-1/2 times his/her regular base rate for all emergency work, for all work performed in excess of forty hours in any workweek, and in the case of an hourly or weekly employee, for all work performed in excess of eight hours in any workday, except that when a weekly employee is granted, at his/her request, a variation in the time of his scheduled work, the calendar day (midnight to midnight) may be considered a workday. For the purpose of computing premium pay under this section for monthly nonexempt employees, holidays may be counted as time worked. A nonexempt employee may be paid at 1-1/2 times his/her regular base rate for all hours worked on the first of his/her scheduled days off in any workweek and at two times his/her regular base rate for work performed on the second of his/her scheduled days off in any workweek.

A nonexempt employee required to work more than twelve hours within a period of twenty-four consecutive hours may be paid at two times his/her regular base rate for all hours so worked in excess of twelve. A nonexempt employee required to work more than sixteen consecutive hours may be paid at two times his/her regular base rate for all hours so worked in excess of sixteen. A nonexempt employee who has worked a continuous period of sixteen hours or more shall be entitled to an eight-hour rest period before returning to work. If this eight-hour period extends into the employee's regular work schedule, the employee shall be paid at straight time for the hours extending into the employee's regular work schedule.

If a nonexempt employee at the direction of the Laboratory performs emergency work or performs work on either of his/her scheduled days off, and the overtime payment for such work amounts to less than four hours' pay at his/her regular base rate, the employee may be paid four hours' pay at his/her regular base rate, (plus shift premium, if any) for such work. A weekly employee who is required to work beyond his/her scheduled hours may be guaranteed a minimum of one hour's pay at his/her base rate for the overtime work.

The Laboratory operating procedures for regularly scheduled shifts shall be submitted to DOE for information. The Laboratory will also provide the Contracting Officer with a semi-annual report on overtime usage to include total hours and cost of overtime, the total hours and cost of overtime as a percentage of straight-time hours and straight-time cost.

b. Emergency Work - Nonexempt Employees

Work scheduled on less than 36 hours' notice or resulting from a change in schedule made on less than 36 hours' notice is considered emergency work. The time spent by an employee in travel (including travel between home and duty station) required by emergency work is considered as time worked.

3. Shift Premiums

a. Weekly Employees

The Laboratory may pay to weekly employees a shift premium of 15 percent of earned pay (regular base pay, plus overtime and holiday premium pay where applicable) for hours worked between 4 p.m. and 8 a.m. of the following day, provided that the shift premium payable to an employee for four hours or less of overtime which immediately follows regularly scheduled work or 20 minutes or less of work immediately preceding his/her regular eight-hour shift may be the same as the shift premium, if any, paid to him/her for such regular scheduled work.

b. Monthly Exempt and Nonexempt Employees

A monthly employee working as an assigned member of a regularly scheduled shift operation may be paid a premium of up to 15 percent of base pay. The premium may be considered a part of regular base pay for the purposes of paying leave (such as vacation, sick leave, military duty leave) taken during such assignment. Excluded are: scientific staff members, supervisors of Police and Fire Captains, supervisors of Operations Engineers, supervisors of Reactor Shift Supervisors, and supervisors on an equivalent level in other organizations.

4. Premium for Nonconsecutive Days Off

If an employee is assigned by the Laboratory to a schedule in which the employee's days off in any workweek are not consecutive, the employee may be paid for all work performed on the day immediately preceding his/her second non-scheduled day at time and one-half plus applicable shift premium, if any.

5. Schedule Change Premium

If a change in employee's schedule involves a change in the employee's day(s) off, and if the change was not announced before the start of the workweek in

which the change became effective, the employee's original day(s) off may be deemed unchanged for the purpose of computing overtime.

6. Closing of the Laboratory

The Director, or his duly authorized designee, after consultation with the DOE Contracting Officer whenever possible, may order a closing of the Laboratory whenever he deems it in the best interest of the Laboratory to do so because of some emergency which is general in scope, as, for example, the imminent approach of a hurricane or blizzard or some onsite emergency of a serious nature.

An essential nonexempt employee who is required to work when the Laboratory is closed may be paid at 2 times his regular base rate for all regularly scheduled work performed during such period and may be paid at 2 1/2 times his regular base rate for all other work performed during such period.

7. Special Allowances

a. Reporting Allowance

A nonexempt employee who reports for scheduled work and who is prevented from working all or part of such scheduled work by conditions beyond his/her control, may be paid a reporting allowance up to the amount he would have received if such scheduled work had been performed. An employee who is late to work because of widespread fire, storm, or flood, or because of some other cause acceptable to the Laboratory and beyond the control of the employee, may be considered to have reported for work on time provided that he/she shall have reported for work during the first half of his/her scheduled shift.

b. Overtime Meal Period

A nonexempt employee working more than 10 consecutive hours may be allowed a 30-minute paid meal period. If due to operational requirements an employee is prohibited from taking the full 30-minute meal period, the lost meal time may, for pay purposes, be considered additional time worked.

8. Saturday and Sunday Premiums

A weekly nonexempt employee who actually performs work on a Saturday or Sunday at straight time rates is paid a premium equal to one hour's pay at his/her regular base rate for all work performed on a Saturday and a like premium for all work performed on a Sunday. These Saturday and Sunday

premiums shall not be considered as part of "earned pay" for the purpose of computing the shift premium, if any, for such day.

9. Compensation Awards

In the event of an occupational illness or injury of an employee, the charge to his/her sick leave credit may be reduced to one half (1/2) day per day of absence. The employee's sick leave pay is deemed to include any Worker's Compensation Benefits to which the employee is entitled except:

a. If a Worker's Compensation award exceeds the sick leave payments made the employee will receive the excess; and

b. In the event the Laboratory is reimbursed from a compensation award for wages paid to the employee while absent as a result of a work-incurred injury, the Laboratory will restore sick leave credit to the employee up to extent of reimbursement.

c. The combination of sick leave pay and compensation award payments shall not exceed one hundred percent (100%) of the employee's pay.

10. Application of Sick Leave

If an employee suffers illness or injury during his/her vacation, the period of his/her illness or injury may be charged against his/her accrued sick leave credit rather than his/her vacation credit. A holiday observed on a scheduled workday of an employee on sick leave will not be charged against his/her sick leave credit.

11. Sick Leave Repurchase Plan for Nonexempt Employees

When the accrual of sick leave of a nonexempt employee for any monthly reporting period would cause his/her accumulated credit to exceed the 108 the excess shall be recorded to the employee's credit and paid for at the end of the calendar year at the rate of one day's pay for each four days so credited.

12. Holiday Pay

a. Weekly Employees

Each weekly employee who is excused from work on an observed holiday may be granted holiday pay equal to eight hours' pay at his/her regular base rate; if his/her scheduled day off falls on an observed holiday, he/she may accrue one additional day of vacation credit.

A weekly employee who is required to work on an observed holiday may be paid, in addition to eight hours holiday pay, at 1-1/2 times his/her regular base rate for the first eight hours and at 2-1/2 times his/her regular base rate for all hours in excess of eight hours worked in the holiday period.

If any such payment to an employee does not equal or exceed four hours' pay at his/her regular base rate, such employee may be paid in addition to holiday pay, four hours' pay at his/her regular base rate (plus shift premium, if any), for such holiday work.

b. Monthly Employees

A monthly nonexempt employee who is required to work on an observed eight hours holiday may be paid in addition to holiday pay, at one times his/her regular base rate for the first eight hours and at two times his/her regular base rate for all hours in excess of eight hours worked.

A monthly employee whose scheduled day off falls on an observed holiday shall accrue one additional day of vacation credit.

A monthly exempt employee who is required by the Laboratory to work on an observed holiday may accrue one additional day of vacation credit.

13. Death Leave

An employee may be allowed up to three days' absence with pay at their regular base rate for death in the immediate family- death of wife, husband, mother, father, daughter, son, sister, brother, grandmother, grandfather, mother-in-law, father-in-law, same sex domestic partner; and also any other family member residing in the household of the employee. An employee may be allowed one day of absence with pay at their regular base rate for death of any other family member other than the immediate family defined above.

14. Leave for Attendance at Court

An employee may be granted leave with pay for jury duty or for a court appearance where the Laboratory has an interest.

15. Bargaining Unit Activity

Pay for absences from work by employees acting in the capacity of union officers, union stewards and committeemen for time spent in handling grievances, negotiating with the Laboratory, and serving on labor management (Laboratory) committees, are allowable.

16. Leave Without Pay

The Laboratory may grant leave without pay to an employee, without loss of his/her employee status, for such time and upon such terms and conditions as the Laboratory shall determine; provided, however, that in no case shall the vacation accrual of an employee on leave without pay for more than 15 consecutive calendar days in any one calendar year be based upon time spent on such leave in excess of 15 calendar days.

17. Regular Leave of Absence

This nonpay status removes the employee from the active rolls of the Laboratory. All employees are eligible for leave for a period of up to one (1) year with an extension of up to an additional year upon approval of the Director of the Laboratory.

The Laboratory will make no retirement contributions. Group Health, Life and Long-Term Disability insurance based on normal salary will be continued, provided that the employee continues to pay the employee group insurance premium based on normal salary.

No sick leave or vacation credit is accrued, nor is there eligibility for holiday pay.

18. Part-Time Leave of Absence

All employees are eligible for leave for a period of up to one (1) year with an extension of up to an additional year upon approval of the Director of the Laboratory.

Laboratory retirement contributions based on the employee's normal salary will be continued. Group Health, Life and Long-Term Disability insurance based on normal salary will be continued, provided that the employee continues to pay the employee group insurance premium based on normal salary.

Salary and accrual of sick leave and vacation credit will be pro-rated according to the employee's schedule.

19. Professional Advancement Leave of Absence

Full-time staff members with the rank of Scientist or Senior Scientist are eligible. This type of leave is granted to further the scholarly pursuits or professional stature of the recipients and to increase the value of their further services to the Laboratory.

Leave credit accumulates at the rate of one month for each year of service (not including periods of leave) in the rank of Associate Scientist, Scientist, or Senior Scientist to a maximum of 12 months. The number of months of leave at full pay taken at any one time may not exceed the leave credit. The number of months of leave at half salary or nonsalaried leave taken at any one time may not exceed twice the leave credit, or 12 months, whichever is less.

Leave at full pay is not intended for teaching; part-time teaching is permitted on leave at half pay.

Laboratory retirement contributions based on the employee's full-time salary will be continued. Group Health, Life and Long-Term Disability insurance based on full-time salary will be continued, provided, that the employee continues to pay the employee group insurance premium based on full-time salary.

No sick leave or vacation credit is accrued.

In the case of employees on non-salaried leave of absence, the Laboratory may pay retirement and insurance premiums (both employer and employee shares) to the extent that they are not paid by the institution or organization providing the stipend, grant or fellowship.

20. Termination of Individual 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.

21. Severance Pay

Severance payments made to an employee will be reimbursable under this contract when provided in accordance with the following provisions:

a. No employee: (1) who accepts a transfer to another facility, subsidiary, or affiliate of the Contractor, (2) who is offered employment at comparable pay and benefits by successor Contractor, (3) who resigns, or (4) who is discharged for cause, will be eligible for severance pay.

b. Should an employee be rehired in the period covered by severance pay, the employee will be responsible for refunding the remaining balance of severance pay.

c. The Contractor's severance pay plan, and any changes to the plan, are subject to Contracting Officer approval, unless stipulated in a bargaining unit agreement.

d. Severance payments may be made at the Laboratory's option to an employee within a Reduction-in-Force grouping who is not scheduled for termination but who offers to terminate employment, thereby eliminating the need for terminating another employee involuntarily.

e. The Laboratory will advise DOE of all Reductions-in-Force prior to their initiation. Upon completion, and at the end of each fiscal year, the Laboratory will provide DOE with a report to the extent of such Reduction-in-Force.

f. Severance pay may be made in accordance with the following separation allowances in addition to benefits under unemployment compensation laws.

Years of Service	Severance Payment
First 10 years:	1 week for each year
Over 10 years through 15 years:	1-1/2 weeks for each year over 10 years
Over 15 years:	2 weeks for each year over 15 years

Employees with less than one (1) year of service are credited with a full year service. For the final year of employment, service is computed in quarterly (three-month) increments with a full quarter's credit given for any fraction of a quarter attained. Allowances for eligible part-time employees will be prorated in accordance with the employee's official work schedule.

Effective October 1, 1995, the maximum severance pay allowance is 39 weeks.

22. 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.

23. Security Suspension Pay

If the access authorization of an employee is suspended by direction of the Operations Office Manager, the Contractor shall transfer the employee to work not requiring access if such work is available.

In the event a job transfer is not arranged, the employee's base compensation shall be discontinued and the employee shall be placed on leave of absence effective the date that the Contracting Officer provides written notification to the Contractor and shall remain on leave of absence until final disposition of the case under the Department of Energy procedure, 10 CFR Part 710.

In the event the employee whose access authorization has been suspended is transferred to another position where such access authorization is not required, compensation shall, thereafter, be the base wage or salary received by employees in the position transferred into, and such compensation shall continue until final disposition of the case under the Department of Energy procedure, 10 CFR Part 710.

24. Travel - Eligible Persons

The following persons are eligible for reimbursement of travel expenses in accordance with paragraph 25, Travel-Reimbursable Expenses:

a. Employees and consultants while engaged in work relating to the scientific or administrative business of the Laboratory;

b. Employees while in attendance at scientific or professional meetings which may be expected to benefit the Laboratory directly or indirectly, as by enhancing the scientific or professional knowledge of employees;

c. Collaborators (and their families), visitors and speakers, while engaged in travel relating to an appointment with or an approved visit to the Laboratory, or while serving on appointment at the Laboratory, in connection with the performance of work relating to the scientific or administrative business of the Laboratory;

d. Employees and prospective employees, and their families, while making a change of residence required by a change in such employee's place of assignment for the convenience of the Laboratory, or the change required

by a new employee's affiliation with the Laboratory or with DOE approval by termination of his/her employment with the Laboratory within three years of the date of his/her employment.

Where relocation costs incurred incident to recruitment of a new employee have been allowed, and the newly hired employee resigns for reasons within his/her control within 12 months after hire, the individual shall be required to refund or credit such relocation costs; and

e. An applicant for a position with the Laboratory while engaged in travel relating to an interview made at the Laboratory's request. While at the Laboratory on such visit, such person and their spouse may be given meals in lieu of a per diem allowance for the day.

25. Travel - Reimbursable Expenses

Persons Eligible for reimbursement under paragraph 24, Travel-Eligible Persons, may be reimbursed as follows:

a. Transportation

(1) Reimbursement for use of private vehicle, when more advantageous to the Laboratory than use of commercial transportation is at a rate in accordance with the Federal Travel Regulations (FTR), plus bridge, road and ferry tolls. When permitted for the convenience of the traveler, reimbursement should be such that additional costs are borne by the traveler and not by the Laboratory. Mileage shall not be more than one hundred ten percent (110%) of the most direct route per Rand-McNally.

(2) Public Carrier:

(i) Actual cost of commercial transportation, except that air fare reimbursement is limited to less than first-class accommodations, the cost of which shall not exceed the lowest available commercial discount airfare, Government contract airfare, or customary standard (coach or equivalent) commercial airfare as determined by the Laboratory. Less than first-class accommodations are considered not reasonably available where less than first-class accommodations would, for example:

(A) require circuitous routing;

(B) require travel during unreasonable hours;

(C) excessively prolong travel;

(D) result in additional costs which would offset the transportation savings;

(E) offer accommodations which are not reasonably adequate for the physical or medical needs of the traveler;

(F) not meet necessary mission requirements.

(ii) First class accommodations are specifically authorized or approved by the Contracting Officer when deemed necessary for the conduct of the mission.

(iii) Authorized Rental Car: Actual expense when authorized by the Laboratory

(iv) Rented or chartered aircraft: Actual expense when authorized by the Laboratory and as by the Contracting Officer.

b. Subsistence Expenses

(1) Lodging plus Per Diem

For travel in the Continental United States (CONUS) involving one or more overnight stops, reimbursement for lodging, meals and incidental expenses shall be at the rate established for the applicable locality under Federal Travel Regulations (FTR). The applicable rate (allowance) shall be determined by the travel status and location of the individual at 12:00 midnight and whether lodging is required at such location. When lodging is required on the day travel begins (day of departure from the official station or other authorized point), the allowance shall be the maximum amount for lodging allowed by the FTR plus the pro-rated (if applicable) portion of the per diem (meals and incidental expenses - M&IE). For the day travel ends (when the employee returns to the official station or authorized point), the per diem allowance from the preceding calendar date shall be the prorated (if applicable) portion allowed. The per diem portion of the allowance (M&IE) is calculated for partial days by prorating using one fourth of the allowance for each six-hour period or fraction thereof. A day begins at 12:01 a.m.

(2) Travel of Less Than 24 Hours

No per diem (M&IE) allowance will be allowed for travel begun and completed between the hours of 0800 and 1800 on the same day, with the exception of Saturdays, Sundays and Holidays. Per diem will be allowed for travel in excess of six hours, occurring in a single day, if travel is begun prior to 0800 or continued beyond 1800. In this circumstance, the travel period will be divided into six-hour periods starting from the actual time travel begins and ending with their completion at home, office or other authorized point. For each six-hour period or fraction thereof, one-fourth of the applicable per diem (M&IE) rate will be allowed. The maximum per diem (M&IE) allowance shall not exceed the rate established for the Suffolk County, New York locality under the FTR.

(3) Meals and Incidental Expenses

When meals are furnished without charge, an appropriate deduction to the individual's per diem allowance shall be made. For travel incurred in accordance with b.(1) or b.(2), the per diem (M&IE) rate shall be adjusted in accordance with the FTR.

In either case the individual amount of deductions made on partial days shall not cause the individual to receive less than the amount allocated for incidental expenses.

(4) Dependents Travel

When individuals are entitled to allowances for family members, the rate for spouses and other immediate family members age twelve and older is based on three-fourths of the maximum allowance which applied to the traveler. Children under the age of twelve are included based on a maximum rate calculated at one half the maximum allowance applied to the traveler.

(5) Foreign Travel

Allowances payable for official travel within localities outside CONUS will be at rates not to exceed the maximum rates established under:

(i) Non-foreign areas outside CONUS. The allowances payable for official travel in non-foreign areas shall not exceed the maximum rates established by the Secretary of Defense and listed in civilian personnel per diem bulletins published periodically in the Federal Register. The term "non-foreign

areas" includes the states of Alaska and Hawaii, the Commonwealth of Puerto Rico, and the possessions of the United States.

(ii) Foreign areas. Allowances payable for official travel in foreign areas shall not exceed the maximum rates established by the Secretary of State and published in the per diem supplement to the standardized regulations (government civilians, foreign areas). The term "foreign areas" includes any area (including the trust territory of the Pacific Islands) situated both outside CONUS and the non-foreign areas as described in 5.(i) above.

The applicable rate (allowance) shall be determined by the travel status and location of the individual at 12:00 midnight and whether lodging is required at such location.

In addition to the above, travelers are entitled to an enroute rate of $17.00 on the day their trip begins within CONUS, and $25.00 for the day of return. The sum of the two enroute rates, plus the daily allowances for each city where lodging is taken, equals the maximum allowable rate for any outside CONUS (CONUS) trip.

When all or part of the meals and/or lodging are furnished at no cost or at a nominal cost to the employee by the Federal Government or others, the applicable maximum per diem rate or the M&IE rate, as appropriate, shall be reduced to a daily amount commensurate with the remaining expenses expected to be incurred by the employee. If a reduced per diem rate was not authorized in advance of the travel, an appropriate deduction shall be made from the total per diem payable on the travel voucher.

(6) In special or unusual situations, contractor employees may be paid for actual expenses in excess of the above referenced maximum per diem rates provided such payments do not exceed the higher amounts authorized by the Federal Travel Regulations at the time of travel and provided all of the following conditions are met:

(i) Special circumstances exist which are similar to or consistent with the description of conditions warranting approval of the actual expense method as set forth in the Federal Travel Regulations, prescribed by the General Services Administration, for travel in the conterminous 48 United States.

(ii) A written justification for payment of the higher amounts is approved by a Department Chairman or Division Head or their Deputy.

(iii) Documentation exists to support the payment of actual lodging expenses.

c. Research Collaborators who plan to remain at the Laboratory for at least 60 calendar days and persons eligible under subparagraph d. of paragraph 24, Travel – Eligible Persons, may be reimbursed for the actual cost of packing and unpacking, transporting, storing and removing household goods from storage.

d. Purely personal expenses, such as personal telephone calls [except one personal call per week of travel (or portion thereof) and any additional calls deemed necessary due to unusual circumstances, i.e., family illness, emergencies, disasters, etc.] and valet services, are not reimbursed even though incurred in the course of a trip.

e. Allowable miscellaneous expenses: Expenses other than those specified below require the approval of the Director or his designee.

(1) Rental of necessary office equipment
(2) Stenographic and word processing services
(3) Rental of rooms for official business
(4) Clerical services
(5) Excess baggage charges (air travel)
(6) Storage charges for baggage
(7) Official telephone and telegraph
(8) Tolls
(9) Ferry
(10) Limousines and Taxis, including a gratuity of up to a maximum of 15 percent. Taxi fares to and from restaurants are not reimbursable, unless there is no restaurant in or near the lodging.
(11) Public carriers, e.g., bus, subway and streetcar
(12) Passports, visas, and tourist cards, including necessary travel to obtain same
(13) Travelers' check service
(14) Foreign currency exchange loss
(15) Debarkation taxes
(16) Innoculations
(17) Registration fees for meetings
(18) Parking when authorized by the Laboratory in accordance with a.(1) or a.(2)(iii).

7. 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).

Examples of such expenditures are: closing costs incidental to the purchase of a house; rental differential; or other relocation costs validated by submission of a receipt. Employees in the following salary grades will be eligible: all management grades; Scientific Staff (Asst. Scientist and above); Professional Schedule (Grades P7 and above); and Administrative (Grade A8 and above). Approval by the Director is required.

26. Authorization and Voucher Approvals

In addition to any approvals required under other provisions of this Contract, all travel authorizations and vouchers shall be approved in accordance with the Laboratory's signature authorization control policy.

27. Housing for Temporary Appointees

a. Temporary Appointees

(1) 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.

(2) Because Research Collaborators receive no salary for their work at the Laboratory, the deduction equivalent to on-site rental is not made.

28. Post Allowance Foreign Assignment Change of Station

Where an assignment of a BNL employee results in living costs for the employee and his/her family which are in excess of those which the employee would have incurred were he/she to remain at his/her regular place of employment, the employee may be compensated for these additional living costs. Payment on a per diem basis, will be based upon the approximate difference between the normal expenditures of the employee at his/her usual place of abode, and the cost of reasonably equivalent items at the place of his/her foreign assignment, for such items as normal household costs, including local transportation and children's education, and if applicable, storage of furniture and household effects including moving into and out of storage. Subtracted from these and other valid additional expenses will be any extra income generated (1) by renting of the employee's home, and (2) from the tax advantage occurring to those working abroad for 11 months or more. In addition, family size as well as the employee's tax situation will also be considered in BNL's determination for per diem allowance. In no event will the total per diem, adjusted for living costs abroad, exceed "The U.S. Department of State Indexes of Living Costs Abroad and Quarters Allowances" published by the U.S. Department of Labor, Bureau of Labor Statistics.

29. 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.

30. Child Care

The Laboratory is authorized to operate a child development center, by subcontract or otherwise; however, the Laboratory shall not employ personnel (e.g., teachers/caregivers, etc.) under the BNL contract. Furthermore, the costs for labor, materials and supplies expended for the operation of the Child Development Center (e.g., teachers, caregivers, instructional materials and equipment) shall be fully recovered from the participants. If such a center is contracted for, the Laboratory shall require the subcontractor hold harmless the Laboratory and the Department of Energy for all liability arising out of

operation of the center and shall provide adequate property damage liability and bodily injury liability insurance naming the Laboratory and DOE as additional named insured.

The Laboratory shall use its best efforts to add the Department of Energy, at no additional premium or cost, as an additional named insured under the Laboratory's existing liability policy covering the Brookhaven Child Development Center. Should the insurer be unwilling to add DOE at no additional cost, the Laboratory shall notify the Contracting Officer. The Contracting Officer shall in turn advise the Laboratory whether or not DOE desires such coverage. If desired by DOE, the costs are allowable under the Contract.

The following costs associated with implementation of a child care program are allowable:

a. Reasonable costs for communication of the program to employees.

b. Costs associated with utilities and maintenance as well as food services and medical services or supplies which are already being used in support of site operations and are readily available to additionally support child care centers.

Any agreement between contractors and dependent care (program) provider organizations must ensure that contractors and the DOE are held harmless from liability.

Property damage liability and bodily injury liability insurance policies must be retained by the dependent care (program) provider organization in an amount appropriate for services provided. The contractors must also be insured under these policies.

Agreements between the contractors and dependent care (program) provider organizations must ensure that the provider organizations operate, maintain, and upgrade any proposed workplace dependent care facility in compliance with federal, state, and local policies, regulations, and requirements for environment, safety and health.

31. 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.

32. Health and Morale - Recreation

a. Activities

The Laboratory maintains a recreation program consisting of organizations designed to improve company loyalty, teamwork or physical fitness for employees, guests and visitors.

b. Facilities

The recreation building, swimming pool, gymnasium, tennis courts and recreation park will be provided and maintained as recreational facilities. Other building or facilities may be made available for the recreation program when such use does not interfere with the official work of the Laboratory.

c. Group Buying

Profits from group buying services operated for the benefit of all employees may be used to assist in the support of the recreation program.

d. Income

The Laboratory shall provide the Board of Trustees of the Brookhaven Employees Recreation Association annual funds not to exceed an amount equal to $10.00 per employee for their administration of the organizations designed to improve company loyalty, teamwork or physical fitness. The amount shall be determined using the total number of employees, excluding temporary employees, on the payroll as of January 1st each year.

33. Outreach Programs

The Laboratory may sponsor outreach programs which are designed to encourage participation in science and mathematics by youth, minorities and women. The Laboratory shall include a summary of these programs in its annual Affirmative Action Plan.

34. Awards

a. Patent Incentive Award

Awards will be made to any Laboratory employee, assigned employee, loaned employee, consultant, or other affiliate or guest of the Laboratory who is an inventor or co-inventor of a subject invention as said term is defined in the Patent Rights Article when a provisional patent application or patent application is filed in the U. S. Patent and Trademark Office covering such invention; provided that

the person has executed all documents necessary for filing such provisional patent application or patent application in conformance with existing regulations, procedures and contracts of the Laboratory and the Department. An additional award may, with DOE approval, be awarded to each such inventor or co-inventor when a patent is granted on said patent application by the U.S. Patent and Trademark Office.

Awards amount schedule:

Applications filed through September 30, 2007 - $250 for patent application; $0 for provisional patent application.

Applications filed after September 30, 2007 - $300 for patent application; $100 for provisional patent application.

b. Variable Pay

The contractor may expend an amount not to exceed 1.5% (0.015) of the Laboratory's base payroll for variable pay without Contracting Officer approval. The types of payments may include performance-based recognition in the forms of bonuses, performance incentives, plus other payments and costs associated with for example, Service and Retirement Recognition; Safety Awards; Suggestion Program and retention incentives. BSA will provide a summary of expenditures under this authorization to DOE annually.

c. 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.

35. 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.

36. Adjunct and Editorship Appointments

Employees of the Laboratory may be permitted to accept adjunct appointments to academic institutions and editorships of scientific, technical or other professional publications, under the following conditions:

a. An employee may not hold more than one outside appointment that provides for compensation.

b. If the appointment is simply to give formal recognition to an honorary position which requires only incidental and occasional time to be devoted by the employee either at the Laboratory or at another location, the employee may accept the appointment and receive expenses, but not compensation, while continuing to receive from the Laboratory full-time salary and benefits.

c. If the appointment requires the employee to spend not more than 10 percent of the normal working hours of the Laboratory on an appointment, both compensation and expenses may be accepted for performing such duties. The employee may use vacation time and, in addition, take leave without pay for such purposes. Under these circumstances, the employee loses no normal Laboratory benefits. Should a conflict of duties arise, the employee's primary commitment is to the Laboratory.

d. If the appointment requires the employee to spend more than 10 percent of the normal working hours of the Laboratory on the appointment, salary will be proportionately reduced for the time spent performing such duties, and the employee will be considered to be on part-time leave of absence (refer to paragraph. 17). The employee may accept both compensation and expenses from the other employer. The Laboratory, however, must concur in such arrangements including the term of the appointment. Under no circumstances may the working time devoted by the employee to such projects exceed 50 percent.

37. Meal Allowance

Exempt employees who are required to work three or more hours beyond their normal scheduled workday will be eligible for a meal allowance of ten dollars ($10). This must be approved by a Department Chairman/Division Head.

38. Recruitment

Reimbursable expenses incurred in the recruitment of personnel shall include necessary and reasonable costs based on previous expense history, internal controls and the fluctuation of the level of recruitment. Expenses of recruitment may include:

a. Transportation, lodging, meals, incidental and other expenses for interviewees and, when approved by the Laboratory, on a case-by-case basis, for spouses, during their stay for the interview and in traveling to and from their home to the Laboratory location where they are interviewed, subject to the limitations under the Travel section of the Appendix.

b. Costs associated with a one-time sign-on cash supplement of up to $10,000 to new employees with critical and special skills who the Human Resources Division has determined are difficult to recruit. The cash supplement is intended to provide a competitive hiring package based on the Laboratory's Sign-on Supplement Program Policy. If a newly hired employee is terminated by BNL for performance or resigns for reasons under his/her control within 12 months after hire, the individual shall be required to refund or credit the cash supplement to the Laboratory for credit against its prime contract with DOE.

c. 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.

V. Retired Employees' Group Medical Insurance Plan

The Laboratory has a Group Medical Insurance Plan which provides extensive coverage for most in- and out-of-hospital medical expenses, in accordance with the insurance policy issued by the carrier. Each participant receives a Certificate of Insurance which contains the details of the plan. Effective October 1, 1995, the Laboratory pays a portion of the cost of active employee and dependent coverage; and employees are required to contribute to the cost of such coverage.

In compliance with federal and state laws, the Laboratory also offers a number of qualified Health Maintenance Organizations (HMO) medical care plans as additional employee options to the group Medical Insurance plan. For these HMO plans, the Laboratory will pay an amount no greater than the amount it pays for the group medical plan.

a. Retired Employees and Families

All employees employed prior to January 1, 1988 are eligible for the following:

Employees retiring in the calendar year in which their 55th birthday occurs and thereafter, who have completed not less than three (3) years of service with Brookhaven National Laboratory prior to retirement, are retired employees for the purpose of continuing medical insurance coverage.

All employees employed on or after January 1, 1988 and before January 1, 2001 are eligible for the following:

A terminating employee age 55 or older, with at least five years service, must have a combination of age and years of service totaling 70 in order to receive Laboratory medical insurance coverage.

All employees employed on or after January 1, 2001 are eligible for the following:
A terminating employee age 55 or older, with at least ten years service, must have a combination of age and years of service totaling 70 in order to receive Laboratory medical insurance coverage.

Retirees otherwise eligible who are subsequently employed elsewhere will become ineligible for retiree coverage if the new employer makes available a group medical plan. Such subsequent employment will not preclude the retiree from again being eligible if he/she becomes ineligible for coverage under any other group plan.

Retired employees under 65, spouses under age 65, and dependent children continue to be covered under the Laboratory's plan on the same basis as active employees.

For employees who retired between October 1, 1995, and December 31, 2001, retiree contributions will be the amount they were contributing on the day of their retirement. Should the rates for active employees' contributions change, the rates for employees who retire on or after January 1, 2002, will be adjusted accordingly.

Retired employees and their dependents eligible for Medicare benefits will be covered at no cost under the Laboratory's Medical Insurance Plan; except that payment under the plan will be reduced by the amount that employees and their dependents are reimbursed, or entitled to reimbursement, by Medicare.

The Contractor will provide experience reports and actuarial calculations estimating retiree liability, as directed by the Contractor Officer.

If the contract terminates and there is a replacement Contractor, all assets and liabilities shall transfer to the replacement Contractor, and the Contractor shall be relieved of, and held harmless by the Department of Energy, subject to the availability of appropriated funds, against any and all further liabilities arising from such plans.

If the contract terminates and there is no replacement Contractor, the Department of Energy, subject to the availability of appropriated funds, will make available to the Contractor in a timely manner sufficient funds so that the Contractor has no out-of-pocket expenditures from corporate funds to cover all liabilities incurred under this contract related to Contracting Officer-approved employee welfare benefit plans (including but not limited to Medical, Life, Dental, and Workers' Compensation). If so requested by the Department of Energy at the time of contract termination or expiration, the Contractor will continue as the sponsor of these plans until all liabilities of such plans are discharged.

b. Deceased Employees and Families

The medical insurances on the dependents of an employee who dies before the calendar year of his/her 55th birthday may be continued for a maximum of one year.

The medical insurance on dependents of an employee with three (3) years but less than fifteen (15) years service may be continued after one year, providing they pay the full group rate premium.

The medical insurance on the dependents of an employee who dies during or after the calendar year of his 58th birthday or had fifteen (15) or more years service, may be continued to the same extent that coverage would have continued had the employee retired.

Coverage in all the above situations will terminate for all dependents on the date surviving spouse remarries. This policy would not apply to a surviving spouse who is eligible for coverage by a group medical insurance plan provided by another employer.

U.S. DEPARTMENT OF ENERGY

AND

BROOKHAVEN SCIENCE ASSOCIATES, LLC

ATTACHMENT J.2

APPENDIX B

PERFORMANCE EVALUATION AND MEASUREMENT PLAN

FISCAL YEAR 2010

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, 2009, through September 30, 2010. 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 (Performance Measures/Targets) 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 available fee for FY 2010 is $7,400,000. The FY 2010 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 and for Management and Operations. No overall rollup grade will be provided. The rollup of the performance of each Goal will then be utilized to determine the Contractor numerical grade for Science and Technology and Management and Operations (see Table A below). The total overall numerical grade derived for Science and Technology will be utilized to determine the amount of available fee that may be earned (see Table C). The overall numerical grade derived for Management and Operations will be utilized to determine the multiplier to be applied (see Table C) to the Science and Technology fee earned to determine the final amount of fee earned for FY 2010. Each Goal is composed of two or more weighted Objectives and each Objective has set definitions and/or Notable Outcomes, which are linked to an Objective or set of Objectives to assist the reviewer in determining the Contractor's overall performance in meeting an Objective(s). Where utilized, each of the Notable Outcomes highlight key aspects/areas of performance deserving special attention for the upcoming fiscal year and are utilized as a means of determining the Contractor's success in meeting the Objective along with other performance information available to the evaluating office from other sources to include, but not limited to, operational awareness (daily oversight) activities; "For Cause" reviews (if any); other outside agency reviews (OIG, GAO, DCAA, etc.), and the annual 2-week review (if needed). The following describes the methodology for determining the Contractor's grade for each Goal:

Performance Evaluation Methodology:
The purpose of this section is to establish a methodology to develop grading at the Objective Level. Each Objective within a Goal shall be assigned a grade and corresponding numerical grade by the evaluating office. Each evaluation will measure the degree of effectiveness and performance of the Contractor in meeting the corresponding Objectives based on all performance information available to the evaluating office.

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 five M&O Goals, DOE will rely on a combination of the information through the Contractor's own assurance systems, the ability of the Contractor to demonstrate the validity of this information, and DOE's own independent assessment of the Contractor's performance across the spectrum of its responsibilities. The latter might include, but is not limited to operational awareness (daily oversight) activities; formal assessments conducted; "For Cause" reviews (if any); and other outside agency reviews (OIG, GAO, DCAA, etc.).

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

The Department sets our expectations high, and expects performance at that level to optimize the efficient and effective operation of the Laboratory. Thus, the Department does not expect routine Contractor performance above expectations against the M&O Goals (4.0 – 8.0). Performance that might merit grades above B+ would need to reflect a Contractor's unexpectedly strong improvement in a particular area, significant contributions to the management and operations at the system of Laboratories, or recognition by external, independent entities as exemplary performance.

This year, a set of Notable Outcomes have been identified under each Goal to highlight the Contractor key aspects/areas of performance deserving special attention 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). 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.

Definitions for the grading scale for the Goal 4.0 – 8.0 Objectives are provided in Figure I-1, below:

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

Letter Grade	Numerical Grade	Definition
D	1.0-0.8	Most or all expectations of performance against the Objective in question are missed. Performance failures in this area have affected all parts of the Laboratory; DOE leadership engagement is required to deal with the situation and help the Contractor.
F	0.7-0	All expectations of performance against the Objective in question are missed. Performance failures in this area are not recoverable by the Contractor or DOE.

Figure I-1. Letter Grade and Numerical Grade Definitions

Calculating Individual Goal Scores and Letter Grades:

Each Objective is assigned the earned numerical grade by the evaluating office as stated above. The Goal rating is then computed by multiplying the numerical grade by the weight of each Objective within a Goal. These values are then added together to develop an overall numerical grade for each Goal. For the purpose of determining the final Goal grade, the raw numerical grade for each Goal will be rounded to the nearest tenth of a point utilizing the standard rounding convention discussed below and then compared to Table B. 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 grades to the Goal grade. Utilizing the raw numerical grade for each Goal within Table A, below, the grades for each of the Science and Technology (S&T) Goals and Management and Operations (M&O) Goals are then multiplied by the weight assigned and these are summed to provide an overall raw numerical grade for each.

As stated above the raw numerical grade from each calculation shall be carried through to the next stage of the calculation process. The raw numerical grade for Science and Technology and Management and Operations will be rounded to the nearest tenth of a point for purposes of determining fee as indicated in Table C. 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.50).

S&T Performance Goal	Numerical Grade	Letter Grade	Weight[1]	Weighted Score	Total Score
1.0 Mission Accomplishment			XX%		
2.0 Construction and Operations of User Research Facilities and Equipment			XX%		

[1] The final weights to be utilized for determining the overall S&T score will be determined following the end of the performance period and will be based on actual Budget Authority for FY 2010. If no preliminary weights are provided, please insert "TBD" in the table.

3.0 Science and Technology Research Project/Program Management			XX%		
				Total Score	
M&O Performance Goal	**Numerical Grade**	**Letter Grade**	**Weight**	**Weighted Score**	**Total Score**
4.0 Leadership and Stewardship of the Laboratory			25%		
5.0 Integrated Safety, Health, and Environmental Protection			20%		
6.0 Business Systems			20%		
7.0 Operating, Maintaining, and Renewing Facility and Infrastructure Portfolio			20%		
8.0 Integrated Safeguards and Security Management and Emergency Management Systems			15%		
				Total Score	

Table A. FY 2010 Contractor Evaluation Numerical Grade Calculation

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

Table B. FY 2010 Contractor Letter Grade Scale

Determining the Amount of Performance-Based Fee Earned:

The percentage of the available performance-based fee that may be earned by the Contractor shall be determined based on the overall weighted numerical grade for the S&T Goals (see Table A. above) and then compared to Table C. blow. The overall numerical grade of the M&O Goals from Table A. above shall then be utilized to determine the final fee multiplier (see Table C.), which shall be utilized to determine the overall amount of performance-based fee earned for FY 2010 as calculated within Table D.

Overall Weighted Score from Table A.	Percent S&T Fee Earned	M&O Fee Multiplier
4.3	**100%**	**100%**

Overall Weighted Score from Table A.	Percent S&T Fee Earned	M&O Fee Multiplier
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%

Table C. - Performance-Based Fee Earned Scale

Overall Fee Determination	
Percent S&T Fee Earned from Table C.	
M&O Fee Multiplier from Table C.	X
Overall Earned Performance-Based Fee Percent	

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

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); other outside agency reviews (OIG, GAO, DCAA, etc.), and the annual 2-week review (if 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 a set of Notable Outcomes, both objective and subjective, that are to focus primarily on end-results or impact and not on processes or activities. Notable Outcomes provide specific

evidence of performance, and collectively, they provide the body of evidence that indicates performance relative to the corresponding Objectives. On occasion however, it may be necessary to include a process/activity-oriented measure when there is a need for the Contractor to develop a system or process that does not currently exist but will be of significant importance to the DOE and the Laboratory when completed or that lead to the desired outcome/result.

Performance Goals, Objectives, and Notable Outcomes

The following sections describe the Performance Goals, their supporting Objectives, and associated Notable Outcomes for FY 2010.

1.0 Provide for Efficient and Effective Mission Accomplishment

The Contractor produces high-quality, original, and creative results that advance science and technology; demonstrates sustained scientific progress and impact; receives appropriate external recognition of accomplishments; and contributes 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 Tables 1.1, 1.2, & 1.3). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual Budget Authority for FY 2010.

- Office of Science (SC) (TBD%)
- Office of Defense Nuclear Nonproliferation (DNN) (TBD%)
- Department of Homeland Security (DHS) (TBD%)
- Assistant Secretary for Energy Efficiency and Renewable Energy (EERE) (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 1.4 below). The overall score earned is then compared to Table 1.5 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 BA for FY 2010 as compared to the total BA for those remaining HQ Program Offices.

Objectives:

1.1 Science and Technology Results Provide Meaningful Impact on the Field

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.:

- The impact of publications on the field;
- Publication in journals outside the field indicating broad impact;
- Impact on DOE or other customer mission(s);
- Successful stewardship of mission-relevant research areas;
- Significant awards (R&D 100, FLC, Nobel Prizes, 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.

A to A+	Changes the way the research community thinks about a particular field; resolves critical questions and thus moves research areas forward; results generate huge interest/enthusiasm in the field.
B+	Impacts the community as expected. Strong peer review comments in all relevant areas.
B	Not strong peer review comments in at least one significant research area.
C	One research area just not working out. Peer review reveals that a program isn't going anywhere.
D	Failure of multiple program elements.
F	Gross scientific incompetence and/or scientific fraud.

1.2 Provide Quality Leadership in Science and Technology

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, 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 the Contractor "guessed right" in that previous risky decisions 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 of collaborative efforts, quality of the scientists attracted and maintained at the Laboratory;
- Staff members visible in leadership position in the scientific community; and
- Effectiveness in driving the direction and setting the priorities of the community in a research field.

A to A+	Laboratory staff lead Academy or equivalent panels; laboratory's work changes the direction of research fields; world-class scientists are attracted to the laboratory, lab is trend-setter in a field.
B$^+$	Strong research performer in most areas; staff asked to speak to Academy or equivalent panels to discuss further research directions; lab is center for high-quality research and attracts full cadre of researchers; some aspects of programs are world-class.
B	Strong research performer in many areas; staff asked to speak to Academy or equivalent panels to discuss further research directions; few aspects of programs are world-class.
C	Working on problems no longer at the forefront of science; stale research; evolutionary, not revolutionary.
D	Failure of multiple program elements.
F	Gross scientific incompetence and/or scientific fraud.

1.3 Provide and sustain Outputs that Advance Program Objectives & Goals

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measures through defined project products, progress reports, statements of work, program management plans, Program Office and/or other reviews/oversight, etc.:

- The quantity and quality of program/project (e.g., technical reports, policy papers, prototype demonstrations, tasks, etc.) output(s) be it policy, R&D, or implementation programs;
- The number of publications in peer-reviewed journals; and
- Demonstrated progress against peer-reviewed recommendations, headquarters guidance, etc.

A to A+	Program offices, clients, end-users, independent experts and/or peers laud work results; output(s) exceeds the amount and/or quality typically expected for an excellent body of work.
B$^+$	Program office, client, end-user, independent expert and/or peer reviews are universally positive; output(s) meet the amount and/or quality typically expected for the body of work; work demonstrates progress against review recommendations and/or headquarters guidance.
B	Program office, client, end-user, independent expert and/or peer reviews are largely positive, with only a few minor deficiencies and/or slightly negative

	responses noted; minor deficiencies and/or negative responses have little to no potential to adversely impact the overall program/project.
C	A number of outputs have not met the amount and/or quality typically expected for the body of work; program office, client, end-user, independent expert and/or peer reviews identify a number of deficiencies and although they may be somewhat offset by other positive performance, they have the potential to negatively impact the overall program/project if not corrected.
D	Most outputs have not met the amount and/or quality typically expected for the body of work; program office, client, end-user, independent expert and/or peer reviews identify significant deficiencies which have negatively impacted the overall program/project.
F	All outputs have not met the amount and/or quality typically expected for the body of work; program office, client, end-user, independent expert and/or peer reviews identify significant deficiencies which have significantly impacted and/or damaged the overall program/project.

1.4 Provide for Effective Delivery of Products

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measures through progress reports, peer-reviews; Field Work Proposals (FWPs), Program Office reviews/oversight, etc.:

- Efficiency and effectiveness in meeting goals/milestones documented within FWPs and/or other such documents;
- Efficiency and effectiveness in delivering on promises and/or getting instruments to work as promised; and
- Efficiency and effectiveness in transmitting results to the community and/or responding to DOE or other customer guidance.

A to A+	Program/project goals and/or milestones are met well ahead of schedule and/or well under budget; program/project and/or mission objective(s) are fully meet and results anticipate HQ guidance.
B$^+$	Program/project goals and/or milestones are primarily met on schedule and within budget; program/project and/or mission objective(s) are fully meet and are fully responsive to HQ guidance.
B	Most program/project goals and/or milestones are met on schedule and within budget; overall program/project and/or mission objective(s) are meet; minor delays, overruns, and/or deficiencies are minimized and/or have little to no adverse impact the overall program/project.
C	A number of and/or key program/project goals and/or milestones are not met within the scheduled timeframe(s) (e.g less than 6 months behind) and/or within the agreed upon budget (e.g., less than 15% over); overall program/project and/or mission objective(s) have not been met or have the potential to be missed; delays, overruns, and/or deficiencies are identified which have the potential to adversely impact the overall program/project is

	not corrected.
D	Most of and/or key program/project goals and/or milestones are not met within the scheduled timeframe(s) (e.g more than 6 months behind) and/or within the agreed upon budget (e.g., less than 25% over); overall program/project and/or mission objective(s) have not been met or have the potential to be missed; sizeable delays, overruns, and/or deficiencies are identified which have negatively impacted the overall program/project.
F	All and/or key program/project goals and/or milestones are not met within the scheduled timeframe(s) (e.g more than 9 months behind) and/or within the agreed upon budget (e.g., greater than 25% over); overall program/project and/or mission objective(s) have not been met; significant delays, overruns, and/or deficiencies are identified which have negatively impacted the overall program/project.

Office of Science Program Office Notable Outcomes

- None.

Science Program Office[2]	Letter Grade	Numerical Score	Weight	Weighted Score	Overall Score
Office of Advanced Scientific Research					
1.1 Impact			40%		
1.2 Leadership			30%		
1.3 Output			15%		
1.4 Delivery			15%		
				Overall ASCR Total	
Office of Basic Energy Sciences					
1.1 Impact			45%		
1.2 Leadership			30%		
1.3 Output			15%		
1.4 Delivery			10%		
				Overall BES Total	
Office of Biological and Environmental Research					
1.1 Impact			30%		
1.2 Leadership			20%		
1.3 Output			20%		
1.4 Delivery			30%		
				Overall BER Total	
Office of High Energy Physics					
1.1 Impact			30%		
1.2 Leadership			30%		
1.3 Output			20%		
1.4 Delivery			20%		
				Overall HEP Total	
Office of Nuclear Physics					
1.1 Impact			35%		
1.2 Leadership			25%		
1.3 Output			25%		
1.4 Delivery			15%		
				Overall NP Total	

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

Office of Workforce Development for Teachers and Scientists					
1.1 Impact			25%		
1.2 Leadership			30%		
1.3 Output			30%		
1.4 Delivery			15%		
				Overall WDTS Total	

Table 1.1 – 1.0 SC Program Office Performance Goal Score Development

Science Program Office	Letter Grade	Numerical Score	Funding Weight (BA)	Weighted Score	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 1.0 Total	

Table 1.2 – SC Program Office Overall Performance Goal Score Development[3]

HQ Program Office[4]	Letter Grade	Numerical Score	Weight	Weighted Score	Overall Score
Office of Defense Nuclear Nonproliferation					
1.1 Impact			25%		
1.2 Leadership			25%		
1.3 Output			25%		
1.4 Delivery			25%		

[3] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual Budget Authority for FY 2010.

[4] A complete listing of the S&T Goals & Objectives weightings for the other Programs and other customers is provided within Attachment I to this plan.

				Overall DNN Total	
Department of Homeland Security					
1.1 Impact			55%		
1.2 Leadership			15%		
1.3 Output			15%		
1.4 Delivery			15%		
				Overall DHS Total	
Assistant Secretary for Energy Efficiency and Renewable Energy					
1.1 Impact			25%		
1.2 Leadership			25%		
1.3 Output			25%		
1.4 Delivery			25%		
				Overall EERE Total	

Table 1.3 – 1.0 Other Program Office & Customer Performance Goal Score Development

HQ Program Office	Letter Grade	Numerical Score	Funding Weight (BA)	Weighted Score	Overall Weighted Score
Office of Science			TBD%		
Office of Defense Nuclear Nonproliferation			TBD%		
Department of Homeland Security			TBD%		
Office of Energy Efficiency and Renewable Energy			TBD%		
				Performance Goal 1.0 Total	

Table 1.4 – Overall Performance Goal Score Development[5]

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 1.5 – 1.0 Goal Final Letter Grade

[5] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual Budget Authority for FY 2010.

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

The Contractor 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, other cognizant HQ Program Offices, and other customers as identified below. The overall Goal score from each SC 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 Budget Authority for FY 2010.

- Office of Science (SC) (100%)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned to each of the objectives by the weightings identified for each and then summing them (see Table 2.1 below). The overall score earned is then compared to Table 2.2 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 SC.

<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 determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by scientific/technical workshops developing pre-conceptual R&D, progress reports, Lehman reviews, Program/Staff Office reviews/oversight, etc.:

- Effectiveness of planning of preconceptual R&D and design for life-cycle efficiency;
- Leverage of existing facilities at the site;
- Delivery of accurate and timely information needed to carry out the critical decision and budget formulation process.; and
- Ability to meet the intent of DOE Order 413.3, Program and Project Management for the Acquisition of Capital Assets.

A to A+	In addition to meeting all measures under B^+, the laboratory is recognized by the research community as the leader for making the science case for the acquisition; Takes the initiative to demonstrate the potential for revolutionary scientific advancement. Identifies, analyzes and champions novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing. Proposed approaches are widely regarded as innovative, novel, comprehensive, and potentially cost-effective. Reviews repeatedly confirm potential for scientific discovery in areas that support the Department's mission, and potential to change a discipline or research area's direction.
B+	Provides the overall vision for the acquisition. Displays leadership and commitment to achieving the vision within preliminary estimates that are defensible and credible in terms of cost, schedule and performance; develops 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). Solves problems and addresses issues. 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.
B	Fails to meet expectations in one of the areas listed under B+.
C	The laboratory team develops the required analyses and documentation in a timely manner. However, inputs are mundane and lack innovation and commitment to the vision of the acquisition.
D	The potential exists for credible science and business cases to be made for the acquisition, but the laboratory fails to take advantage of the opportunity.
F	Proposed approaches are based on fraudulent assumptions; the science case is weak to non-existent, 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 determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by progress reports, Lehman reviews, Program/Staff Office reviews/oversight, etc.:

- Adherence to DOE Order 413.3 Project Management for the Acquisition of Capital Assets;
- Successful fabrication of facility components
- Effectiveness in meeting construction schedule and budget; and
- Quality of key staff overseeing the project(s).

A to A+	Laboratory has identified and implemented practices that would allow the project scope to be increased if such were desirable, without impact on baseline cost or schedule; Laboratory always provides exemplary project status reports on time to DOE and takes the initiative to communicate emerging problems or issues. There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline; Reviews identify environment, safety and health practices to be exemplary.
B+	The project meets CD-2 performance measures; the laboratory provides sustained leadership and commitment to environment, safety and health; reviews regularly recognize the laboratory for being proactive in the management of the execution phase of the project; to a large extent, problems are identified and corrected by the laboratory with little, or no impact on scope, cost or schedule; DOE is kept informed of project status on a regular basis; reviews regularly indicate project is expected to meet its cost/schedule performance baseline.
B	The project fails to meet expectations in one of the areas listed under B+.
C	Reviews indicate project remains at risk of breaching its cost/schedule performance baseline; Laboratory commitment to environment, safety and health issues is adequate; Reports to DOE can vary in degree of completeness; Laboratory commitment to the project appears to be subsiding.
D	Reviews indicate project is likely to breach its cost/schedule performance baseline; and/or Laboratory commitment to environment, safety and health issues is inadequate; reports to DOE are largely incomplete; laboratory commitment to the project has subsided.
F	Laboratory falsifies data during project execution phase; shows disdain for executing the project within minimal standards for environment, safety or health, fails to keep DOE informed of project status; reviews regularly indicate that the project is expected to breach its cost/schedule performance baseline.

2.3 Provide Efficient and Effective Operation of Facilities

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, Program/Staff Office reviews/oversight, performance against benchmarks, Approved Financial Plans (AFPs), etc.:

- Availability, reliability, and efficiency of facility(ies);

- Degree the facility is optimally arranged to support community;
- Whether R&D is conducted to develop/expand the capabilities of the facility(ies);
- Effectiveness in balancing resources between facility R&D and user support; and
- Quality of the process used to allocate facility time to users.

A to A+	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, beam delivery, or luminosity, and this performance can be directly attributed to the efforts of the laboratory; and /or: the schedule and the costs associated with the ramp-up to steady state operations are less than planned and are acknowledged to be 'leadership caliber' by reviews; Data on ES&H continues to be exemplary and widely regarded as among the 'best in class'.
B$^+$	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, beam delivery, or luminosity, and this performance can be directly attributed to the efforts of the laboratory; and /or: the schedule and the costs associated with the ramp-up to steady state operations occur as planned; Data on ES&H continues to be very good as compared with other projects in the DOE.
B	The project fails to meet expectations in one of the areas listed under B+.
C	Performance of the facility fails to meet expectations in several of the areas listed under B+; for example, the cost of operations is unexpectedly high and availability of the facility is unexpectedly low, the number of users is unexpectedly low, beam delivery, or luminosity is well below expectations. Facility operates at steady state, on cost and on schedule, but the reliability of performance is somewhat below planned values, **or** acquisition operates at steady state, but the associated schedule and costs exceed planned values. Commitment to ES&H is satisfactory.
D	Performance of the facility fails to meet expectations in many of the areas listed under B+; for example, the cost of operations is unexpectedly high and availability of the facility is unexpectedly low. Acquisition operates somewhat below steady state, on cost and on schedule, and the reliability performance is somewhat below planned values, **or** acquisition operates at steady state, but the schedule and costs associated exceed planned values. Commitment to ES&H is satisfactory.
F	The facility fails to operate; acquisition operates well below steady state **and/or** the reliability of the performance is well below planned values.

2.4 Utilization of Facility to Grow and Support Lab's Research Base and External User Community

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by peer reviews, participation in international design teams, Program/Staff Office reviews/oversight, etc.:

- The facility is being used to perform influential science;
- Contractor's efforts to take full advantage of the facility to strengthen the Laboratory's research base;
- Conversely the facility is strengthened by a resident research community that pushes the envelope of what the facility can do and/or are among the scientific leaders of the community;
- Contractor's ability to appropriately balance access by internal and external user communities; and
- There is a healthy program of outreach to the scientific community.

A to A+	Reviews document that multiple disciplines are using the facility in new and novel ways, that the facility is being used to pursue influential science, that full advantage has been taken of the facility to enhance external user access, and strengthen the laboratory's research base. A healthy outreach program is in place.
B$^+$	Reviews state strong and effective approach exists toward establishing a large external and internal user community; that the facility is being used for influential science; the laboratory is capitalizing on existence of facility to grow internal scientific capabilities. A healthy outreach program is in place.
B	Reviews state that lab is establishing an external and internal user community, but laboratory is still not capitalizing fully on existence of the facility to grow internal capabilities and/or reach out to external users.
C	Reviews state that the laboratory has made satisfactory use of the facility, but has not demonstrated much innovation.
D	Few facility users, with none using it in novel ways; research base is very thin.
F	Laboratory does not know how to operate/use its own facility adequately.

Office of Science Program Office Notable Outcomes

- **BES:** Provide effective management leadership and oversight of the construction of NSLS-II and the development of a transition plan for NSLS. (Objective 2.2).

- **HEP:** The laboratory, in its role as host lab for the US ATLAS research program, will work proactively to identify and resolve management and planning issues related to this effort. (Objectives 2.3, 2.4).

Science Program Office[6]	Letter Grade	Numerical Score	Weight	Weighted Score	Overall Score
Office of Advanced Scientific Computing Research					
2.1 Design of Facility			0%		
2.2 Construction of Facility/Fabrication of Components			0%		
2.3 Operation of Facility			0%		
2.4 Utilization of Facility			0%		
				Overall ASCR Total	
Office of Basic Energy Sciences					
2.1 Design of Facility			20%		
2.2 Construction of Facility/Fabrication of Components			40%		
2.3 Operation of Facility			35%		
2.4 Utilization of Facility			10%		
				Overall BES Total	
Office of Biological and Environmental Research					
2.1 Design of Facility			0%		
2.2 Construction of Facility/Fabrication of Components			0%		
2.3 Operation of Facility			90%		
2.4 Utilization of Facility			10%		
				Overall BER Total	
Office of High Energy Physics					
2.1 Design of Facility			40%		
2.2 Construction of Facility/Fabrication of Components			50%		
2.3 Operation of Facility			0%		
2.4 Utilization of Facility			0%		
				Overall HEP Total	
Office of Nuclear Physics					
2.1 Design of Facility			0%		
2.2 Construction of Facility/Fabrication of			0%		

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

Components					
2.3 Operation of Facility			85%		
2.4 Utilization of Facility			15%		
				Overall NP Total	
Office of Workforce Development for Teachers and Scientists					
2.1 Design of Facility			0%		
2.2 Construction of Facility/Fabrication of Components			0%		
2.3 Operation of Facility			0%		
2.4 Utilization of Facility			0%		
				Overall WDTS Total	

Table 2.1 – 2.0 Program Office Performance Goal Score Development

Science Program Office	Letter Grade	Numerical Score	Funding Weight (BA)	Weighted Score	Overall Weighted Score
Office of Advanced Scientific Computing 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 – SC Program Office Overall Performance Goal Score Development[7]

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 – 2.0 Goal Final Letter Grade

[7] The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual Budget Authority for FY 2010.

3.0 Provide Effective and Efficient Science and Technology Program Management

The Contractor 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, 3.2, & 3.3). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual Budget Authority for FY 2010 provided by the Program Offices listed below.

- Office of Science (SC) (TBD%)
- Office of Defense Nuclear Nonproliferation (DNN) (TBD%)
- Department of Homeland Security (DHS) (TBD%)
- Assistant Secretary for Energy Efficiency and Renewable Energy (EERE) (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 3.4 below). The overall score earned is then compared to Table 3.5 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 BA for FY 2010 as compared to the total BA for those remaining HQ Program Offices.

Objectives:

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

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by peer reviews, existence and quality of strategic plans as determined by SC and scientific community review, Program Office reviews/oversight, etc.:

- Efficiency and Effectiveness of joint planning (e.g., workshops) with outside community;
- Articulation of scientific vision;
- Development of core competencies, ideas for new facilities and research programs; and
- Ability to attract and retain highly qualified staff.

A to A+	Providing strong programmatic vision that extends past the laboratory and for which the lab is a recognized leader within SC and in the broader research communities; development and maintenance of outstanding core competencies, including achieving superior scientific excellence in both exploratory, high-risk research and research that is vital to the DOE/SC missions; attraction and retention of world-leading scientists; recognition within the community as a world leader in the field.
B+	Coherent programmatic vision within the laboratory with input from and output to external research communities; development and maintenance of strong core competencies that are cognizant of the need for both high-risk research and stewardship for mission-critical research; attracting and retaining scientific staff who are very talented in all programs.
B	Programmatic vision that is only partially coherent and not entirely well connected with external communities; development and maintenance of some, but not all core competencies with attention to, but not always the correct balance between, high-risk and mission-critical research; attraction and retention of scientific staff who talented in most programs.
C	Failure to achieve a coherent programmatic vision with little or no connection with external communities; partial development and maintenance of core competencies (i.e., some are neglected) with imbalance between high-risk and mission-critical research; attracting only mediocre scientists while losing the most talented ones.
D	Minimal attempt to achieve programmatic vision; little ability to develop any core competencies with a complete lack of high-risk research and ignorance of mission-critical areas; minimal success in attracting even reasonably talented scientists.

F	No attempt made to achieve programmatic vision; no demonstrated ability to develop any core competencies with a complete lack of high-risk research and ignorance of mission-critical areas; failure to attract even reasonably talented scientists.

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

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by peer reviews, existence and quality of strategic plans as determined by SC and scientific community review, Program Office and scientific community review/oversight, etc.:

- Quality of R&D and/or user facility strategic plans
- Adequacy in considering technical risks;
- Success in identifying/avoiding technical problems;
- Effectiveness in leveraging (synergy with) other areas of research; and
- Demonstration of willingness to make tough decisions (i.e., cut programs with sub-critical mass of expertise, divert resources to more promising areas, etc.).

A to A+	Research plans are proactive, not reactive, as evidenced by making hard decisions and taking strong actions; plans are robust against budget fluctuations – multiple contingencies planned for; new initiatives are proposed and funded through reallocation of resources from less effective programs; plans are updated regularly to reflect changing scientific and fiscal conditions; plans include ways to reduce risk, duration of programs.
B$^+$	Plans are reviewed by experts outside of lab management and/or include broadly-based input from within the laboratory; research plans exist for all program areas; plans are consistent with known budgets and well-aligned with DOE interests; work follows the plan.
B	Research plans exist for all program areas; work follows the plan.
C	Research plans exist for most program areas; work does not always follow the plan.
D	Plans do not exist for a significant fraction of the lab's program areas, or significant work is conducted outside those plans.
F	No planning is done.

3.3 Provide Efficient and Effective Communications and Responsiveness to Customer Needs

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by Program Office reviews/oversight, etc.:

- The quality, accuracy and timeliness of response to customer requests for information;

- The extent to which the Contractor keeps the customer informed of both positive and negative events at the Laboratory so that the customer can deal effectively with both internal and external constituencies; and
- The ease of determining the appropriate contact (who is on-point for what).

A to A+	Communication channels are well-defined and information is effectively conveyed; important or critical information is delivered in real-time; responses to HQ requests for information from laboratory representatives are prompt, thorough, correct and succinct; laboratory representatives *always* initiate a communication with HQ on emerging issues there are no surprises.
B$^+$	Good communication is valued by all staff throughout the contractor organization; responses to requests for information are thorough and are provided in a timely manner; the integrity of the information provided is never in doubt
B	Evidence of good communications is noted throughout the contractor organization and responses to requests for information provide the minimum requirements to meet HQ needs; with the exception of a few minor instances HQ is alerted to emerging issues.
C	Laboratory representatives recognize the value of sound communication with HQ to the mission of the laboratory. However, laboratory management fails to demonstrate that its employees are held accountable for ensuring effective communication and responsiveness; laboratory representatives do not take the initiative to alert HQ to emerging issues.
D	Communications from the laboratory are well-intentioned but generally incompetent; the laboratory management does not understand the importance of effective communication and responsiveness to the mission of the laboratory.
F	Contractor representatives are openly hostile and/or non-responsive – emails and phone calls are consistently ignored; communications typically do not address the request; information provided can be incorrect, inaccurate or fraudulent – information is not organized, is incomplete, or is fabricated.

Office of Science Program Office Notable Outcomes

- **BER:** Demonstrate an effectively integrated, team oriented, and collaborative research program (Objectives 3.1, 3.2, and 3.3)

- **NP:** Work with the community to develop the scientific case for an electron-ion collider. (Objective 3.1)

- **BES:** Provide effective oversight of the management and initial operations of the Energy Frontier Research Center: "Center for Emergent Superconductivity." (Objective 3.2)

- **HEP:** The laboratory will make progress in addressing demographic issues involving their HEP research staff, as identified in several recent program reviews. (Objective 3.2)

Science Program Office[8]	Letter Grade	Numerical Score	Weight	Weighted Score	Overall Score
Office of Advanced Scientific Research					
3.1 Effective and Efficient Stewardship			30%		
3.2 Project/Program Planning and Management			40%		
3.3 Communications and Responsiveness			30%		
				Overall ASCR Total	
Office of Basic Energy Sciences					
3.1 Effective and Efficient Stewardship			40%		
3.2 Project/Program Planning and Management			30%		
3.3 Communications and Responsiveness			30%		
				Overall BES Total	
Office of Biological and Environmental Research					
3.1 Effective and Efficient Stewardship			20%		
3.2 Project/Program Planning and Management			30%		
3.3 Communications and Responsiveness			50%		
				Overall BER Total	
Office of High Energy Physics					
3.1 Effective and Efficient Stewardship			40%		
3.2 Project/Program Planning and Management			40%		
3.3 Communications and Responsiveness			20%		
				Overall HEP Total	
Office of Nuclear Physics					
3.1 Effective and Efficient Stewardship			40%		
3.2 Project/Program Planning and Management			35%		
3.3 Communications and Responsiveness			25%		
				Overall NP Total	
Office of Workforce Development for Teachers and Scientists					
3.1 Effective and Efficient Stewardship			20%		
3.2 Project/Program Planning and Management			40%		

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

3.3 Communications and Responsiveness			40%		
				Overall WDTS Total	

Table 3.1 – 3.0 SC Program Office Performance Goal Score Development

Science Program Office	Letter Grade	Numerical Score	Funding Weight (BA)	Weighted Score	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 1.0 Total	

Table 3.2 – SC Program Office Overall Performance Goal Score Development[9]

HQ Program Office[10]	Letter Grade	Numerical Score	Weight	Weighted Score	Overall Score
Office of Defense Nuclear Nonproliferation					
3.1 Effective and Efficient Stewardship			34%		
3.2 Project/Program Planning and Management			33%		
3.3 Communications and Responsiveness			33%		
				Overall DNN Total	
Department of Homeland Security					
3.1 Effective and Efficient Stewardship			30%		
3.2 Project/Program Planning and Management			20%		
3.3 Communications and Responsiveness			50%		
				Overall DHS Total	

[9] 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 Budget Authority for FY 2010.

[10] A complete listing of the S&T Goals & Objectives weightings for the other Programs and other customers is provided within Attachment I to this plan.

Assistant Secretary for Energy Efficiency and Renewable Energy					
3.1 Effective and Efficient Stewardship			34%		
3.2 Project/Program Planning and Management			33%		
3.3 Communications and Responsiveness			33%		
				Overall EERE Total	

Table 3.3 – 3.0 Other Program Office & Customer Performance Goal Score Development

HQ Program Office	**Letter Grade**	**Numerical Score**	**Funding Weight (BA)**	**Weighted Score**	**Overall Weighted Score**
Office of Science			TBD%		
Office of Defense Nuclear Nonproliferation			TBD%		
Department of Homeland Security			TBD%		
Office of Energy Efficiency and Renewable Energy			TBD%		
				Performance Goal 1.0 Total	

Table 3.4 – Overall Performance Goal Score Development[11]

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 3.5 – 3.0 Goal Final Letter Grade

[11] 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 Budget Authority for FY 2010.

Attachment I

Program Office Goal & Objective Weightings

Office of Science

		ASCR	BES	BER	HEP	NP	WDTS
		Weight	**Weight**	**Weight**	**Weight**	**Weight**	**Weight**
Goal #1 Mission Accomplishment							
	Goal's weight	**80%**	**30%**	**50%**	**35%**	**40%**	**65%**
1.1 Impact (significance)		40%	45%	30%	30%	35%	25%
1.2 Leadership (recognition of S&T accomplishments)		30%	30%	20%	30%	25%	30%
1.3 Output (productivity)		15%	15%	20%	20%	25%	30%
1.4 Delivery		15%	10%	30%	20%	15%	15%
Goal #2 Design, Fabrication, Construction and Operation of Facilities							
	Goal's weight	0%	**50%**	**25%**	**35%**	**40%**	**0%**
2.1 Design of Facility (the initiation phase and the definition phase, i.e. activities leading up to CD-2)		0%	20%	0%	50%	0%	0%
2.2 Construction of Facility/Fabrication of Components (execution phase, Post CD-2 to CD-4)		0%	40%	0%	50%	0%	0%
2.3 Operation of Facility		0%	30%	90%	0%	85%	0%
2.4 Utilization of Facility to Grow and Support Lab's Research Base and External User Community		0%	10%	10%	0%	15%	0%
Goal #3 Program Management							
	Goal's weight	**20%**	**20%**	**25%**	**30%**	**20%**	**35%**
3.1 Stewardship of Scientific Capabilities and Programmatic Vision		30%	40%	20%	40%	40%	20%
3.2 Program Planning and Management		40%	30%	30%	40%	35%	40%
3.3 Program Management-Communication & Responsiveness (to HQ)		30%	30%	50%	20%	25%	40%

Attachment I

Program Office Goal & Objective Weightings

All Other Customers[12]

	DNN Weight	DHS Weight	EERE Weight
Goal 1.0 Mission Accomplishment[13]			
Goal's weight	**50%**	**65%**	**50%**
1.1 Impact (significance)	25%	55%	25%
1.2 Leadership (recognition of S&T accomplishments)	25%	15%	25%
1.3 Output (productivity)	25%	15%	25%
1.4 Delivery	35%	15%	25%
Goal 2.0 Design, Fabrication, Construction and Operation of Facilities			
Goal's weight	**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%
2.2 Construction of Facility/Fabrication of Components (execution phase, Post CD-2 to CD-4)	0%	0%	0%
2.3 Operation of Facility	0%	0%	0%
2.4 Utilization of Facility to Grow and Support Lab's Research Base and External User Community	0%	0%	0%
Goal 3.0 Program Management			
Goal's weight	**50%**	**35%**	**50%**
3.1 Stewardship of Scientific Capabilities and Programmatic Vision	34%	30%	34%
3.2 Program Planning and Management	33%	20%	33%
3.3 Program Management-Communication & Responsiveness (to HQ)	33%	50%	33%

[12] Goal and Objective weightings indicated for non-science customers are reflective of FY 2009 weightings and will be updated as those customers provide their weightings. 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. Should a HQ Program Office fail to provide final Goal and Objective weightings before the end of the first quarter FY 2010 the preliminary weightings provided shall become final.

[13] The Goal and Objective weights are based on previous discussions with the Other Customers.

Goal 4.0 Provide Sound and Competent Leadership and Stewardship of the Laboratory
The weight of this Goal is 25%.

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.

4.1 Leadership and Stewardship of the Laboratory (Provide a Distinctive Vision for the Laboratory and an Effective Plan for Accomplishment of the Vision to Include Strong Partnerships Required to Carry Out those Plans) (Weight is 33%)

4.2 Management and Operation of the Laboratory (Provide for Responsive and Accountable Leadership throughout the Organization) (Weight is 33%)

4.3 Contractor Value-added (Provide Efficient and Effective Corporate Office Support as Appropriate) (Weight is 34%)

- In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends, outcomes and continuous improvement 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.

Notable Outcome: Laboratory leadership will develop a strategic plan for the future scientific and technical activities of the Laboratory, which aligns with Office of Science and Department goals, and a detailed strategy for executing the plan during the next 2-5 years. (Objective 4.1)

Notable Outcome: Laboratory leadership will provide a strategy for its Work for Others (WFO) program; the WFO program should align with and support Office of Science, Department, and Laboratory goals. (Objective 4.1)

Notable Outcome: Laboratory leadership will make significant progress in defining and implementing its contractor assurance system. It is expected that a collaborative and uniform approach to this issue among all contractors will be evident. (Objective 4.2)

Notable Outcome: The contractor will fill all key leadership positions at the Laboratory in a timely manner. (Objective 4.3)

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Total Points	Total Points
4.0 Provide Sound and Competent Leadership and Stewardship of the Laboratory					
4.1 Leadership and Stewardship of the Laboratory (Provide a Distinctive Vision for the Laboratory and an Effective Plan for Accomplishment of the Vision to Include Strong Partnerships Required to Carry Out those Plans)			33%		
4.2 Management and Operation of the Laboratory (Provide for Responsive and Accountable Leadership throughout the Organization)			33%		
4.3 Contractor Value-added (Provide Efficient and Effective Corporate Office Support as Appropriate)			34%		
				Goal 4.0 Total	

Goal 5.0 Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health, and Environmental Protection. The weight of this Goal is 20%.

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 a Work Environment that Protects Workers and the Environment (Weight is 20%)

5.2 Provide Efficient and Effective Implementation of Integrated Safety, Health and Environmental Management (Weight is 60%)

5.3 Provide Efficient and Effective Waste Management, Minimization, and Pollution Prevention. (Weight is 20%)

- In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends, outcomes and continuous improvement 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 relative to the Core Functions and Guiding Principles of ISM and addresses efficiency with respect to the performance of the ISM program at the Laboratory; the 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 covering cradle to grave Laboratory level management of waste, pollution prevention and regulatory compliance; and the effectiveness of responses to identified hazards and/or incidents.

Notable Outcome: BSA will review and upgrade performance in high risk topical safety programs (electrical safety, LOTO, and construction safety). (Objective 5.1)

Notable Outcome: BSA will implement selected milestones in the FY08 Fire Safety Management Plan and the FY09 Chemical Safety Management Plan. (Objective 5.2)

Notable Outcome: BSA will demonstrate improvement in their Work Planning and Control process by reviewing and upgrading the higher risk Job Risk Assessments (JRA's) and the process used for their deployment. (Objective 5.2)

Notable Outcome: BSA will implement defined elements of two Waste Management Plans developed in FY09 to optimize the management of routine waste streams and

the disposition of excess materials and chemicals as evidence by meeting the milestones of the plan. (Objective 5.3)

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Total Points	Total Points
5.0 Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health, and Environmental Protection					
5.1 Provide a Work Environment that Protects Workers and the Environment			20%		
5.2 Provide Efficient and Effective Implementation of Integrated Safety, Health and Environmental Management			60%		
5.3 Provide Efficient and Effective Waste Management, Minimization, and Pollution Prevention			20%		
				Goal 5.0 Total	

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 20%.

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 Sound, responsive and economical financial management systems (Weight is 30%)

6.2 Sound, comprehensive procurement management systems (Weight is 15%)

6.3 Sound, comprehensive property management systems (Weight is 10%)

6.4 Sound and responsive human resource management systems and diversity program (Weight is 15%)

6.5 Sound internal audit, information management and other administrative systems (Weight is 15%)

6.6 Effective technology transfer and commercialization of intellectual assets (Weight is 15%)

- In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends, outcomes and continuous improvement in the development, deployment and integration of foundational program (e.g., Quality, Financial Management, Acquisition Management, Requirements 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 and 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 and intellectual asset deployment activities.

Notable Outcome: BSA shall have no material findings resulting from audits, reviews and other assessments and appraisals; internal and external findings are addressed adequately in a timely manner; control testing indicates that transaction quality is within acceptable standards for the applicable category in accordance with the Financial Management Assurance (FMA) tool. (Objective 6.1)

Notable Outcome: Procurement systems shall meet 90% of the Balanced Scorecard (BSC) measures. (Objective 6.2)

Notable Outcome: Property systems shall meet 90% of the Balanced Scorecard (BSC) measures. (Objective 6.3)

Notable Outcome: BSA shall develop a document that defines a comprehensive workforce planning process which will identify future organizational skills and staffing needs, critical gaps and actions required to achieve strategic organizational objectives. (Objective 6.4)

Notable Outcome: BSA will complete 90% of the DOE-approved annual audit plan, including incorporating coverage of the American Recovery & Reinvestment Act during the performance period, while maintaining capable audit resources and providing value-added audit recommendations and management reviews. (Objective 6.5)

Notable Outcome: BSA shall demonstrate progress towards diversifying their Technology Transfer portfolio. (Objective 6.6)

Notable Outcome: Demonstration of the effective use of royalty income that results in the sponsorship of a program that would not have ordinarily received funding. (Objective 6.6)

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Total Points	Total Points
6.0 Deliver Efficient, Effective, and Responsive Business Systems and Resources that Enable the Successful Achievement of the Laboratory Mission(s)					
6.1 Sound, responsive and economical financial management systems			30%		
6.2 Sound, comprehensive procurement management systems			15%		
6.3 Sound, comprehensive property management systems			10%		
6.4 Sound and responsive human resource management systems and diversity program			15%		
6.5 Sound internal audit, information management and other administrative systems			15%		
6.6 Effective technology transfer and commercialization of intellectual assets			15%		
				Goal 6.0 Total	

<u>Goal 7.0 Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs</u>. The weight of this Goal is 20%

This Goal evaluates the overall effectiveness and performance of the Contractor in planning for, delivering, and operations of Laboratory facilities and equipment needed to ensure required capabilities are present to meet today'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. (Weight is 50%)

7.2 Provide planning for and acquire the facilities and infrastructure required to support the continuation and growth of laboratory missions and programs. (Weight is 50%)

- In measuring the performance of the above Objectives, the DOE evaluator(s) shall consider performance trends, outcomes and continuous improvement 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 and conservation 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 construction projects.

Notable Outcome: BSA will maintain reliable electrical and building infrastructure as measured by the existing infrastructure reliability index calculation. The infrastructure reliability index (RI) will be 0.9997 (or better) for FY 2010. (Objective 7.1)

Notable Outcome: BSA shall effectively plan, manage and control Office of Environmental Management (EM) projects throughout their life cycle. The contractor will maintain its annual Schedule and Cost Performance Indexes above 0.90 for Office of Environmental Management (EM) Projects within the approved baseline. (Objective 7.1)

Notable Outcome: BSA shall plan, fund and manage institutional investments (e.g. IGPP, deferred maintenance, maintenance) consistent with the ALP/TYSP and site commitments made in support of the Modernization and Transformational Energy Action Management (TEAM) initiatives. (Objective 7.2)

Notable Outcome: BSA will successfully execute SLI Line Item and Recovery Act GPP Projects during FY 2010 on cost and schedule. (Objective 7.2)

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Total Points	Total Points
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 and Minimizes Life Cycle Costs and Ensures Site Capability to Meet Mission Needs			50%		
7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to support the Continuation and Growth of Laboratory Missions and Programs			50%		
				Goal 7.0 Total	

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 15%

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 (Weight is 35%)

8.2 Provide an Efficient and Effective System for Cyber-Security (Weight is 35%)

8.3 Provide an Efficient and Effective System for the Protection of Special Nuclear Materials, Classified Matter, and Property (Weight is 15%)

8.4 Provide an Efficient and Effective System for the Protection of Classified and Sensitive Information (Weight is 15%)

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

Notable Outcome: BSA will complete development of a Continuity of Operations Program (COOP) Plan by 05/2010 as committed in their Schedule for Compliance letter to DOE. (Objective 8.1)

Notable Outcome: BSA will successfully renew the site cyber systems' Authority to Operate (ATO). (Objective 8.2)

Notable Outcome: BSA will implement the Office of Science Program Cyber Security Plan (PCSP) upon issuance. (Objective 8.2)

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Total Points	Total Points
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 System for Cyber-Security			35%		
8.3 Provide an Efficient and Effective System for the Protection of Special Nuclear Materials, Classified Matter, and Property			15%		
8.4 Provide an Efficient and Effective System for the Protection of Classified and Sensitive Information			15%		

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. M178

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

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)

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. M120

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.

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ATTACHMENT J.5

APPENDIX E

KEY PERSONNEL

Applicable to the Operation of
The Brookhaven National Laboratory

Contract No. DE-AC02-98CH10886
Modification No. M237

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. Samuel Aronson	Director
Mr. Michael Bebon	Deputy Director for Operations
Dr. Doon Gibbs	Deputy Director for Science & Technology
Mr. Lanny Bates	Assistant Laboratory Director, Facilities & Operations
Dr. Steven Dierker	Associate Laboratory Director, Light Sources
Mr. Michael Goldman	General Counsel
Mr. Mark Israel*	Interim Assistant Laboratory Director, Finance
Dr. Fritz Henn*	Interim Associate Laboratory Director, Environment and Life Sciences
Dr. J. Patrick Looney	Assistant Laboratory Director, Policy and Strategic Planning
Ms. Margaret Lynch	Assistant Laboratory Director, Community, Education, Government & Public Affairs
Dr. James Misewich	Associate Laboratory Director, Basic Energy Sciences
Dr. Carol Parnell	Assistant Laboratory Director, ES&H
Dr. Steven Vigdor	Associate Laboratory Director, Nuclear and Particle Physics
Dr. Gerald M. Stokes	Associate Laboratory Director, Global and Regional Solutions

* Positions designated as “Interim” have not been officially approved as Key Personnel by DOE, but reflect the personnel functioning in the position.

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ATTACHMENT J.6

APPENDIX F

RESERVED

Applicable to the Operation of
The Brookhaven National Laboratory

Contract No. DE-AC02-98CH10886
Modification No. M120

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ATTACHMENT J.7

APPENDIX G

PURCHASING SYSTEM REQUIREMENTS

Applicable to the Operation of
Brookhaven National Laboratory

Contract No. DE-AC02-98CH10886
Modification No. M120

Appendix G

Purchasing System Requirements

This Appendix and Clause I.114, "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.

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Brookhaven Science Associates, LLC

ATTACHMENT J.8

APPENDIX H

FY'10 – SMALL BUSINESS SUBCONTRACTING PLAN

Applicable to the Operation of

The Brookhaven National Laboratory

Contract No. DE-AC02-98CH10886
Modification No. M245

FY10 Small Business Subcontracting Plan

Identification Data

Contractor: **BROOKHAVEN SCIENCE ASSOCIATES, LLC**

Address: **BROOKHAVEN NATIONAL LABORATORY**
Upton, New York 11973-5000

Contract Number: **DE-AC02-98CH10886**

Item/Service: **BASIC RESEARCH**

Total Amount of the Contract for the Performance Period: $696,000,000.00

Period of Contract Performance: Oct. 1, 2009 through Sept. 30, 2010

1. **Type of Plan**

Individual Contract Plan - Individual Contract 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 purpose may be allocated on a prorated basis to the contract.

This plan is for FY10 as the small business goals are set for each fiscal year of the ongoing contract.

2. **Goals**

State separate dollar and percentage goals for Small Business, Small Disadvantaged Business, Woman-Owned Small Business, HUB-Zone Small Business, Veteran-Owned Small Business, and Service-Disabled Veteran-Owned Small Business (hereafter referred to as the six small business categories), as subcontractors, for the basic and each option year, as specified in FAR 19.704

Individual goals are included in Appendix 1

Below is an estimate of the principle types of supplies and services to be subcontracted under this contract, and an indication of the types planned for subcontracting to the six categories of small business and large business.

FY10 Small Business Subcontracting Plan

Subcontracted Product/Service	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	--	--	--	X
SERVICE	X	X	X	X	X	X	X
MAT'L/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	X	X	--	--	X

Note: The NAICS codes have not been included as the breadth of work subcontracted would require an extensive listing. The SBLO works directly with the procurement staff to ensure solicitations of small businesses to the maximum extent possible.

The six small business categories goals are based on consultations with the DOE and use BSA's current vendor base and directories including: DOD Central Contractor Registration (CCR), The DOE-OSDBU Small Business Contacts Database, Women's Chamber of Commerce, The Suffolk County Women's Business Enterprise Coalition, the Procurement Technical Assistance Center's Database, the SBA-SBDC's databases and sharing the Small Business databases from the other National Labs. The areas to be subcontracted to each target small business group are determined by historic references and current needs. Capabilities to provide goods and services are determined on an individual basis.

3. Indirect Costs

Indirect costs have ***NOT*** been included in the dollar and percentage subcontracting goals stated in Appendix 1.

4. Program Administrator

The contractor's subcontracting program administrator is:

Name: Jill Clough-Johnston
Title: Small Business Liaison Officer

FY10 Small Business Subcontracting Plan

Address: Brookhaven National Laboratory
Procurement & Property Management Division – Bldg. 355
Upton, NY 11973-5000

Telephone: 631 344-3173 Email: clough@bnl.gov FAX: 631 344-4295

Duties: Has general overall responsibility for the contractor's 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 company-wide policy initiatives that demonstrate the company's support for awarding contracts and subcontracts to the six small business categories

B. Making arrangements for the utilization of various sources for the identification of the six small business categories through some of the following resources: DOD Central Contractor Registration (CCR), The DOE-OSDBU Small Business Contacts Database, Women's Chamber of Commerce, the Procurement Technical Assistance Center's (PTAC) 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 we are lagging in our goals.

C. Attending or arranging for the attendance of company counselors at various small business opportunity workshops; the six small business categories seminars, trade fairs, procurement conferences, etc.;

D. Ensuring the six small business categories are made aware of subcontracting opportunities and how to prepare responsive bids to the laboratory;

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. The SBLO will support the PPM Compliance and Policy Manager in randomly reviewing solicitations, evaluations and procurements to ensure they permit the maximum possible participation of the six small business categories.

G. Monitoring the over $550,000 ($1M for construction) subcontractors performance and making small business suggestions, 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 of new suppliers. Ensuring that supplier NAICS codes and socioeconomic classifications are included in supplier descriptions.

5. Equitable Opportunity

The contractor agrees to ensure that all of the six small business categories will 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 Long Island Development Corp – Procurement Technical Assistance Program (PTAP); and Small Business Administration (SBA).

(iii) Potential sources will be obtained from DOD Central Contractor Registration (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 CCR.

(ii) Establishing, maintaining, and using the six small business categories source lists, guides, and other data for soliciting subcontracts for giving leads to procurement staff.

(iii) Monitoring activities to evaluate compliance with the subcontracting plan.

(iv) Maintaining a list of trip reports and other documentation on the outreach activities attended, including new sources, along with recommendations to buyers to include these sources in the next appropriate solicitation.

C. Outreach Events:

(i) Develop an annual list of outreach events and activities to attend and participate in.

(ii) Obtain a list of outreach activities to attend from the DOE Small Business Program Manager.

D. Additional Efforts:

(i) Attend DOE annual small business conferences and other small business 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.

(ii) Continue to work closely with both the on & off site SBDC's and our local SBA office.

(iii) Continue to network with other M&O contractor SBLOs,

(iv) Continue to work closely with BSA's CEGPA directorate on out-reach efforts,

(v) Continue to provide contacts for HUB-Zone small businesses to learn how to become SBA certified,

(vi) Maintain an internal Small Business Policy.

(vii) Continue to participate in DOE SBPM conference calls.

6. <u>Flow-Down Clause</u>

The contractor agrees to include the provisions under FAR 52.219-8, "Utilization of Small Business Concerns," in all subcontracts that offer further subcontracting opportunities. All subcontractors, except small business concerns, that receive subcontracts in excess of $550,000 ($1,000,000 for construction) must adopt and comply with a plan similar to the plan required by FAR 52.219-9 "Small Business Subcontracting Plan." (FAR 19.704)(a)(4).

Such plans will be reviewed by comparing them with the provisions of Public Law 95-507, and assuring that all minimum requirements of an acceptable subcontracting plan have been satisfied. The acceptability of percentage goals shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of the six small business categories as subcontractors, 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.

7. Reporting and Cooperation

The contractor gives assurance of (1) cooperation in any studies or surveys that may be required by the contracting agency or the Small Business Administration; (2) submission of periodic reports such as utilization reports, which show compliance with the subcontracting plan; (3) submission of small business subcontracting achievement data as reported on the Individual Subcontract Report (ISR) and/or the Summary Subcontract Report (SSR), to the eSRS and (4) ensuring that large business subcontractors with subcontracting plans agree to input to the eSRS.

8. Document Retention

The following is a recitation of the types of documents the contractor will maintain to demonstrate the procedures adopted to comply with the requirements and goals in the subcontracting plan. These documents 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:
   1. workshops, seminars, training programs
   2. monitoring of activities to evaluate compliance

C. The procurement file for all subcontract solicitations over $100,000 will contain AMS-Form-002 which indicates for each solicitation whether the six small business categories were solicited, and if not, why not: and the reason for failure of solicited the small business concerns to receive the subcontract award.

D. Representations and Certifications Information
   1. Representations and certification for all new suppliers to review their socio-economic status for reporting purposes, and as required, recertification of the socio-economic status of all suppliers.
   2. Maintenance of SBA certification approval of 8(a) suppliers.

3. Maintenance of HUB-Zone certification approval through their SBA certification letter.

9. Mentor-Protégé Program

The Contractor agrees to maintain an official DOE approved "Mentor-Protégé" in accordance with DOE DEARS Part 19. The Small Business Liaison Officer is the individual designated to administer this program.

10. Description of Good Faith Effort

The Contractor 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 the six small business categories. The following steps shall be taken.

A. Issue and promulgate company-wide policy statements in support of the six small business categories 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 six eligible small business categories.

C. Demonstrate continuing management interest and involvement in support of this effort through such actions as regular reviews of progress.

D. Train and motivate BSA personnel regarding the need for the support of the six small business categories.

E. Assist the six small business categories 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 six small business categories.

G. Execute Service Agreements, Teaming Agreements, and Basic Ordering Agreements with small businesses from the qualified six small business categories, 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 businesses, in the six small business categories have an equal opportunity in preparing bids.

FY10 Small Business Subcontracting Plan

I. Establish and maintain a categorized list of potential subcontractors with separate identification of the six small business categories.

Acquisition of construction estimated to cost $3.5 million or less, including new construction, and repair and alteration of structures, shall be a small or small disadvantaged business 8(a) set-aside. For acquisition in excess of $3.5 million, small business or small disadvantaged business 8(a) set-aside will be considered on a case-by-case basis.

This subcontracting plan was submitted by:

Signature: _____ Date: 10/23/09

Typed Name: Michael Bebon
Title: Deputy Director for Operations

Approval:

Signature: Evelyn Landini Date: 12/07/09

Typed Name: Evelyn Landini
Title: Contracting Officer

FY10 Subcontracting Plan – Appendix 1

Contractor: **BROOKHAVEN SCIENCE ASSOCIATES, LLC**

Address: **BROOKHAVEN NATIONAL LABORATORY**
Upton, New York 11973-5000

Contract Number: DE-AC02-98CH10886

1. Total estimated dollar value of all planned subcontracting (to all types of business concerns) under this contract is **$365,109,000.00**.

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) 50.20% or $183,284,718.00** of total planned subcontracting dollars under this contract will go to subcontractors who are small business.

   (ii) **8(a)/Small Disadvantaged Business (SB) 6.30% or $23,001,867.00** of total planned subcontracting dollars under this contract will go to subcontractors who are 8(a)/small disadvantaged businesses. This percentage is included in the percentage shown under (2) (i) above as a subset.

   (iii) **Woman-Owned Small Business (WOB): 8.00% or $29,208,720.00** of total planned subcontracting dollars under this contract will go to subcontractors who are small business concerns owned and controlled by a woman or women. This percentage is included in the percentage shown under (2) (i) above as a subset.

   (iv) **HUB Zone Small Businesses (HUB): 3.00% or $10,953,270.00** of total planned subcontracting dollars under this contract will go to subcontractors who have received HUBZone certification through the Small Business Administration. This percentage is included in the percentage shown under (2) (i) above as a subset.

   (v) **Veteran-Owned Businesses (VOB): 3.00% or $10,953,270.00** of total planned subcontracting dollars under this contract will go to subcontractors who are small business concerns owned and controlled by a veteran. This percentage is included in the percentage shown under (2) (i) above as a subset.

   (vi) **Service-Disabled Veteran-Owned Businesses (SDVOB): 3.00% or $10,953,270.00** of total planned subcontracting dollars under this contract will go to subcontractors who are small business concerns owned and controlled by a service-disabled veteran. This percentage is included in the percentage shown under (2) (i) above as a subset.

U.S. Department of Energy

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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. M237

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 were accepted and implemented by the previous contractor but have subsequently been revised by DOE to remove certain sections.

Appendix I - Part I

CRD=Contractor Requirements Document

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
2/26/01	N 153.1	CONNECTIVITY TO ATMOSPHERIC RELEASE ADVISORY CAPABILITY
8/11/03	N 153.2	CRD - CONNECTIVITY TO NATIONAL ATMOSPHERIC RELEASE ADVISORY CENTER (NARAC)
10/02/00	N 203.1	CRD - SOFTWARE QUALITY ASSURANCE
11/1/99	N 205.2	CRD - FOREIGN NATIONAL ACCESS TO DOE CYBER SYSTEMS (Extended until 8/12/05 by DOE N 205.14 dated 8/12/04) (Extended until 9/30/06 by DOE N 205.16 dated 9/15/05)
11/23/99	N 205.3	CRD - PASSWORD GENERATION, PROTECTION, AND USE (Extended until 8/12/05 by DOE N 205.14 dated 8/12/04) (Extended until 9/30/06 by DOE N 205.16 dated 9/15/05)
2/11/04	N 205.8	CRD - CYBER SECURITY REQUIREMENTS FOR WIRELESS DEVICES AND INFORMATION SYSTEMS (Extended until 03/18/06 by DOE N 205.15 dated 3/18/05)
2/19/04	N 205.9	CRD – CERTIFICATION AND ACCREDITATION PROCESS FOR INFORMATION SYSTEMS INCLUDING NATIONAL SECURITY SYSTEMS (Extended until 03/18/06 by DOE N 205.15 dated 3/18/05)
2/19/04	N 205.10	CRD – CYBER SECURITY REQUIREMENTS FOR RISK MANAGEMENT (Extended until 03/18/06 by DOE N 205.15 dated 3/18/05)
2/19/04	N 205.11	CRD – SECURITY REQUIREMENTS FOR REMOTE ACCESS TO DOE AND APPLICABLE CONTRACTOR INFORMATION TECHNOLOGY SYSTEMS (Extended until 03/18/06 by DOE N 205.15 dated 3/18/05)
8/12/04	N 205.14	EXTENSION OF DOE DIRECTIVES (N 205.2 and N 205.3)
3/18/05	N 205.15	EXTENSION OF DOE DIRECTIVES – NOTICES 205.8, 205.9, 205.10, 205.11, 205.12
9/15/05	N 205.16	EXTENSION OF DOE DIRECTIVES (N 205.2 and N 205.3)
6/29/07	N 206.4	CRD - PERSONAL IDENTITY VERIFICATION
2/27/08	N 234.1	CRD – REPORTING OF RADIOACTIVE SEALED SOURCES (Extended to 02/27/10 or until superseded, by DOE N 251.76 dated 06/09/09)
7/7/05	N 251.64	EXTENSION OF DOE DIRECTIVES (O 471.1A, M 471.1-1 Change1, M 472.1-1B, O 473.2, and N 473.9)
6/9/09	N 251.76	EXTENSION OF DOE N 234.1, REPORTING OF RADIOACTIVE SEALED SOURCES
1/25/07	O 110.3A	CRD - CONFERENCE MANAGEMENT
9/29/95	O 130.1	CRD - BUDGET FORMULATION PROCESS
1/13/04	O 142.1	CRD – CLASSIFIED VISITS INVOLVING FOREIGN NATIONALS
9/4/08	M 142.2-1	CRD – MANUAL FOR IMPLEMENTATION OF THE VOLUNTARY OFFER SAFEGUARDS AGREEMENT AND ADDITIONAL PROTOCOL WITH THE INTERNATIONAL ATOMIC ENERGY AGENCY
12/15/06	O 142.2A	CRD – VOLUNTARY OFFER SAFEGUARDS AGREEMENT AND ADDITIONAL PROTOCOL WITH THE INTERNATIONAL ATOMIC ENERGY AGENCY

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
6/18/04 2/28/08	O 142.3 Change 1	CRD – UNCLASSIFIED FOREIGN VISITS AND ASSIGNMENTS PROGRAM
5/8/08	O 150.1	CRD – CONTINUITY PROGRAMS
11/2/05	O 151.1C	CRD - COMPREHENSIVE EMERGENCY MANAGEMENT SYSTEM
6/27/07	O 153.1	CRD - DEPARTMENTAL RADIOLOGICAL EMERGENCY RESPONSE ASSETS
12/23/08	O 200.1A	CRD – INFORMATION TECHNOLOGY MANAGEMENT
1/7/05	O 203.1	LIMITED PERSONAL USE OF GOVERNMENT OFFICE EQUIPMENT INCLUDING INFORMATION TECHNOLOGY
12/4/06	O 205.1A	CRD – DEPARTMENT OF ENERGY CYBER SECURITY MANAGEMENT
4/17/06	M 205.1-3	TELECOMMUNICATIONS SECURITY MANUAL
3/8/07	M 205.1-4	CRD – NATIONAL SECURITY SYSTEM MANUAL
9/1/09	M 205.1-5 Change 1	CRD – CYBER SECURITY PROCESS REQUIREMENTS MANUAL
9/1/09	M 205.1-6 Change 1	CRD – MEDIA SANITIZATION MANUAL
9/1/09	M 205.1-7 Change 1	CRD – SECURITY CONTROLS FOR UNCLASSIFIED INFORMATION SYSTEMS MANUAL
9/1/09	M 205.1-8 Change 1	CRD – CYBER SECURITY INCIDENT MANAGEMENT MANUAL
1/16/09	O 206.1	CRD - DEPARTMENT OF ENERGY PRIVACY PROGRAM
6/12/06	O 210.2	CRD – DOE CORPORATE OPERATING EXPERIENCE PROGRAM
4/19/08	O 221.1A	CRD - REPORTING FRAUD, WASTE, AND ABUSE TO THE OFFICE OF INSPECTOR GENERAL
2/25/08	O 221.2A	CRD - COOPERATION WITH THE OFFICE OF INSPECTOR GENERAL
11/26/97	O 225.1A	CRD - TYPE A AND B ACCIDENT INVESTIGATIONS
7/31/07	O 226.1A	CRD – IMPLEMENTATION OF DEPARTMENT OF ENERGY OVERSIGHT POLICY
3/19/04 9/9/04 6/12/07	M 231.1-1A Change 1 Change 2	CRD - ENVIRONMENT, SAFETY, AND HEALTH REPORTING MANUAL
8/19/03	M 231.1-2	CRD - OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION
4/9/01 10/14/03	O 241.1A Change 1	CRD - SCIENTIFIC AND TECHNICAL INFORMATION MANAGEMENT
2/3/06	O 243.1	CRD - RECORDS MANAGEMENT PROGRAM
2/2/06	O 243.2	CRD - VITAL RECORDS
8/16/06	O 251.1B	CRD - DEPARTMENTAL DIRECTIVES PROGRAM
8/16/06	M 251.1-1B	CRD - DEPARTMENTAL DIRECTIVES PROGRAM MANUAL
11/19/99	O 252.1	CRD - TECHNICAL STANDARDS PROGRAM

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
10/18/07	O 341.1A Parts: 1.a., 1.b., 2.a., 2.a.(1), 2.a.(2), 2.a.(3), 2.a,(4)(a), 2.a.(4)(b), 2.a.(4)(d), 2.a.(4)(f), 2.a.(4)(g) and 2.a.(4)(h)	CRD - FEDERAL EMPLOYEE HEALTH SERVICES
9/30/96 5/8/98	O 350.1 Change 1	CRD - CONTRACTOR HUMAN RESOURCE MANAGEMENT PROGRAMS CRD - EMPLOYEE BENEFITS
10/29/03	O 350.2A	CRD - USE OF MANAGEMENT AND OPERATING OR OTHER FACILITY MANAGEMENT CONTRACTOR EMPLOYEES FOR SERVICES TO DOE IN THE WASHINGTON, D.C., AREA
8/17/09	O 410.2	CRD – MANAGEMENT OF NUCLEAR MATERIALS
4/21/05	O 412.1A	WORK AUTHORIZATION SYSTEM
10/28/08	O 413.1B	CRD – INTERNAL CONTROL PROGRAM
4/19/06	O 413.2B	CRD - LABORATORY DIRECTED RESEARCH AND DEVELOPMENT
7/28/06	O 413.3A	CRD - PROGRAM AND PROJECT MANAGEMENT FOR THE ACQUISITION OF CAPITAL ASSETS
6/17/05	O 414.1C	CRD – QUALITY ASSURANCE
12/22/05	O 420.1B	CRD – FACILITY SAFETY
7/23/04	O 420.2B	CRD - SAFETY OF ACCELERATOR FACILITIES
3/13/03	O 425.1C	CRD - STARTUP AND RESTART OF NUCLEAR FACILITIES
09/24/03 2/8/08	O 430.1B Change 1	CRD – REAL PROPERTY ASSET MANAGEMENT
2/27/08	O 430.2B	CRD - DEPARTMENTAL ENERGY, RENEWABLE ENERGY AND TRANSPORTATION MANAGEMENT
2/13/07	O 433.1A	CRD - MAINTENANCE MANAGEMENT PROGRAM FOR DOE NUCLEAR FACILITIES
7/9/99 8/28/01	O 435.1 Change 1	CRD - RADIOACTIVE WASTE MANAGEMENT
7/9/99 6/19/01	M 435.1-1 Change 1	RADIOACTIVE WASTE MANAGEMENT MANUAL
11/27/02 11/19/06	O 440.2B Change 1	CRD - AVIATION MANAGEMENT AND SAFETY
3/7/08	M 441.1-1	CRD - NUCLEAR MATERIAL PACKAGING MANUAL
6/6/01	O 442.1A	CRD - DEPARTMENT OF ENERGY EMPLOYEE CONCERNS PRG.
11/16/06	M 442.1-1	CRD - DIFFERING PROFESSIONAL OPINIONS MANUAL FOR TECHNICAL ISSUES INVOLVING ENVIRONMENT, SAFETY, AND HEALTH

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
12/20/07	O 443.1A	CRD – PROTECTION OF HUMAN SUBJECTS
6/4/08	O 450.1A	CRD – ENVIRONMENTAL PROTECTION PROGRAM
11/1/06	M 450.4-1	INTEGRATED SAFETY MANAGEMENT SYSTEM MANUAL
1/5/09	O 456.1	CRD – SAFE HANDLING OF UNBOUND ENGINEERED NANOPARTICLES
4/4/03	O 460.1B	CRD - PACKAGING AND TRANSPORTATION SAFETY
12/22/04	O 460.2A	CRD - DEPARTMENTAL MATERIALS TRANSPORTATION AND PACKAGING MANAGEMENT
6/4/08	M 460.2-1A	RADIOACTIVE MATERIAL TRANSPORTATION PRACTICES MANUAL
10/31/02	O 470.2B	CRD - INDEPENDENT OVERSIGHT AND PERFORMANCE ASSURANCE PROGRAM
8/12/08	O 470.3B	GRADED SECURITY PROTECTION (GPS) POLICY
8/26/05 3/7/06	M 470.4-1 Change 1	CRD – SAFEGUARDS AND SECURITY PROGRAM PLANNING & MANAGEMENT
7/23/09	M 470.4-2A	CRD – PHYSICAL PROTECTION
11/5/08	M 470.4-3A	CRD – CONTRACTOR PROTECTIVE FORCE MANUAL
8/26/05 6/29/07	M470.4-4* Change 1	CRD – INFORMATION SECURITY
1/16/09	M 470.4-4A	CRD – INFORMATION SECURITY MANUAL
8/26/05	M 470.4-5	CRD – PERSONNEL SECURITY
8/26/05 8/14/06	M 470.4-6 Change 1	CRD – NUCLEAR MATERIAL CONTROL AND ACCOUNTABILITY
6/30/00	O 471.1A	CRD - IDENTIFICATION AND PROTECTION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION (Extended until 06/30/05 by DOE N 251.58 dated 7/6/04) (Extended until 07/7/06 by DOE N 251.64 dated 7/7/05)
6/30/00 10/23/01	M 471.1-1 Change 1	IDENTIFICATION AND PROTECTION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION MANUAL (Extended until 06/30/05 by DOE N 251.58 dated 7/6/04) (Extended until 07/7/06 by DOE N 251.64 dated 7/7/05)
4/9/03	O 471.3	CRD - IDENTIFYING AND PROTECTING OFFICIAL USE ONLY INFORMATION
4/9/03	M 471.3-1	CRD - MANUAL FOR IDENTIFYING AND PROTECTING OFFICIAL USE ONLY INFORMATION
8/28/07	M 475.1-1B	CRD – MANUAL FOR IDENTIFYING CLASSIFIED INFORMATION
12/10/04	O 475.1	COUNTERINTELLIGENCE PROGRAM
8/28/07	O 475.2	CRD – IDENTIFYING CLASSIFIED INFORMATION

***See Part II, Partial Deletions**

DIRECTIVES LIST		
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**
1/03/01 9/28/01	M 481.1-1A Change 1	REIMBURSABLE WORK FOR NON-FEDERAL SPONSORED PROCESS MANUAL
1/12/01	O 482.1	CRD - DOE FACILITIES TECHNOLOGY PARTNERING PROGRAMS
1/12/01	O 483.1	CRD - DOE COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS
1/12/01	M 483.1-1	DOE COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS
8/17/06	O 484.1	CRD - Reimbursable Work for the Department of Homeland Security
11/3/04	O 522.1	CRD - PRICING OF DEPARTMENTAL MATERIALS AND SERVICES
1/6/03	O 534.1B	CRD – ACCOUNTING
6/24/08	O 551.1C	CRD - OFFICIAL FOREIGN TRAVEL
12/7/05 5/8/08	O 580.1 Change 1	CRD – DEPARTMENT OF ENERGY PROPERTY MANAGEMENT PROGRAM
5/2/01	P 141.1	DEPARTMENT OF ENERGY MANAGEMENT OF CULTURAL RESOURCES
5/8/01	P 205.1	DEPARTMENTAL CYBER SECURITY MANAGEMENT POLICY
6/10/00	P 413.1	PROGRAM AND PROJECT MANAGEMENT POLICY FOR THE PLANNING, PROGRAMMING, BUDGETING, AND ACQUISITION OF CAPITAL ASSETS
6/5/09	P 434.1	CONDUCT AND APPROVAL OF SELECT AGENT AND TOXIN WORK AT DEPARTMENT OF ENERGY SITES
8/2/04	P 450.7	DOE ENVIRONMENT, SAFETY AND HEALTH GOALS
7/15/03	P 455.1	USE OF RISK-BASED END STATES
9/15/05	P 456.1	SECRETARIAL POLICY STATEMENT ON NANOSCALE SAFETY
5/08/01	P 470.1	INTEGRATED SAFEGUARDS AND SECURITY MANAGEMENT POLICY
5/20/02	P 580.1	MANAGEMENT POLICY FOR PLANNING, PROGRAMMING, BUDGETING, OPERATION, MAINTENANCE AND DISPOSAL OF REAL PROPERTY
11/12/92	1450.4	CONSENSUAL LISTENING-IN TO OR RECORDING TELEPHONE/RADIO CONVERSATIONS
2/8/90 6/5/90 1/7/93	5400.5* Change 1 Change 2	RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT
7/9/90 5/18/92 10/23/01	5480.19 Change 1 Change 2	CONDUCT OF OPERATIONS REQUIREMENTS FOR DOE FACILITIES
11/15/94 7/12/01	5480.20A Change 1	PERSONNEL SELECTION, QUALIFICATION AND TRAINING REQUIREMENTS FOR DOE NUCLEAR FACILITIES
8/1/80	5610.2	CONTROL OF WEAPON DATA

***See Part II, Partial Deletions**

Appendix I - Part II

PARTIAL DELETIONS OF DIRECTIVES				
DATE	**DOE DIRECTIVE NUMBER**	**SUBJECT TITLE**	**DELETION DIRECTIVE DATE**	**SECTIONS DELETED**
8/26/05 6/29/07	M470.4-4 Change 1	INFORMATION SECURITY	M470.4-4A 1/16/09	All Except Section E which is retained as Section D of M470.4-4A
2/8/90 6/5/90 1/7/93	5400.5 Change 1 Change 2	RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT	O 231.1 9/30/95 Change 1 10/26/95	Chapter II: Para 1a(3) (a)

*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. M120

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.

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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.							

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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.

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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:

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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***

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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.

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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.

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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:

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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.								

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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:									

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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

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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

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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:

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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:								

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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 of 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.

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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:								

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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

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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 responsible 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.

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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:

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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.

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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***

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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 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 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 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 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 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 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 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 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 Indefinite	Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom	Implementing/ project, annex	Energy conservation/ emissions reduction in combustion	

DEPARTMENT OF ENERGY RESEARCH AND DEVELOPMENT MULTI-LATERAL AGREEMENTS
All Active Agreements

Term of Agreement	Countries	Type of Agreement	Agreement Subject Area	DOE Record #
3/16/77 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
9/22/78 Indefinite	Belgium, EEC, Denmark, Germany, Netherlands, Sweden, Switzerland	Implementing/ project, annexes	Energy conservation through energy	60

DEPARTMENT OF ENERGY RESEARCH AND DEVELOPMENT MULTI-LATERAL AGREEMENTS
All Active Agreements

Term of Agreement	Countries	Type of Agreement	Agreement Subject Area	DOE Record #
			storage	
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, Sweden, Switzerland, United Kingdom	Implementing/ project, annexes	Information Center for the Analysis and Dissemination of Demonstrated Energy Technologies	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 #
			(CADDET)	
1/1/89 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 4/2/00	Commission of the Euratom, Japan	Implementing/ project	Fusion Energy/ Reversed Field Pinches (RFP)	123
4/3/90 4/2/00	Commission of the Euratom, Japan	Annex 1	Fusion Energy/ Reversed Field Pinches (RFP)	124
4/3/90 4/2/00	Commission of the Euratom, Japan	Annex 2	Fusion Energy/ Reversed Field Pinches (RFP)	119
7/5/91 7/4/96	Russia, Former Soviet Union	MOU/MOC	Magnetic confinement fusion	91
10/1/91 10/1/96	France, Germany (unified), United Kingdom	Umbrella	Liquid metal cooled fast breeder reactors	200
10/22/91 10/22/96	Czech Republic, Slovak Republic	Science and Technology Agreement	Fusion energy	259
11/20/91 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 7/6/97	Canada, Commission of the Euratom, Japan	Implementing/ project, annexes	Environmental safety and economic aspects of fusion power	232
7/6/92 7/6/97	Canada, Commission of the Euratom, Japan	Umbrella	Environmentally economic aspects of fusion power	266
7/21/92 7/20/98	EEC, Germany, Japan, the former Soviet Union		Controlled thermonuclear fusion	233
11/24/92 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 6/13/99	Canada, Japan	Implementing/ project, annex	Nuclear technology of fusion reactors	
7/12/94 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. M120

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 No. M237

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 FY04 through the first 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 January 4, 2010 is established at $1,850,000, 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

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
%	X		=	%	X	$1,850,000	=	$

U.S. Department of Energy

and

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. M120

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.