

**MODIFICATION NO. M098**

**CONTRACTOR AND ADDRESS:**

Brookhaven Science Associates, LLC  
Brookhaven National Laboratory  
Upton, NY 11973

**MODIFICATION FOR:**

Recognition of previous obligation increases;  
Revision to Clause I.104, Obligation of Funds;  
Replacement of Clause I.50, Subcontracts for  
Commercial Items (MAY 2002) with Subcontracts  
for Commercial Items (APR 2003); Replacement of  
Clause I.53, Preference for Privately Owned U.S.  
Flag-Commercial Vessels (JUN 2000) with  
Preference for Privately Owned U.S. Flag-  
Commercial Vessels (APR 2003), Revision to Clause  
I.69, Key Personnel; Revision to Clause I.80A,  
Allowable Costs and Fees (Management and  
Operating Contracts); Revision to Attachment J.2,  
Appendix B, Critical Outcomes, Objectives, and  
Performance Measures for FY 2003; Addendum  
added to Attachment J.8, Appendix H, Small  
Business Subcontracting Plan; Replacement of  
Attachment J.9, Appendix I, DOE Directives

**PRIOR OBLIGATION:**

\$ 2,452,938,703.04

**INCREASE IN MODS A095 – A097**

A095	28,899,495.13
A096	10,367,865.00
A097	3,286,522.77

**INCREASE IN THIS MODIFICATION**

-0-

**CURRENT TOTAL OBLIGATION:**

\$ 2,495,492,585.94

THIS MODIFICATION, effective the 28<sup>th</sup> day of July 2003, by and between the UNITED STATES OF AMERICA (hereinafter referred to as the "Government"), as represented by the UNITED STATES DEPARTMENT OF ENERGY (hereinafter referred to as "DOE"), and BROOKHAVEN

SCIENCE ASSOCIATES, LLC (hereinafter referred to as the "Contractor"),

WITNESSETH THAT:

WHEREAS, the Government and the Contractor entered into Contract No. DE-AC02-98CH10886 on the 5th day of January 1998, for the operation of the Brookhaven National Laboratory; and

WHEREAS, said contract has been modified previously, and the parties desire to modify said contract further, as hereinafter provided; and

WHEREAS, this modification is authorized by law, including 41 U.S.C. 252(c)(15), P.L. 95-91 and other applicable law;

NOW, THEREFORE, said contract, as modified previously, is hereby further modified as follows:

1. **Clause I.50** - Delete 52.244-6, Subcontracts for Commercial Items (May 2002) in its entirety and replace with the attached updated revision of 52.244-6, Subcontracts for Commercial Items (APR 2003).
2. **Clause I.53** - Delete 52.247-64, Preference for Privately Owned U.S. Flag-Commercial Vessels (June 2000) in its entirety and replace with the attached updated revision of, Preference for Privately Owned U.S. Flag-Commercial Vessels (April 2003).
3. **Clause I.69** - Delete 952.215-70, Key Personnel (DEC 2000) in its entirety and replace with the attached updated revision of 952.215-70, Key Personnel (DEC 2000).
4. **Clause I.80A** - 970.5204-13, Allowable Costs and Fees (Management and Operating Contracts) (JUN 1997) (Deviation) is modified as follows:

Paragraph (b) Fees(s) add the following phrase to the end of paragraph 2 "October 1, 2001 through and including September 30, 2002 - \$6,634,425.00"

Paragraph (b) Fees(s) paragraph 3 delete the phrase "October 1, 2001 through and including September 30, 2002, is \$7,000,000.00" and replace with "October 1, 2002 through and including September 30, 2003, is \$7,000,000.00"

Delete the first 2 sentences of Paragraph (b) Fees(s) paragraph 4 and replace with the following "The type of fee (fixed, award, incentive, as appropriate) and fee amounts payable to the Contractor for the performance of the work under this contract with respect to the period October 1, 2003, to and including January 4, 2004 is unspecified. As soon as practicable after October 1, 2003, the Parties hereto shall negotiate an appropriate fee (fixed, award, incentive) and fee amount for the period October 1, 2003 to and including January 4, 2004"

5. **Clause I.104 - OBLIGATION OF FUNDS:** The first sentence of paragraph (a) is revised to read as follows: "The amount presently obligated by the Government with respect to this contract is \$2,495,492,585.94".
6. **Attachment J.2, Appendix B – Critical Outcomes, Objectives, and Performance Measures 2003;**
- a. Critical Outcome Performance Measure 3.4.1, Pursue Alternative Financing (AF) for Infrastructure Projects is deleted and replaced in entirety,
  - b. Critical Outcome Performance Measure 3.3.1.1, Site Hazard Footprint Management is deleted and replaced in entirety.

These revisions are reflected in the attached revised Critical Outcome Section 3. entitled Laboratory Management and Operations. Delete Section 3 in its entirety and replace with the attached revised Section 3, identified as Modification M098.

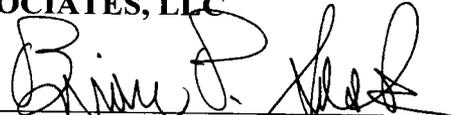
7. **Attachment J.8, Appendix H – FY'03 – Small Business Subcontracting Plan:** Paragraph 7. Record keeping, insert the following new subparagraph H. On a contract-by-contract basis, records on all solicitations over \$100,000 which indicate for each solicitation (1) whether small business concerns were solicited, and if not, why not (2) whether small disadvantaged business concerns were solicited, and if not, why not (3) whether women-owned small businesses were solicited, and if not, why not; and (4) reason for failure of solicited small business, small disadvantaged business, women owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns or HUB Zone small business concerns to receive the subcontract award;
8. **Attachment J.9, Appendix I – DOE Directives:** DOE Directives identified as Modification M094 is deleted in its entirety and replaced with the attached Appendix I, identified as Modification M098.

IN WITNESS WHEREOF, the parties have executed this document.

**UNITED STATES OF AMERICA  
DEPARTMENT OF ENERGY**

BY:   
Robert P. Gordon  
Contracting Officer  
(Title)

**BROOKHAVEN SCIENCE  
ASSOCIATES, LLC**

BY:   
Brian P. Sack  
Chief Financial Officer  
(Title)

DATE: 7-28-03

DATE: 7/26/03

# AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF PAGES
	1	1

2. AMENDMENT/MODIFICATION NO. M098	3. EFFECTIVE DATE 7/25/2003	4. REQUISITION/PURCHASE REQ. NO. 02-03CH10886.014	5. PROJECT NO. (If applicable)
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6. ISSUED BY U.S. Department of Energy Chicago Operations Office 9800 South Cass Avenue Argonne, IL 60439	7. ADMINISTERED BY (If other than Item 6) U.S. Department of Energy Brookhaven Area Office 53 Bell Avenue, Building 464 Upton, NY 11973
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8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Brookhaven Science Associates, LLC 25 Brookhaven Ave. Building 460 Upton, New York 11973	(X)	9A. AMENDMENT OR SOLICITATION NO.
		9B. DATED (SEE ITEM 11)
		10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC02-98CH10886
		10B. DATED (SEE ITEM 11)  01/05/1998

CODE	FACILITY CODE
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### 11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

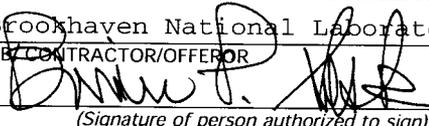
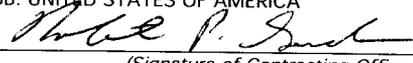
### 13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
✓	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: <u>Mutual Agreement of the Parties</u>
	D. OTHER (Specify type of modification and authority)

**E. IMPORTANT:** Contractor  is not,  is required to sign this document and return 2 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)  
 Recognition of previous obligation increases; Revision to Clause I.104, Obligation of Funds; Replacement of Clause I.50, Subcontracts for Commercial Items (MAY 2002) with Subcontracts for Commercial Items (APR 2003); Replacement of Clause I.53, Preference for Privately Owned U.S. Flag-Commercial Vessels (JUN 2000) with Preference for Privately Owned U.S. Flag-Commercial Vessels (APR 2003), Revision to Clause I.69, Key Personnel; Revision to Clause I.80A, Allowable Costs and Fees (Management and Operating Contracts); Revision to Attachment J.2, Appendix B, Critical Outcomes, Objectives, and Performance Measures for FY 2003; Addendum added to Attachment J.8, Appendix H, Small Business Subcontracting Plan; Replacement of Attachment J.9, Appendix I, DOE Directives

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

15A. NAME AND TITLE OF SIGNER (Type or print) Brian P. Sack, Chief Financial Officer Brookhaven National Laboratory	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Robert P. Gordon Contracting Officer
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED 7/25/03
16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 7-28-03

CLAUSE I.50 - FAR 52.244-6 – SUBCONTRACTS FOR COMMERCIAL ITEMS  
(APR 2003)

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

"Commercial item" has the meaning contained in the clause at 52.202-1, 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) 52.219-8, Utilization of Small Business Concerns (Oct 200) (15 U.S.C. 637(d)(2)(3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceed \$500,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (Apr 2002) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Dec 2001) (38 U.S.C. 4212(a));

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

(v) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (APR 2003) (46 U.S.C. Appx 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.

(End of Clause)

CLAUSE I.53 - 52.247-64 - PREFERENCE FOR PRIVATELY OWNED  
U.S.-FLAG COMMERCIAL VESSELS (APR 2003)

(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 of the Panama Canal Commission or 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.

(End of Clause)

**CLAUSE I.69 - DEAR 952.215-70 KEY PERSONNEL (DEC 2000)**

- (a) The personnel listed below or elsewhere in this contract 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.

Dr. Praveen Chaudhari	Dr. Ralph James
Gregory Fess, J.D.	Dr. Peter Paul
Dr. Thomas Kirk	Thomas Sheridan
Dr. Brian P. Sack	Leslie M. Hill
Michael Bebon	Dr. James Tarpinian
Margaret Lynch	Dr. Steven Dierker

CLAUSE I.80A - DEAR 970.5204-13 ALLOWABLE COSTS AND FEES  
(MANAGEMENT AND OPERATING CONTRACTS) (JUN 1997)  
(DEVIATION)

- (a) Compensation for Contractor's Services. Payment for the allowable costs as hereinafter defined, and of the fee(s), if any, as hereinafter provided, shall constitute full and complete compensation for the performance of the work under this contract.
- (b) Fee(s). The fixed fee payable to the Contractor for the performance of the work under this contract with respect to the period commencing when the Contractor assumed full responsibility for the Laboratory, to and including September 30, 1998 is \$3,574,000.00. In addition, the Parties have agreed that the maximum amount that DOE will reimburse the Contractor for fees that are paid to Bechtel National, Inc., Waste Management Federal Services, Inc., and Duke Engineering and Services, Inc. for work through September 30, 1998 shall not exceed \$1,085,000.00.

The performance fees earned by the Contractor for the performance of the work under this contract for the following periods are:

October 1, 1998 through and including September 30, 1999 -  
\$6,608,000.00  
October 1, 1999 through and including September 30, 2000 -  
\$6,633,908.00  
October 1, 2000 through and including September 30, 2001 -  
\$6,583,492.00  
October 1, 2001 through and including September 30, 2002 -  
\$6,634,425.00

The maximum performance fee earnable for the period October 1, 2002 through and including September 30, 2003, is \$7,000,000.00 as determined by the procedures outlined in Appendix L – Computation of Fee.

The type of fee (fixed, award, incentive, as appropriate) and fee amounts payable to the Contractor for the performance of the work under this contract with respect to the period October 1, 2003, to and including January 4, 2004 is unspecified. As soon as practicable after October 1, 2003, the Parties hereto shall negotiate an appropriate fee (fixed, award, incentive) and fee amount for the period October 1, 2003 to and including January 4, 2004. The Parties agree that these fee negotiations will be conducted in accordance with the DOE fee policies set forth in the Department of Energy Acquisition Regulations in effect at the time of the fee negotiations. Pending agreement upon such fee, the Contractor shall continue performance of the work under this contract and shall be paid a

provisional fee at 75% of the amount paid for the previous period. There shall be no adjustment in the amount of the Contractor's fee by reason of differences between any estimate of cost for performance of the work under this contract and the actual costs for performance of that work.

- (c) Allowable Costs. The allowable cost of performing the work under this contract shall be the costs and expenses that are actually incurred by the Contractor in the performance of the contract work in accordance with its terms, that are necessary or incident thereto, and that are determined to be allowable as set forth in this paragraph. The determination of allowability of cost shall be based on:
- (1) Allowability and reasonableness in accordance with FAR 31.201-2(d) and 31.201-3;
  - (2) Standards promulgated by the Cost Accounting Standards Board, if applicable; otherwise, generally accepted accounting principles and practices appropriate to the particular circumstances; and
  - (3) Recognition of all exclusions and limitations set forth in this clause or elsewhere in this contract as to types or amounts of items of cost. Allowable costs shall not include the cost of any item described as unallowable in paragraph (e) of this clause except as indicated therein. Failure to mention an item of cost specifically in paragraphs (d) or (e) of this clause shall not imply either that it is allowable or that it is unallowable.
- (d) Examples of Items of Allowable Cost. Subject to the other provisions of this clause, the following examples of items of cost of work done under this contract shall be allowable to the extent indicated:
- (1) Bonds and insurance, including self-insurance, as provided in the clause entitled, Insurance--Litigation and Claims.
  - (2) Communication costs, including telephone services, local and long-distance calls, telegrams, cablegrams, postage, and similar items.
  - (3) Consulting services (including legal and accounting), and related expenses, as approved by the Contracting Officer, except as made unallowable by paragraphs (e)(16) and (e)(26).
  - (4) Reasonable litigation and other legal expenses, including counsel fees, if incurred in accordance with the clause of the contract entitled, Insurance - Litigation and Claims, and the DOE approved contractor litigation management procedures (including cost

guidelines) as such procedures may be revised from time to time, and if not otherwise made unallowable in this contract.

- (5) Losses and expenses (including settlements made with the consent of the Contracting Officer) sustained by the Contractor, in the performance of this contract and certified, in writing, by the Contracting Officer to be reasonable, except the losses and expenses expressly made unallowable under other provisions of this contract. Such certification will not be unreasonably withheld.
- (6) Materials, supplies, and equipment, including freight transportation, material handling, inspection, storage, salvage, and other usual expenses incident to the procurement, use and disposition thereof, subject to approvals required under other provisions of this contract.
- (7) Patents, purchased design, license fees, and royalty payments to the extent expressly provided for under other provisions in this contract or as approved by the Contracting Officer, and preparation of invention disclosures, reports and related documents, and searching the art to the extent necessary to make such invention disclosures in accordance with Clause I.97 – DEAR 970.5227-10 - Patent Rights - Management and Operating Contracts, Nonprofit Organization or Small Business Firm Contractor, and the cost of DOE funded technology transfer in accordance with paragraph c., Allowable Costs, of Clause I.92 - DEAR 970.5227-3 - Technology Transfer Mission.
- (8) Personnel costs and related expenses incurred in accordance with the personnel appendix (Appendix A) which is hereby incorporated by reference and made a part of this contract. It is specifically understood and agreed that said personnel appendix sets forth in detail personnel costs and related expenses to be allowable under this contract and is intended to document those personnel policies, practices and plans which have been found acceptable by the Contracting Officer. It is further understood and agreed that the Contractor will advise the Contracting Officer of any proposed changes in any matters covered by said policies, practices or plans which relate to this item of cost, and that the personnel appendix may be modified from time to time, in writing, by mutual agreement of the Contractor and Contracting Officer without execution of an amendment to this contract for the purpose of effectuating any such changes in, or additions to, said personnel appendix as may be agreed upon by the Parties. Such modifications shall be evidenced by execution of written numbered approval letters from the Contracting Officer or his representative. Types of personnel costs

and related expenses to be incorporated into the personnel appendix, or amendments thereto, are as follows:

- (i) Salaries and wages; bonuses and incentive compensation; overtime, shift differential, holiday, and other premium pay for time worked; nonwork time, including vacations, holidays, sick, funeral, military, jury, witness, and voting leave; salaries and wages to employees in their capacity as union stewards and committeemen for time spent in handling grievances, or serving on labor management (Contractor) committees; provided, however, that the Contracting Officer's approval is required in each instance of total compensation to an individual employee at an annual rate of \$80,000 or more, when it is proposed that a total of 50 percent or more of such compensation be reimbursed under DOE cost type contracts. Total compensation, as used herein, includes only the employee's base salary, bonus, and incentive compensation payments;
- (ii) Legally required contributions to old-age and survivors' insurance, unemployment compensation plans, and workers compensation plans, (whether or not covered by insurance); voluntary or agreed-upon plans providing benefits for retirement, separation, life insurance, hospitalization, medical-surgical and unemployment (whether or not such plans are covered by insurance);
- (iii) Travel (except foreign travel, which requires specific approval by the Contracting Officer on a case-by-case basis); incidental subsistence and other allowances of Contractor employees, in connection with performance of work under this contract (including new employees reporting for work and transfer of employees, the transfer of their household goods and effects and the travel and subsistence of their dependents);
- (iv) Employee relations, welfare, morale, etc.; programs including incentive or suggestion awards; employee counseling services, health or first-aid clinics; house or employee publications; and wellness/fitness centers;
- (v) Personnel training, (except special education and training courses and research assignments calling for attendance at educational institutions which require specific approval by the Contracting Officer on a case-by-case basis); including apprenticeship training programs designed to improve

efficiency and productivity of contract operations, to develop needed skills, and to develop scientific and technical personnel in specialized fields required in the contract work;

- (vi) Recruitment of personnel (including help-wanted advertisement), including service of employment agencies at rates not in excess of standard commercial rates, employment office, travel of prospective employees at the request of the Contractor for employment interviews; and
  - (vii) Net cost of operating plant-site cafeteria, dining rooms, canteens, and lodging facilities, attributable to the performance of the contract.
- (9) Repairs, maintenance, inspection, replacement, and disposal of Government-owned property and the restoration or clean-up of site and facilities to the extent approved by the Contracting Officer and as allowable under paragraph (f) of the clause of this contract entitled, Property.
  - (10) Subcontracts and purchase orders, including procurements from Contractor-controlled sources, subject to approvals required by other provisions of this contract.
  - (11) Subscriptions to trade, business, technical and professional periodicals, as approved by the Contracting Officer.
  - (12) Taxes, fees, and charges levied by public agencies which the Contractor is required by law to pay, except those which are expressly made unallowable under other provisions of this contract.
  - (13) Utility services, including electricity, gas, water and sewage.
  - (14) Indemnification of the Pension Benefit Guaranty Corporation, pursuant to the Employee Retirement Income Security Act of 1974, in accordance with FAR 31.205-6(j)(3)(iv).
  - (15) Establishment and maintenance of financial institution accounts in connection with the work hereunder, including, but not limited to, service charges, the cost of disbursing cash, necessary guards, cashiers, and paymasters. If payments to employees and visitors are made by check, facilities and arrangements for cashing checks may be provided without expense to the employees and visitors, subject to the approval of the Contracting Officer.

- (16) Subject to the approval or ratification, in writing, of the Contracting Officer, litigation 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 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.
- (17) 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 Appendix G.
- (18) Stipends and payments made to reimburse travel or other expenses of faculty members, students and others 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 Contracting Officer approved fellowship, or other research, educational or training programs.
- (19) Payments to educational institutions for tuition and fees or institutional allowances in connection with Contracting Officer approved fellowship or other research, educational or training programs.
- (20) 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.
- (21) 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.
- (22) Subject to any other limitations on allowability contained in this contract, including paragraph (e) below, 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.

(e) Examples of Items of Unallowable Costs. The following examples of items of costs are unallowable under this contract to the extent indicated:

- (1) Advertising and public relations costs designed to promote the Contractor or its products, including the costs of promotional items and memorabilia such as models, gifts and souvenirs, and the cost of memberships in civic and community organizations; except those advertising and public relations costs:
  - (i) Specifically required by the contract;
  - (ii) Approved, in advance, by the Contracting Officer as clearly in furtherance of work performed under the contract;
  - (iii) That arise from requirements of the contract and that are exclusively for recruiting personnel, acquiring scarce items for contract performance, disposing of scrap or surplus materials, the transfer of Federally-owned or originated technology to State and local governments and to the private sector, or acquisition of contract-required supplies and services; or
  - (iv) Where the primary purpose of the activity is to facilitate contract performance in support of the DOE mission.
- (2) Bad debts (including expenses of collection) and provisions for bad debts arising out of other business of the Contractor.
- (3) Bidding expenses and cost of proposals except for such expenses and costs which are incurred pursuant to the provisions of the contract, including but not limited to Clause H.3 – DEAR 970.70 - Agreements to Perform Non-DOE Activities.
- (4) Bonuses and similar compensation under any other name, which:
  - (i) Are not pursuant to an agreement between the Contractor and employee prior to the rendering of the services or an established plan consistently followed by the Contractor or,
  - (ii) Are in excess of those costs which are allowable by the Internal Revenue Code and regulations thereunder, or
  - (iii) Provide total compensation to an employee in excess of reasonable compensation for the services rendered.

- (5) Central and branch office expenses of the Contractor, except as specifically set forth in the contract.
- (6) Commissions, bonuses, and fees (under whatever name) in connection with obtaining or negotiating for a Government contract or a modification thereto, except when paid to bona fide employees or bona fide established selling organizations maintained by the Contractor for the purpose of obtaining Government business.
- (7) Contingency reserves, provisions for.
- (8) Contributions and donations, including cash, Contractor-owned property and services, regardless of the recipient.
- (9) Depreciation in excess of that calculated by application of methods approved for use by the Internal Revenue Service under the Internal Revenue Code of 1954, as amended, including the straight-line declining balance (using a rate not exceeding twice the rate which would have been used had the depreciation been computed under the straight-line method), or sum-of-the-years digits method, on the basis of expected useful life, to the cost of acquisition of the related fixed assets less estimated salvage or residual value at the end of the expected useful life.
- (10) Dividend provisions or payments and, in the case of sole proprietors and partners, distributions of profit.
- (11) Entertainment, including costs of amusement, diversion, social activities; and directly associated costs such as tickets to shows or sports events, meals, lodging, rentals, transportation, and gratuities; costs of membership in any social, dining or country club or organization, except the costs of such recreational activities for on-site employees, as may be approved by the Contracting Officer or provided for elsewhere in the contract. Costs made specifically unallowable under this cost principle are not allowable under any other cost principle.
- (12) Fines and penalties, except, with respect to civil fines and penalties only, if the Contractor demonstrates to the Contracting Officer that (i) Such a civil fine or penalty was incurred as a result of compliance with specific terms and conditions of the contract or written instructions from the Contracting Officer; or (ii) Such a civil fine or penalty was imposed without regard to fault and could not have been avoided by the exercise of due care.

- (13) Government-furnished property, except to the extent that cash payment therefor is required pursuant to procedures of DOE applicable to transfers of such property to the Contractor from others.
- (14) Insurance (including any provisions of a self-insurance reserve) on any person where the Contractor under the insurance policy is the beneficiary, directly or indirectly; insurance against loss of or damage to Government property as defined in Clause I.115, Property, except as authorized by the Contracting Officer; and insurance covering any cost which is unallowable under any provision of this contract.
- (15) Interest, however represented (except (i) Interest incurred in compliance with other contract clauses including Clause I.99 – DEAR 970.5229-1 - State and Local Taxes, or (ii) imputed interest costs relating to leases classified and accounted for as capital leases under generally accepted accounting principles (GAAP), provided that the decision to enter into a capital leasing arrangement has been specifically authorized and approved by the DOE in accordance with applicable procedures and such interest costs are recorded in an appropriately specified DOE account established for such purpose), bond discounts and expenses, and costs of financing and refinancing operations.
- (16) Legal, accounting, and consulting services and related costs incurred in connection with the preparation and issuance of stock rights; organization or reorganization; prosecution or defense of antitrust suits; prosecution of claims against the United States; contesting actions or proposed actions of the United States; and prosecution or defense of patent infringement litigation (unless initiated at the request of DOE, or except where incurred pursuant to the Contractor's performance of the Government-funded technology transfer mission and in accordance with Clause I.98 - Insurance--Litigation and Claims).
- (17) Losses or expenses:
  - (i) On, or arising from the sale, exchange, or abandonment of capital assets, including investments;
  - (ii) On other contracts, including the Contractor's contributed portion under cost-sharing contracts;
  - (iii) In connection with price reductions to and discount purchases by employees and others from any source;

- (iv) That are compensated for by insurance or otherwise or which would have been compensated for by insurance required by law or by written direction of the Contracting Officer but which the Contractor failed to procure or maintain through its own fault or negligence;
  - (v) That result from willful misconduct or lack of good faith on the part of any of the Contractor's managerial personnel [as that term is defined in Clause I. 115 (j)];
  - (vi) That represent liabilities to third persons that are not allowable under the clause of this contract entitled, Insurance--Litigation and Claims; or
  - (vii) That represent liabilities to third persons for which the Contractor has expressly accepted responsibility under other terms of this contract.
- (18) Maintenance, depreciation, and other costs incidental to the Contractor's idle or excess facilities (including machinery and equipment), other than reasonable standby facilities.
  - (19) Memberships in trade, business, and professional organizations, except as approved by the Contracting Officer.
  - (20) Precontract costs, except as expressly made allowable under other provisions in this contract.
  - (21) Independent Research and Development Costs excluding Laboratory Directed Research and Development or unless specifically provided for elsewhere in this contract.
  - (22) Selling costs, except to the extent they are determined to be reasonable and to be allocable to the contract. Allocability of selling costs to the contract will be determined in the light of reasonable benefit to the agency program arising from such activities as technical, consulting, demonstration, and other services performed for such purposes as applying or adapting the Contractor's product for agency use.
  - (23) Storage of records pertaining to this contract after completion of operations under this contract, irrespective of contractual or statutory requirement for the preservation of records.
  - (24) Taxes, fees, and charges in connection with financing, refinancing, or refunding operations, including listing of securities on

exchanges, taxes which are paid contrary to Clause I.99 – DEAR 970.5229-1 - State and Local Taxes; Federal taxes on net income and excess profits; special assessments on land which represent capital improvement; and taxes on accumulated funding deficiencies of, or prohibited transactions involving, employee deferred compensation plans pursuant to Section 4971 or Section 4975 of the Internal Revenue Code of 1954, as amended, respectively.

- (25) Travel expenses of the officers, proprietors, executives, administrative heads and other employees of the Contractor's central office or branch office organizations concerned with the general management, supervision, and conduct of the Contractor's business as a whole, except to the extent that particular travel is in connection with the contract and approved by the Contracting Officer.
- (26) Salary or other compensation (and expenses related thereto) of any individual employed under this contract as a consultant or in another comparable employment capacity who is an employee of another organization and concurrently performing work on a full-time annual basis for that organization under a cost-type contract with DOE, except to the extent that cash payment therefor is required pursuant to the provisions of this contract or procedure of DOE applicable to the borrowing of such an individual from another cost-type Contractor.
- (27) Travel by commercial aircraft or travel by other than common carrier that is not necessary for the performance of this contract or the cost of which exceeds the lesser of the lowest available commercial discount airfare, Government contract airfare, or customary standard (coach or equivalent) commercial airfare. Airfare costs in excess of the lowest such airfare are unallowable, except when such accommodations:
  - (i) Require circuitous routing;
  - (ii) Require travel during unreasonable hours;
  - (iii) Excessively prolong travel;
  - (iv) Result in increased cost that would offset transportation savings;
  - (v) Would offer accommodations not reasonably adequate for the physical or medical needs of the traveler; or

- (vi) Are not reasonably available to meet necessary mission requirements.

Individual Contractor determinations of nonavailability of commercial discount airfare or Government contract airfare will not be contested by DOE when the Contractor can reasonably demonstrate such nonavailability or, on an overall basis, that established policies and procedures result in the routine use of the lowest available airfare. However, in order for air travel costs in excess of customary standard airfare to be allowable, the Contractor must justify and document the applicable condition(s) set forth above.

- (28) Special construction industry "funds" financed by employer contributions for such purposes as methods and materials research, public and industry relations, market development, and disaster relief, except as specifically provided elsewhere in this contract.
- (29) Late premium payment charges related to employee deferred compensation plan insurance.
- (30) Facilities capital cost of money. (CAS 414 and CAS 417).
- (31) Contractor costs incurred to influence either directly or indirectly --
  - (i) Legislative actions on any matter pending before Congress, a State legislature, or a local legislature; or
  - (ii) Federal, State, or local executive branch action on regulatory and contract matters, other than costs incurred in regard to contract proposals, as described in the "Legislative Lobbying Cost Prohibition" clause of this contract.
- (32) Commercial automobile rental expenses, unless approved by the Contracting Officer or authorized by Appendix A.
- (33) Costs incurred in connection with any criminal, civil or administrative proceeding commenced by the Federal Government or a State, local or foreign government, as provided in the Clause entitled, "Cost Prohibitions Related to Legal and Other Proceedings", incorporated elsewhere in this contract.
- (34) Costs of alcoholic beverages.
- (35) Contractor employee travel costs incurred for lodging, meals and incidental expenses which are not in accordance with Appendix A.

- (36) Premium Pay for wearing radiation-measuring devices for Laboratory and all-tier cost-type subcontract employees.
- (37) Costs incurred in connection with any employee action, as provided in Clause H.4 - Costs Associated with Whistleblower Actions.
- (38) Notwithstanding any other provision of this contract, the costs of bonds and insurance are unallowable to the extent they are incurred to protect and indemnify the Contractor and/or subcontractor against otherwise unallowable costs, unless such insurance or bond is required by law, the express terms of this contract, or is authorized in writing by the Contracting Officer. The cost of commercial insurance to protect the Contractor against the costs of correcting its own defects in materials or workmanship is an unallowable cost.
- (39) Costs of gifts; however, gifts do not include awards for performance or awards made in recognition of employee achievements pursuant to an established Contractor plan or policy.
- (40) The costs of recreation, except for the costs of employees' participation in company sponsored sports teams or employee organizations designed to improve company loyalty, team work, or physical fitness.
- (41) 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.

### Critical Outcome 3.0 Laboratory Management and Operations

BNL 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.

The weight of this Outcome is 32% of total.

#### Objective 3.1 Management and Business Processes

The weight of this Objective is 55% of total.

BSA will develop, implement, evaluate, and improve management tools and processes to attract, hire and retain a highly qualified and diverse workforce and enable the workforce to effectively and efficiently support the Laboratory scientific and cleanup missions.

#### Measure 3.1.1 Corporate Leadership

The weight of this measure is 32%.

##### 3.1.1.1 Establishing Partnerships

Brookhaven Science Associates will establish partnerships with non-DOE entities to enhance research programs.

The weight of this measure is 28%.

#### Performance Metric

BSA corporate involvement leads to successfully entering into substantial partnerships (\*) that result in sponsorship or enhanced financing from non-DOE entities to support research programs at the Laboratory.

<i>Rating</i>	<i>Criteria</i>
Outstanding	Development of a strategic plan for the BSA partners and the core universities to develop and sustain new partnerships that lead to enhanced non-DOE funding of research programs at BNL and establishment of multiple substantial MOUs/Letters of Intent with non-DOE entities that have the potential to sponsor substantial programs/activities at the Laboratory.
Excellent	Development of a strategic plan for the BSA partners and the core universities to develop and sustain new partnerships that lead to enhanced non-DOE funding of research programs at BNL and establish a substantial MOU/Letter of Intent with a non-DOE entity that has the potential to sponsor a substantial program/activity at the Laboratory.
Good	Development of a strategic plan for the BSA partners and the core universities to develop and sustain new partnerships that lead to enhanced non-DOE funding of research programs at BNL.
Marginal/Unsatisfactory	No strategic plan or MOU/Letter of Intent established.

\* - Substantial partnerships are \$200,000 and above.

**3.1.1.2 Corporate Involvement**

Brookhaven Science Associates believes that active corporate involvement is a critical success factor in the management of BNL. To implement this, BSA is committed to the following types of activities at BNL:

The weight of this measure is 72%.

1. Returning a substantial amount of the funds collected by BSA as fee on this Contract to enhance the scientific position, prestige, and viability of BNL as a Department of Energy National Laboratory.
2. Providing highly skilled candidates for senior management positions at the Laboratory.
3. Providing proven management systems and processes for enhancing business operations.
4. Facilitating the implementation of these with long-term assignments of key leaders and short-term assignments of subject matter experts.
5. Conducting management assessments in various areas of Laboratory operations.
6. Providing strategic guidance on science, technology, cleanup missions, and appropriate management and administrative matters resulting in cost savings (e.g. fringe benefits).
7. Facilitating the exchange of ideas and practices between other organizations affiliated with BSA corporate partners that bring benefits to DOE and/or BNL (e.g. joint appointments with universities).

**Performance Metric**

Performance relative to each item will be determined as acceptable or unacceptable by BAO management with input from BSA. Performance related to the measure, as a whole, will be determined as follows:

<i>Rating</i>	<i>Criteria</i>
Outstanding	All 7 items determined acceptable.
Excellent	6 of the 7 items determined acceptable.
Good	5 of the 7 items determined acceptable.
Marginal	4 of the 7 items determined acceptable.
Unsatisfactory	3 or less of the 7 items determined acceptable.

**Measure 3.1.2 Procurement**

The weight of this measure is 23%

**3.1.2.1 Deliver Effective Procurement Packages to DOE-BAO for procurements that require DOE approval and/or consent.**

The weight of this element is 30%.

**Performance Metric**

<i>Rating</i>	<i>Criteria</i>
Outstanding	≥ 95% of packages submitted are effective
Excellent	90 - 94.9% of packages submitted are effective
Good	85 – 89.9% of packages submitted are effective
Marginal	80 – 84.9% of packages submitted are effective
Unsatisfactory	< 80% of packages submitted are effective

“Effective” packages are those which meet the requirements of the prime contract or contain rationale acceptable to DOE for deviating from prime contract requirements.

**3.1.2.2 Maximize Procurement Quality Through Implementation of the Following Procurement Initiatives:**

The weight of this element is 70%.

1. *Improve Procurement Planning to Ensure Timely Placement of Major Procurements in Accordance with the Prime Contract and Procurement and Property Management (PPM) Procurement Operations Manual*

Approach: Establish two integrated procurement-planning teams to provide effective assistance, support and coordination for one department and one support division that have significant procurement activities.

Deployment:

1. Under the chairmanship of a procurement manager/supervisor, assign a buyer/contract specialist, the assistant contract administration specialist, procurement quality engineer, and department/division representatives (technical and administrative) to identify, support, monitor and coordinate procurement activities.
2. Develop a comprehensive procurement strategy.
3. The buyer/contract specialist will assist technical team members in finalizing SOWs and will develop procurement milestones that support programmatic needs.
4. The Procurement Quality Engineer (PQE) will assist in the review of SOWs/Requisitions for quality requirements. The PQE will assist in the development and qualification of potential suppliers with respect to specific quality requirements (e.g. review supplier capabilities and/or systems).
5. The Assistant Contract Administration Specialist will monitor contracts/purchase orders to ensure timely performance and receipt of deliverables and inform the other team members of a contractor’s failure to perform.

Results: Conduct a satisfaction survey of procurement-planning team members to determine effectiveness of the process, and document cases of success that occurred as a result of this effort.

2. *Improve Procurement Qualities by Providing More Effective Tools for the Procurement Staff*

Approach: Develop standardized contract templates and improved checklists.

Deployment:

1. PPM supervisors will develop standardized contract templates for all contract types.
2. PPM supervisors will develop improved checklists.
3. Implement and provide instruction to Buyers/Contract Specialists.

Results: Improved quality as demonstrated in self-assessment compliance reviews.

3. *Effective Development and Implementation of a Supplier Qualification/Performance System*

Approach: Improve existing supplier-related practices and procedures (as outlined in SBMS) including adding controls and developing new error-proof processes as required to reduce variability and mitigate risks in the selection, control and improvement of the supplier base. Utilize existing PeopleSoft capabilities and develop/implement web-based information systems as needed, to allow for lab-wide sharing of information and results to enhance decision-making.

Deployment:

Establish a formal Supplier Qualification and Performance-Monitoring System, commensurate with the importance of the purchased item or service, to ensure:

1. Performance and schedule capabilities of prospective suppliers are evaluated.
2. The best-value supplier is selected (qualified).
3. The addition of new suppliers to the database is controlled and the socio-economic classification is accurate.
4. Qualified supplier's performance is monitored, evaluated and reported periodically to ensure that supplied items or services are meeting quality, cost and schedule requirements.

Results: A rating system will be deployed lab-wide that will rank major suppliers / subcontractors based on quality, cost and schedule performance.

4. *Develop and Implement Phase II of the Contract Administration Improvement Plan.*

Approach: Develop a plan to improve contract administration as performed by the department/division contract administration representatives, technical representatives and the buyers/contract specialists.

Deployment:

1. Implement PPM matrix authority over contract administration representatives in their progress surveillance, receipt of deliverable documentation, invoice approval and contract closeout activities.
2. Implement recertification training for technical representatives.
3. Implement periodic surveillance of Buyers/Contract Specialists contract administration responsibilities.

Results: Results of self-assessment compliance reviews

**Performance Metric**

<i>Rating</i>	<i>Criteria</i>
Outstanding	Implementation of all 4 tasks
Excellent	Implementation of 3 tasks
Good	Implementation of 2 tasks
Marginal	Implementation of 1 tasks
Unsatisfactory	Implementation of 0 tasks

**Measure 3.1.3 Baseline Study of Laboratory's Business Management System**

The weight of this measure is 18%.

**Purpose and Background**

BSA seeks to continuously improve the Laboratory's Business Management Systems. In FY2002 BSA began a process of examining the feasibility of comparing BNL business systems and processes to those of best-in-class organizations. This feasibility study concluded that there exists a set of metrics that could be used to make sensible comparisons for various business systems. In FY 2002 a list of potential key Business Management Systems indicators was identified which could assist in evaluating the ongoing effectiveness and efficiency of the Laboratory business-related Management Systems. In FY2003 BSA will advance the work performed in FY2002 by selecting a number of management systems and determining whether the indicators identified in FY2002 are comprehensive and adequate for comparison to best-in-class organizations. To the extent practicable, BNL will utilize the services of a professional organization,

recognized as an expert in the field of business systems measurement, to assist in developing the appropriate set of indicators.

**Measure**

BSA and DOE will partner to develop the sets of indicators that can be used for examining the effectiveness of those Business Management Systems identified in the Baseline/Benchmarking feasibility study of FY 2002 and to compare BNL systems to best in class.

**Performance Metric**

<i>Rating</i>	<i>Criteria</i>
Outstanding	Indicators are fully developed and actual Benchmarking Study has been initiated
Excellent	Indicators are fully developed and actual Benchmarking Study is partially initiated
Good	Indicators are fully developed and actual Benchmarking Study is ready for initiation in FY2004
Marginal	Indicators are not fully developed
Unsatisfactory	No progress beyond FY2002 effort has been made

**Measure 3.1.4 Cyber Security**

The weight of this Measure is 27%.

Each element of the Performance Measure will be awarded points based on specific accomplishments, as described below. The evaluation of the Performance Measure will be the numerical average of the scores of the supporting metrics for each of the major elements.

**Purpose and Supporting Information**

BNL's goal is to achieve a sustainable plateau in its Cyber Security Program where the following hold true:

- All open audit findings have been addressed and assured through implementation of Corrective Action Plans.
- The Cyber Security Program is in place and functioning effectively with the active participation of Line Management in developing and implementing the Cyber Security Program Plan.
- Through the application of formal risk analysis, an appropriate and sustainable balance between the openness required by the science mission and the security required to adequately protect the Laboratory's assets is achieved.
- Processes are in place to ensure that all sensitive country foreign nationals and 90% of non-sensitive country foreign nationals, granted access to sensitive and/or critical site systems (other than publicly available systems), have documented approval for cyber access based on the requirements indicated below (see element #4).

This achievement will reflect a new maturity in BNL's Cyber Security Program – an approach that is proactive, preventative, forward thinking and sustainable.

Elements of this measure are:

1. BNL will establish and sustain an administrative program for computer systems to ensure that all devices connected to the network are registered as authorized machines. The Laboratory also will maintain an acceptable level of security readiness defined by the most current guidance on security vulnerabilities and configuration published by Cyber Security.
  - A. ITD will administer an effective network-registration program that will ensure BNL has authorized all systems connected to the network. ITD will continue a process to ensure that unregistered devices can be located quickly, so that their connection to the network can be terminated, if necessary.

The weight of element 1A is 10%.

**Metrics**

<i>Rating</i>	<i>Criteria</i>
Outstanding	<3% of active devices on the network are unregistered
Excellent	<5% of active devices on the network are unregistered
Good	<7% of active devices on the network are unregistered
Marginal	<9% of active devices on the network are unregistered
Unsatisfactory	≥ 9% of active devices on the network are unregistered

- B. ITD will administer an effective internal and external computer-scanning program to measure the security posture of devices connected to the network, and will report the results to the field quarterly. Devices exempt from internal scanning for operational reasons (e.g., highly sensitive control devices) will be tracked and scanned manually to ensure that maximum security is achieved and maintained within the context of the mission's requirement.

The weight of element 1B is 15%.

The measure of this element *taken as a quarterly time period* is as follows:

**Metrics**

<i>Rating</i>	<i>Criteria</i>
Outstanding	>90% of devices are scanned
Excellent	>80% of devices are scanned
Good	>70% of devices are scanned
Marginal	>60% of devices are scanned
Unsatisfactory	≤60% of devices are scanned

2. Cyber Security will design, develop and implement an Internal Intrusion Detection Program to carry out meaningful assessments and analyses of threats and risks for the Laboratory. Such assessments are essential effective performance measures for a fully rounded, mature program – and to provide the data required for improving and adjusting priorities to best deploy our limited resources.

- A. Cyber Security will complete the design of an Internal Intrusion Detection System (IIDS) capability - documented with a network diagram and supporting text. The implementation team will evaluate, test, and deploy an Internal IDS capability, consisting of one sensor that listens and returns data alerts to a centrally located IDS console. The IDS team will determine methodology for analyzing the output from the internal IDS sensors; the results will be given to Management in routine reports reflecting internal risk.

The weight of this element is 25%

The measure of this element is as follows:

**Metrics**

<i>Rating</i>	<i>Criteria</i>
Outstanding	IIDS test configuration up and running, fully documented; routine reports generated by 08/15/03.
Excellent	IIDS test configuration up and running; fully documented, reports under development.
Good	IIDS documented, test configuration working, no progress on report generation.
Marginal	IIDS documented, test configuration working, but not fully tuned, e.g. false positives not yet tuned to an acceptable level.
Unsatisfactory	No progress

3. ITD will assess risks and analyze threats to determine the appropriate security actions for "critical" or "sensitive" computer systems at Brookhaven.

Together with the system owners, Cyber Security will identify "critical" or "sensitive" systems. ITD then will ensure that a security review is made for each critical or sensitive system and that the appropriate level of protection is applied to it.

The weight of this element is 25%

The measure of this element is as follows:

**Metrics**

<i>Rating</i>	<i>Criteria</i>
Outstanding	Critical and sensitive systems identified; 90% - 100% of the security reviews are undertaken and protection levels applied.
Excellent	Critical and sensitive systems identified; 75% - 89% of security reviews undertaken and protection levels applied.
Good	Critical and sensitive systems identified, 50% - 74% of security reviews undertaken and protection levels applied.
Marginal	Critical and sensitive systems identified and security reviews undertaken. No protection applied.
Unsatisfactory	No progress

4. BNL will develop and maintain a security process for regulating the access of foreign nationals to the laboratory's critical and sensitive systems. BNL will implement a program that ensures that 1) a designated

official approves the cyber access of foreign nationals, 2) the approval identifies the specific system(s) to which access is granted, and the anticipated period of access, 3) approvals are based on documenting an assessment of risks and identifying access controls, and, 4) access is periodically audited consistent with the risk upon which approval is based.

By the end of FY03, BNL will have developed a system to automatically gather account information that tracks foreign nationals' (on-site) access to BNL's computing resources. The process will check users currently logged into the critical and sensitive systems against both their approved times at the Laboratory, and their permission for access, as specified in the GIS.

The weight of this element is 25%.

The measure of this element is as follows:

**Metrics**

<i>Rating</i>	<i>Criteria</i>
Outstanding	Account tracking system implemented; 90% - 100% of critical and sensitive systems configured by the end of FY 03.
Excellent	Account tracking system implemented; 75% - 89% of critical and sensitive systems configured.
Good	Account tracking system implemented; 50% - 74% of critical and sensitive systems configured.
Marginal	Account tracking system developed and implemented; systems not configured (resuming manual process).
Unsatisfactory	No progress

**Objective 3.2 Assessment and Improvement**

The weight of this Objective is 15%

**Purpose and Supporting Information**

BSA is committed to rigorous and candid self-assessment in order to monitor performance and promote early identification and resolution of issues that may impact accomplishment of the Laboratory's performance objectives.

Two fundamental and distinct elements of BSA's self assessment program are:

1. Monitoring and measuring progress towards achieving Critical Outcomes, Objectives, and Performance Measures, and
2. Monitoring and measuring progress towards other objectives associated with internal Laboratory initiatives or contractual obligations.

Processes for the first part of the program, monitoring and measuring progress towards accomplishment of the Critical Outcomes are relatively mature. However, BSA Corporate Oversight and BNL management have determined that processes for the second element of the self-assessment program need improvement. Specifically, those assessment activities identified the need to drive improvement in the consistency and integration of performance monitoring associated with deployment of laboratory management systems (in SBMS). This is the horizontal (or management system) "slice" of the Laboratory's assessment program.

Specific measures are developed that relate to improving the laboratory's approach for planning management system assessment activities, including both those conducted by the management system steward and those required to be performed by line organization managers. The laboratory expects to apply these assessment processes to all management systems over the next three years (FY03, 04, and 05).

The laboratory is also pursuing continuation of the management system Maturity Evaluation process that has been highly successful in verification of the QA program. The FY03 Management System selections for both of these measures are based primarily on their role in supporting key Laboratory Programs (e.g. ISM, QA, EMS, ISSM).

In addition to the specific measures for discrete performance improvements, BSA and DOE continue to develop and pilot processes to measure the adequacy and effectiveness of the overall assessment program. To ensure objectivity of the evaluation, in FY03, Laboratory Management and DOE have agreed to pursue a third party evaluation process. This process will be similar to the one used to evaluate community involvement initiatives.

**Measure 3.2.1 Management System Assessment Planning**

**3.2.1.1 Management System Objectives and Assessment Activities**

The weight of this measure is 20%.

Establish a process for planning management system assessments, publish the process in SBMS and document management system assessment plans in accordance with the process for the following management systems by (three months after contract measures (Appendix B) approval).

- Acquisition Management
- Emergency Preparedness
- Environmental Management
- Facility Operations
- Facility Safety
- Hazardous Material Transportation
- Life Cycle Asset Management
- Radiological Control
- Safeguards and Security
- Work Planning and Control
- Worker Safety and Health

Notes: Development of the assessment plans will include solicitation and consideration of DOE input.

**Performance Metric**

<i>Rating</i>	<i>Criteria</i>
Outstanding	11 of 11 completed on schedule
Excellent	10 of 11 completed on schedule
Good	9 of 11 completed on schedule
Marginal	8 of 11 completed on schedule
Unsatisfactory	< 8 of 11 completed on schedule

**3.2.1.2 Consensus-based User/Peer Reviewer Maturity Determinations**

The Weight of this measure is 30%

Complete formal consensus based user/peer reviewer Maturity Determinations for the following management systems.

- Facility Safety

- Safeguards and Security
- Worker Safety and Health
- Radiological Control

This measure includes the completion and documentation of the maturity determinations, subsequent management analysis of the results and necessary/appropriate updates of the assessment plans for the respective system.

**Performance Metric**

<i>Rating</i>	<i>Criteria</i>
Outstanding	4 of 4 completed by September 30, 2003
Excellent	3 of 4 completed by September 30, 2003
Good	2 of 4 completed by September 30, 2003
Marginal	1 of 4 completed by September 30, 2003
Unsatisfactory	No items completed by September 30, 2003

**3.2.1.3 Third Party Evaluation of the Management System Assessment Program**

The weight of this measure is 50%

An independent third-party review team will be established to evaluate the management system assessment program. The team will consist of individuals from the public and private sector. The individuals will be recognized as expert in the management of institutional/corporate level self-assessment programs in performance-based environments. The evaluation will be limited to the eleven management systems listed and the assessment activities defined by measure 3.2.1.1.

An evaluation protocol will be jointly developed by BSA and DOE using criteria extracted from the National Baldrige Quality Award, DOE G 414.1-1A *Management Assessment and Independent Assessment Guide*, and New York State Quality Award (Excelsior Award). The criteria used by the review team will be included in the protocol. During the FY03 cycle, the third party review team will also “validate” those criteria and recommend revision as appropriate for use in subsequent years.

**Metrics:**

As determined by the criteria and Third Party evaluation protocol.

**Objective 3.3 Environmental Safety & Health**

BNL will develop, implement, and continuously improve management systems, processes, and services to effectively and efficiently manage environment, safety, and health risks associated with the legacy vulnerabilities and work associated with support of ongoing Laboratory mission activities.

The weight of this Objective is 10%

**Measure 3.3.1 Legacy ES&H Risk Management**

The weight of this measure is 38%.

**3.3.1.1 Site Hazard Footprint Management**

The weight of this measure is 100%.

**Purpose and Supporting Information**

Long-term legacy ES&H risk management requires assurance that site hazards are primarily associated with on-going mission or mission support activities. Site hazards that are not associated with on-going work can present significant legacy vulnerabilities. They also present inefficiencies because the resources and attention required to effectively manage the hazards detract from work that is clearly connected to the Laboratory mission.

This measure is intended to continue establishing a “hazard footprint” for conditions that are not directly related to achieving the Laboratory mission and have not been transitioned to EM for disposition/ resolution. In the context of this measure, a “footprint” is defined as records, in the form of drawings, databases, and other documents, which collectively define the scope of hazard sufficiently to enable effective management (i.e., location, source term, volume, etc.) and definition of areas regarding future decommissioning needs. The focus will be on establishing the footprint for radiological hazards. The FY03 measure is a continuation of work commenced in FY02.

Once the footprint is established, management processes can be developed and action taken to address specific issues. This initiative is a natural follow-on to the Facility Review Project because it develops and implements management processes designed to aid in obviating the need for any such site-wide initiative in the future.

**Measure**

BNL will perform research activities, with limited physical characterization, to define/baseline areas with regard to radiological status. The goal is to define areas in accordance with standard definitions applied to decommissioning status, e.g. suspect, known, adjacent, non-suspect for radiological contamination. The research activities include:

- reviewing log books and experimental activities
- reviewing surveys
- reviewing occurrence reports
- assembling process knowledge
- physical walk downs
- limited characterization surveys

**Performance Metric**

The performance metric rating is determined by the number of records entered into the dataset.

<i>Rating</i>	<i>Criteria</i>
Outstanding	Greater than 7500 new data records into dataset
Excellent	Greater than 3500, but less than or equivalent to 7500 new data records into dataset
Good	Greater than 1500, but less than or equivalent to 3500 new data records into dataset
Marginal	Greater than 500, but less than or equivalent to 1500 new data records into dataset
Unsatisfactory	Less than 500 new data records into dataset

**Measure 3.3.2 On-going ES&H Risk Management**

The weight of this Measure is 62%.

### 3.3.2.1 Pollution Prevention

The weight of this Measure is 50%.

#### Purpose and Supporting Information

Investment in pollution prevention can help BSA save money, create a safer workplace, and help protect the environment at the same time. The Laboratory's Pollution Prevention (P2) program is focused on incorporating P2 into work planning (facility design, experimental review, process assessment, and work planning). Proposals for funding pollution prevention opportunities are submitted to the Laboratory Pollution Prevention Council based on several factors, including funding availability, return on investment, and achieving goals associated with specific waste streams. Project plans are developed to an appropriate level based on complexity for funded P2 projects.

This measure focuses on driving site-wide involvement in the Pollution Prevention Program. It will help develop a rich database of pollution prevention opportunities so when funding becomes available we are prepared to take advantage of the opportunity. It enhances the communication of best practices and lessons learned. *Greening the Government* pollution-prevention goals are incorporated into the evaluation criteria for funding pollution prevention projects. Additionally, having clear evidence of site-wide management commitment to, and implementation of, Pollution Prevention initiatives, helps the Laboratory to be recognized as leaders in the DOE community and improves our chances of obtaining additional pollution prevention funds.

#### Measure

Each organizational unit must demonstrate active involvement in the BNL Pollution Prevention Program. For the listed organizational units, "demonstrating involvement" is evidenced by submitting at least two pollution prevention project proposals to the P2 Council and/or two success stories and/or lessons learned stories. List of organizations that must submit P2 Proposals and/or success stories/lessons learned:

Basic Energy Sciences Directorate  
EENS Directorate  
Environmental Management Directorate  
Facilities and Operations Directorate  
Finance and Administration Directorate  
High Energy & Nuclear Physics Directorate  
Life Sciences Directorate

Other organizational units (listed below) shall demonstrate involvement by establishing a pollution prevention objective in their organization's EMS Program.

ESHQ Directorate  
CIGPA Directorate and Director's Office

#### Performance Metric

<i>Rating</i>	<i>Criteria</i>
Outstanding	All organizational units demonstrated involvement in the P2 Program
Excellent	8 out of 9 organizational units demonstrated involvement in the P2 Program
Good	7 out of 9 organizational units demonstrated involvement in the P2 Program
Marginal	6 out of 9 of organizational units demonstrated involvement in the P2 Program.

Unsatisfactory	Less than 6 of organizational units demonstrated involvement in the P2 Program
----------------	--

### 3.3.2.2 OSHA Reportable Injury Management

The weight for this Measure is 0%.

#### Background:

Although BSA/BNL successfully met the BSA Contract Off-Ramp provision in FY 2000, the Laboratory's performance in this measure has been deteriorating. The FY 03 incentive is aimed to ensure that BNL works to regain and sustain the 2000 performance (i.e., DOE Research Contractor Average Lost Workday Case Rate (LWCR)).

BNL will seek to achieve excellence in worker safety and health protection. In the area of Occupational Safety and Health BNL will seek to improve the following reportable rate:

Lost Workday Case Rate (LWCR)

Where:

$$\text{LWCR (per 100 FTEs)} = \frac{\text{Number of Lost Workday Cases} \times 200,000}{\text{Total Hours Worked}}$$

For FY 2003, BNL's LWCR will improve to within 40% of the DOE Research Contractor Average for CY2002 (Ex., If DOE Research Contractor LWCR Average for CY2002 is 1.0, BNL must improve its LWCR performance to below 1.4). The DOE Research Contractor Average will be the data reported in the CAIRS Table S3 (<http://tis.eh.doe.gov/cairs/cairs/summary/main.html>) for the period of January to December 2002. The BNL performance value is calculated from the BNL Occupational Safety Management Information System (OSMIS) Database and will represent the 12 months of FY 2003 data.

#### Performance Incentive

BNL LWCR for FY03 must improve to within 40% of the DOE Research Contractor Average for CY2002. A penalty of \$1K will be assessed to available fee for every 1% (of the DOE Research Contractor Average for CY 2002) increment in the BNL LWCR above 140% of the DOE Research Contractor Average for CY2002. (Ex., If the BNL LWCR is 159% of the DOE Research Contractor Average, a penalty of \$19K will be assessed.) This penalty will be capped at \$100K.

### 3.3.2.3 Radiological Source Inventory Database

The weight of this measure is 50%.

#### Purpose and Supporting Information

The Radiological Control Division (RCD) has overall responsibility for the radioactive source accountability program for Brookhaven National Laboratory (BNL). This program maintains a database of all accountable radioactive sources. RCD has taken action to expand the database to include all discrete radioactive sources. This database could be further expanded, and its usefulness enhanced by incorporating it into a web-based system with sort capability. These features would allow BNL users to readily access inventories, and also find compatible radioactive sources for their work. A mature program would improve radiological safety at BNL in many respects.

#### Performance Metric

<i>Rating</i>	<i>Criteria</i>
Outstanding	Expand the information in the current RCD database to include other major, discrete radiological source terms that would be of interest to Building Managers, etc..., to enhance the management of facilities through the Facility Use Agreement (FUA) system, e.g. balancing hazardous inventories versus administrative limits. The deliverable will be a design specification to be developed and a prototype for testing for the enhanced radiological source term information system. The design will consider input from the building managers, department management, and FSS Staff.
Excellent	Establish a web-based system that allows Laboratory personnel to access the radiological inventory information of their facilities/departments. This system would allow users access to source inventory databases, both accountable and non-accountable. It would also allow for the users to sort the data based on source custodian, department, and location fields.
Good	Provide web-based tables of source inventories by department building and establish links to SBMS source subject areas.
Marginal	Provide web-based tables of source inventories by department.
Unsatisfactory	No action.

**Objective 3.4 Site Infrastructure, Facilities, and Operations**

BNL will maintain and improve the efficiency and reliability of the site infrastructure and manage projects to upgrade site facilities to meet the objectives of the Strategic Facility Plan and Master Site Plan.

The weight of this measure is 10%.

**Measure 3.4.1 Pursue Alternative Financing (AF) for Infrastructure Projects**

The weight of this measure is 25%.

**Purpose, Means, and Strategies**

Available infrastructure funding at BNL (capital replacement, capital renewal) has not been adequate to meet past, current, and future needs. Underfunding of infrastructure persisted throughout the 1990's and has resulted in very large backlogs of infrastructure requirements.

Therefore BSA will pursue alternative (non-DOE) project financing to meet selected infrastructure needs.

Depending on the nature of the project, alternative funding could come from a variety of sources, including: energy services performance contractors (ESPC's), utility energy services contracts (e.g. with NYPA, LIPA, KeySpan), private sector developers, BSA financing, New York State financing, or grants from other government (non-DOE) agencies.

BNL considers that the most attractive method of funding an infrastructure need at BNL is through "direct" federal funding (construction / operating funds) of the project or need. Absent that funding, alternative financing may be an acceptable means of accomplishing needed projects. Our criteria for using alternative financing would be:

- No DOE or BNL funding is available for the project.

- Project investment could be repaid using the savings resulting from project implementation – preferably from investments with less than five-year payback. (Future operating funds would not be “mortgaged”.)
- The project could be repaid by available / related revenues paid by willing “customers” deriving direct benefits (e.g., space charges on new or renovated space) and other benefits accrue to the Laboratory (attracting new research, improved user experience, improved image, improved quality of work-life for employees).
- The project is deemed by BSA to be essential to continued Laboratory operations and no reasonable alternative funding exists (e.g., available funding committed to equal or higher priority projects).

In FY02, BSA began detailed preparations to develop an alternatively financed building project by:

1. Making opportunities known to potentially interested parties through solicitations, advertisements, targeted letter writing, and other interactions;
2. Meeting with and working with financiers / developers to investigate and develop economically attractive projects;
3. Developing appropriate Request for Proposal documents for use in soliciting alternative financing for a **BNL Housing Reconstruction Project**.

For FY03, a two-pronged approach is planned. The first part is to continue the effort to develop the alternatively financed **BNL Housing Reconstruction Project**. The second part, to be conducted in parallel with the first, is to determine the scope, evaluate the economics, gauge developer interest, and prepare the “Performance Specification” section of the Request for Proposal (if the project proves feasible) for an alternatively financed **Energy Sciences Building**.

**Measures**

Composite score for this initiative will be calculated (weighted) as follows:

$$AF = 0.67 * HRP + 0.33 * ESBF$$

**3.4.1.1 BNL Housing Reconstruction Project (HRP)**

The weight of this measure is 67%.

BNL Housing Reconstruction Project (HRP) performance will be measured by schedule performance for the following:

**1. Housing Reconstruction RFP**

The weight of this element is 100%.

**Note: The Request for Proposal (Including the OMB A-11 Analysis and Economic Analysis) was delivered to the DOE on April 3, 2003.**

- a. BNL receives DOE comments on RFP (including OMB A-11 and Economic Analysis)  $T_0$
- b. BNL incorporates comment resolutions to RFP & returns to DOE  $T_0 + 6$  weeks

**Metric**

Outstanding	Approved RFP is issued to Developers
Excellent	Comments resolved by $T_0 + 6$ weeks
Good	Comments resolved by $T_0 + 10$ weeks

Marginal	Comments resolved by $T_0 + 14$ weeks
Unsatisfactory	Comments resolved by $T_0 + > 14$ weeks

### 3.4.1.2 Energy Sciences Building Feasibility (ESBF)

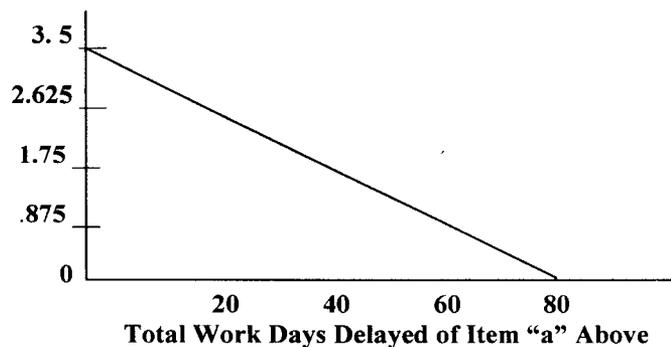
The weight of this measure is 33%.

Energy Sciences Building Feasibility (ESBF) schedule performance will be measured against the schedule performance for the following: Energy Sciences Building Performance Specification

The weight of this element is 100%.

- a. BNL delivers the "Performance Specification" for the ESB to DOE 9/30/03.

#### Metric



Excellent	>2.5 to 3.5
Good	>1.5 to 2.5
Marginal	>0.5 to 1.5
Unsatisfactory	<0 to 0.5

### Measure 3.4.2 Project Management

The weight of this measure is 50%.

#### PURPOSE, MEANS, AND STRATEGIES

In a regime of very scarce infrastructure resources, BSA will manage its construction and construction-like projects to ensure scope, schedule and cost objectives are readily met. Approved projects are completed on time, within budget, and meet baseline expectations. Uncosted carryovers are minimized.

#### Measures

Projects - This performance indicator is for all capital-funded construction projects, excluding Strategic Systems (formerly Major Projects and Major Systems Acquisitions) and EM Projects. It examines the percent of capital funds obligated and costed per fiscal year, the percent of projects on schedule and the number of capital construction projects with scope completed within the Total Estimated Cost (TEC). The formula for calculating the performance indicator is:

**PROJECT RATING (PM):**

$$(PM) = 0.2 (a^1 + a^2) + 0.2 (b^1 + b^2) + 0.2 (c)$$

**Performance Measure**

Outstanding	(PM) = 0.90 to 1.00
Excellent	= 0.80 to 0.89
Good	= 0.70 to 0.89
Marginal	= 0.60 to 0.69
Unsatisfactory	= Less than 0.60

Where:

FUNDS COMMITTED:

$$(a^1) = \frac{\text{Actual Funds Committed}}{\text{Total Planned Funds Committed}}$$

Description of Proposed Method

$$\frac{\text{Actual Present Year Funds [Line Item + GPP] Committed}}{\text{Total Planned [Line Item + GPP] Committed}}$$

Notes

- Measure funds commitment performance only for funds received in the fiscal year being measured.
- Measure will not consider funds received late in fiscal year -- only funds received in financial plan during first quarter will be used in calculation.
- Total planned funds committed exclude planned contingency funds (usually about 12%).
- Only planned (requested) project funds will be included.
- Funds committed (obligated) will continue to be measured when contracts and PO's are "pinned", as reflected in BNL's PeopleSoft accounting records.

FUNDS COSTED:

$$(a^2) = \frac{\text{Actual Funds Costed}}{\text{Total Planned Funds Costed}}$$

Description of Proposed Method

$$\frac{\text{Actual Present Year Funds [Line Item + GPP] Costed}}{\text{Total Planned [Line Item + GPP] Costed}}$$

Notes

- Measure funds costed performance for funds received in fiscal year being measured.
- Measure will not consider funds received late in fiscal year -- only funds received in financial plan during first quarter will be used in calculation
- Only planned (requested) project funds will be included.

PROJECT SCHEDULE COMPLIANCE (GPP and IHEM)

CO3-17

Contract No. DE-AC02-98CH10886  
Modification No. M098

$$(b^1) = \frac{\text{No. of GPPs Completed on Schedule}}{\text{No. of GPPs Scheduled to Complete}}$$

Description of Proposed Method

- 1) BNL and DOE agree on actual completion milestone dates and document and track them in the Plant Engineering Monthly Project Report.
- 2) List all GPP and IHEM projects with TEC >\$300K and completion milestone falling in current fiscal year.
- 3) Determine how many were completed on-time using construction “substantially complete” as complete.
- 4) “Substantially complete” means project is ready for beneficial occupancy or use, as described in the Project Management Control System.

Notes

- a. GPP and IHEM project schedules will be established in cooperation with BHG in continuation of current approval process.

PROJECT SCHEDULE COMPLIANCE (Line Item)

$$(b^2) = \frac{\text{No. of Line Item Milestones}^{(1)} \text{ Completed on Schedule}}{\text{No. of Line Item Milestones}^{(1)}}$$

<sup>(1)</sup> Key controlled Milestones

Description of Proposed Method

1. BNL and DOE agree on actual baseline completion milestone dates and document and track them in the Plant Engineering Monthly Report.
2. List all Line Item projects with key controlled milestones falling in the current fiscal year.
3. Determine current year milestones completed on or ahead of schedule.

Notes

- a. Key controlled milestones are those described in the approved Project Management Plan:
- b. Design Start
  - Design Complete
  - Construction Start
  - Construction Complete
- c. Construction complete is defined as “substantially complete.”
- d. “Substantially complete” means project is ready for beneficial occupancy or use, as described in the Project Management Control System.

SCOPE COMPLETED WITHIN APPROVED BASELINE  
(LINE ITEM, GPP AND IHEM [>300K])

$$(c) = \frac{\text{Projects completed within Approved Baseline}}{\text{Total Projects Complete}}$$

Description of Proposed Method

1. Review Line Item, GPP and IHEM (>\$300K TEC) projects completed through the fiscal year.
2. Upon project completion, determine whether project baseline scope was completed within the approved baseline Total Estimated Cost (TEC).

3. Determine the total number of Line Item, GPP and IHEM (>\$300K TEC) projects completed within approved baseline (approved original project and approved baseline change proposals)
4. Determine total number of projects completed.
5. Calculate:

$$(c) = \frac{\text{Projects Completed within Approved Baseline}}{\text{Projects Completed}}$$

Notes

- a. Justifiable BCPs will be approved by DOE-BAO for legitimate scope changes or reductions (i.e., due to program changes, reasonable unforeseen project conditions, new regulatory requirements, etc.)
- b. Plant Engineering is not currently managing any projects classified as “Strategic Systems” under LCAM (formerly Major Projects and Major System Acquisitions).

**Measure 3.4.3 Facilities / Infrastructure Maintenance**

The weight of this measure is 25%.

**Purpose, Means and Strategies**

This measure tracks how BNL’s conventional infrastructure maintenance program is functioning.

This measure is an indicator of actual maintenance effectiveness, by measuring the reliability of BNL’s building infrastructure and electrical infrastructure as these systems serve BNL’s programs. Reliability is a measure of how many “customers” are impacted by unplanned outages (due to equipment failures) and how long the outages last (BNL’s ability to repair problems and restore service).

**3.4.3.1 Infrastructure Reliability Index (RI)**

The weight of this measure is 100%.

$$(RI) = 0.6 (ESR) + 0.4 (BFR)$$

Electric System Reliability (ESR):

$$(ESR) = \frac{\text{Total Customer Hours} - \text{Unplanned Outage Customer Hours}}{\text{Total Customer Hours}}$$

**Performance Measure**

Outstanding	ESR = greater than 0.999
Excellent	0.998 to 0.999
Good	0.996 to 0.997
Marginal	0.994 to 0.995
Unsatisfactory	Less than 0.994

Description of Proposed Method

1. When an unplanned electric power outage occurs, an electrical supervisor will log outage.

2. Information will be forwarded to O&M Manager's office, where the log will be completed. Data will be tracked monthly.
3. Through the fiscal year, all electric power customer-outage-hours will be totaled to arrive at a figure for total customer-hours outage for the fiscal year.
4. Electric distribution system reliability will be calculated:

$$\frac{\text{Total Customer Hours - Unplanned Outage Customer Hours}}{\text{Total Customer Hours}}$$

Notes:

- a. Standard population figures for each building will be supplied by Plant Engineering's planning group and updated periodically.
- b. Customer outage hours will be based on the actual time the facilities are without power times the population for those buildings.
- c. Total customer hours will be calculated using figures supplied by Plant Engineering's planning group times 8760 hours per year.
- d. Only outages due to failures in the BNL-maintained power distribution system (13.8kV and 2400V) will be included. Off-site (LIPA) outages will not be included. Outages due to malfunctions inside buildings will not be included.

Building and Facilities Reliability (BFR):

$$(BFR) = \frac{\text{Total Building Availability (ft}^2\text{-days)} - \text{Building Failures (ft}^2\text{-days)}}{\text{Total Building Availability (ft}^2\text{-days)}}$$

**Performance Measure**

Outstanding	BFR = greater than 0.999
Excellent	0.998 to 0.999
Good	0.996 to 0.997
Marginal	0.994 to 0.995
Unsatisfactory	Less than 0.994

Description of Proposed Method

1. When an unplanned building system outage or failure occurs, which significantly disrupts occupants of a building or renders the space unusable, the cognizant Plant Engineering supervisor will log outage. The information will be forwarded to O&M Manager's office. Data will be tracked.
2. At the end of each reporting period (month), all building failures will be totaled to arrive at a figure for building and facility reliability for the fiscal year.
3. Building and facility reliability will be calculated as a percentage:

$$\frac{\text{Total Building Availability (ft}^2\text{-days)} - \text{Building Failures (ft}^2\text{-days)}}{\text{Total Building Availability (ft}^2\text{-days)}}$$

Notes:

- a. Standard square footage for each building will be from Plant Engineering's planning group space database.
- b. Building and facility failure days will be based on the actual days the facilities are without critical services (or are unusable) times the normal population for those buildings.

- c. Total Building Availability will be calculated using site square footage figures supplied by Plant Engineering's planning group times 365 days per year.

### **Objective 3.5 Communications and Trust**

The Laboratory will enhance the foundation of trust and confidence it has built by: strengthening existing relationships and building new partnerships with key stakeholders, elected and appointed officials, civic leaders, and other important constituencies; effectively communicating the Laboratory's scientific initiatives and accomplishments; generating community enthusiasm for Laboratory research programs; and working to fulfill the education mission shared with DOE to enhance science literacy.

The weight of this Objective is 10%.

#### **Purpose and Supporting Information**

The Laboratory's Communications, Community Involvement, and Education Program plans serve as a guide to the many activities and initiatives that will be pursued in FY03 to fulfill this objective and to help meet the expectations and performance measures of science and operational departments and divisions across the Laboratory.

Stakeholder feedback will be collected and research and self-assessments will be conducted throughout the year to determine program effectiveness, to evaluate program utility, and to make mid-course corrections as necessary.

BNL and BAO will conduct an independent peer review process to evaluate the Laboratory's communications, community involvement, and education programs. The peer review will focus primarily on the measures below.

#### **Measure 3.5.1 Science & Technology Communication Program**

The weight of this Measure is 40%.

The objective of this measure is to increase regional and national recognition of the Laboratory and the Department of Energy and to increase understanding of science and technology research at the Lab.

Strategic issues include showcasing the results of Brookhaven research in high-profile initiatives that produce exciting and scientifically interesting new information, building relationships with the press, and expanding the Laboratory's use of electronic media.

This year, the Laboratory is planning to enhance the effectiveness of its science and technology communications by focusing on policymaking and "science attentive" and "science interested" publics. Since the science attentive audience prefers to access science information via the Web, the first six months of FY03 will focus on increasing this audience's ease of access to our material by reviewing the most common keywords used to search our site and then enhance key web page "meta tags" accordingly. It is understood that a survey is currently being developed with the support of the National Energy Technology Laboratory, which seeks to explore science attentive, policy making and science interested publics in more depth and determine how these publics receive and process information. The results of this survey, which are expected at the end of the first quarter of FY03, will be evaluated and used to inform the Laboratory's communications planning for the remainder of FY03.

Specific science initiatives - such as RHIC, nanoscience, addiction research, counter-terrorism and environmental research - are carefully tracked, and communications plans are prepared and or updated as needed in anticipation of developments during FY03. In FY02, as an example, Laboratory personnel in the Basic Energy Sciences, Energy, Environment & National Security and the Community Involvement, Education, Government and Public Affairs directorates worked together to promote participation by business, academic, government and the science community in a nanoscience workshop. The workshop as well as the Laboratory's research in nanoscience received favorable publicity throughout the year. Since one of the five Department of Energy nanoscience centers will be located at the Laboratory, we expect that there will continue to be a variety



of opportunities during FY03 to showcase the Laboratory's research and to inform the media, policy makers and science attentive publics about the development of the Laboratory's center for functional nanomaterials.

To expand and enhance communications with policy makers, the Laboratory will query policy makers in Washington, Albany and on Long Island to determine how they prefer to receive information about the Laboratory's/DOE's science programs and at what frequency. A program to increase communications with this audience will be developed based on the information received.

The inaugural issue of Brookhaven's new science magazine, *Discover Brookhaven*, was available on the Laboratory's website in June 2002 and in hardcopy the following month. As successive issues are produced on-line in FY03, the Laboratory will refine the magazine's content based on solicited feedback from target audiences, including program managers at funding agencies and facility users. The number of links within the online magazine that can be used by readers to explore related material will be expanded.

The Laboratory's website has become one of the key mediums through which Lab programs, events and achievements are promoted. Recognizing the importance of this medium, the Laboratory's main website will be further refined so that timely and relevant content, both text and visuals, and background information are readily available to reporters, the science-attentive public and Laboratory stakeholders. Further improvements will be to information architecture and breadth and type of information available. As the website continues to grow, site maintenance workload increases proportionally. To meet the demands of increased workloads with static resources, streamlined maintenance methods such as the use of "include" files (single files referenced by multiple pages), and cascading style sheets (a method of generating uniform, site-wide graphic formatting will be evaluated and implemented where practical.

The Laboratory's Office of Educational Programs (OEP) plays an important role in promoting the understanding of science and technology programs conducted by the Laboratory and funded by the Department of Energy. The strategic thrust of the Laboratory's science education programs for FY03 will be to participate in new Department of Energy science education programs, including the high school science bowl, provided funding for these programs is made available.

*The Laboratory will also be hosting the National Institute of Science-Beta Kappa Chi Joint Annual meeting. Students from predominantly Black Colleges and Universities will present their research at the conference.* To showcase its scientific research at RHIC and to make it accessible to high school students and their teachers, the Lab will continue to work with the Joint Institute for Nuclear Research in Dubna, Russia on the development of an on-line classroom provided funding for this program is made available.

### **Measure 3.5.2 Stakeholder Partnerships & Involvement**

The weight of this Measure is 40%.

The Laboratory is committed to expanding its relationships and building partnerships with key constituencies. To meet this commitment in FY03 the Laboratory will:

- Build new and enhance established relationships in the business, not-for-profit, science, education and public policy arenas. The Laboratory will identify key stakeholders and opinion leaders in New York State who represent or who are involved with business, education and government organizations with a view towards developing long-term relationships with them. As part of this effort, the Laboratory will seek opportunities to partner with these constituencies in seeking funding for science and technology initiatives and science education programs and promoting the importance of science and technology in the State and region. (Ongoing to be reported on mid-year and end of year)
- Fully implement (assuming funding is available) the Volunteers in Partnership Program to ensure that a minimum of ten volunteer activities is fully supported by the Laboratory. (By end of fourth quarter)
- Residents in the area south of the Laboratory have been identified through research activities as having concerns and issues with the Laboratory as their neighbor. Established programs within the Laboratory,

including the Envoy Program, Summer Sundays, Tours and Speakers Bureau will target this area in order for the community to achieve a better understanding of the Laboratory's mission and for the Laboratory to begin to establish a long-term relationship with these neighbors. (Ongoing, to be reported on mid-year and end of year)

The Laboratory is committed to building a mutual understanding between the Laboratory, its stakeholders and the general public. To meet this commitment in FY03 the Laboratory will:

- Ensure that 95% training is accomplished for Level 1 and Level 2 managers in the community involvement and decision-making process. (By end of first quarter)
- Fully implement the issues management tracking system and make it available as read only for Level 1 managers. (By end of second quarter)
- Determine the effectiveness of the CI process by evaluating the frequency of its use by Level 1 and 2 managers. (Ongoing, to be reported mid-year and end of year)

### **Measure 3.5.3 Employee Communications Program**

The weight of this Measure is 20%.

Recognizing the importance of effective employee communications to the success of an organization, the Laboratory plans to develop a formal employee communications program. The program will be based on employee feedback gathered through focus groups, comment cards and public inquiries as well as one-on-one and small group interactions. As part of the program, existing employee communications vehicles, such as the Bulletin, Monday Memo, Intranet, and broadcast e-mails, will be evaluated by CEGPA staff and reviewed with relevant employee groups; the Intranet and print employee publications will be modified as appropriate to reflect employee feedback. An assessment of the effectiveness of employee involvement programs regarding environmental management decisions and issues of interest to employees will be conducted and issue-based communications plans will be developed as appropriate.

Addendum to FY03 Small Business Subcontracting Plan

4/28/03

The U.S. Department of Energy and Brookhaven Science Associates, LLC  
Attachment J.8 – Appendix H  
**FY'03 – Small Business Subcontracting Plan  
IS HEREBY AMENDED AS FOLLOWS:**

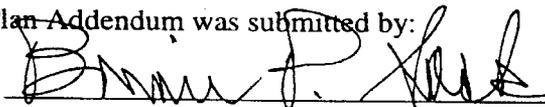
**Paragraph 7. Record keeping**

Insert new subparagraph H. as follows:

On a contract-by-contract basis, records on all subcontract solicitations over \$100,000 which indicate for each solicitation (1) whether small business concerns were solicited, and if not, why not; (2) whether small disadvantaged business concerns were solicited, and if not, why not; (3) whether women-owned small businesses were solicited, and if not, why not; and (4) reason for failure of solicited small business, small disadvantaged business, women-owned small business, veteran-owned small business concerns, disabled veteran-owned small business concerns or HUB Zone small business concerns to receive the subcontract award;

This Subcontracting Plan Addendum was submitted by:

Signature:

  
\_\_\_\_\_

Typed Name: Brian P. Sack

Title: Assistant Laboratory Director, Finance & Administration

Date Prepared:

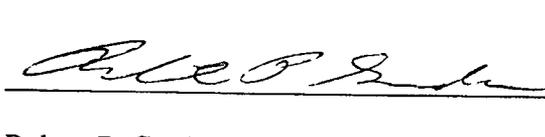
5/2/03  
\_\_\_\_\_

Phone No.

631-344-3317  
\_\_\_\_\_

Approval:

Signature:

 5/8/03  
\_\_\_\_\_

Typed Name: Robert P. Gordon

Title: Contracting Officer

Date Prepared: \_\_\_\_\_

Phone No. \_\_\_\_\_

Appendix I  
Modification No. M098  
Supplemental Agreement to  
Contract No. DE-AC02-98CH10886

**U.S. Department of Energy**  
**and**  
**Brookhaven Science Associates, LLC**

**ATTACHMENT J.9**

**APPENDIX I**

**DOE DIRECTIVES/LIST B**

**Applicable to the Operation of  
The Brookhaven National Laboratory**

**Contract No. DE-AC02-98CH10886  
Modification No. M098**

Appendix I  
Modification No. M098  
Supplemental Agreement to  
Contract No. DE-AC02-98CH10886

## **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**

<b>DIRECTIVES LIST</b>		
<b>DATE</b>	<b>DOE DIRECTIVE NUMBER</b>	<b>SUBJECT TITLE</b>
7/14/99	N 142.1	UNCLASSIFIED FOREIGN VISITS AND ASSIGNMENTS
2/26/01	N 153.1	CONNECTIVITY TO ATMOSPHERIC RELEASE ADVISORY CAPABILITY
10/02/00	N 203.1	CRD - SOFTWARE QUALITY ASSURANCE (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
11/1/99	N 205.2	CRD - FOREIGN NATIONAL ACCESS TO DOE CYBER SYSTEMS (Extended until 2/16/04 by DOE N 205.5 dated 2/14/03)
11/23/99	N 205.3	CRD - PASSWORD GENERATION, PROTECTION, AND USE (Extended until 2/16/04 by DOE N 205.5 dated 2/14/03)
3/18/02	N 205.4	CRD - HANDLING CYBER SECURITY ALERTS AND ADVISORIES AND REPORTING CYBER SECURITY INCIDENTS
1/15/02	N 231.1	CRD - ENVIRONMENT, SAFETY, AND HEALTH REPORTING NOTICE (Extended until 1/15/04 by DOE N 231.2 dated 12/30/02)
9/30/95	N 441.1	RADIOLOGICAL PROTECTION FOR DOE ACTIVITIES (using ORNL/TM-11497 in lieu of Attachment 1)(Extended until 6/30/00 by DOE N 441.4 dated 11/20/98)
10/17/01	N 450.7	CRD - THE SAFE HANDLING, TRANSFER, AND RECEIPT OF BIOLOGICAL ETIOLOGIC AGENTS AT DOE FACILITIES (Extended until 06/30/03 by DOE N 450.11 dated 4/3/03)
12/15/00	N 470.2	CRD - REPORTING UNOFFICIAL FOREIGN TRAVEL (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
4/13/01	N 471.3	CRD - REPORTING INCIDENTS OF SECURITY CONCERN (Extended until 06/30/03 by DOE N 251.51 dated 12/19/02)
5/26/00	N 473.4	CRD - DEPARTMENT OF ENERGY BADGES (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
6/5/00	N 473.5	CRD - SECURITY AREA VOUCHING AND PIGGYBACKING (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
10/26/00	N 473.7	CRD - EXPLOSIVE DETECTION PROGRAM (Extended until 12/31/01 by DOE N 251.40 dated 5/3/01)
8/7/02	N 473.8	CRD - SECURITY CONDITIONS
4/21/03	N 481.1A	CRD - REIMBURSABLE WORK FOR DEPARTMENT OF HOMELAND SECURITY
11/3/99	O 110.3	CRD - CONFERENCE MANAGEMENT
9/29/95	O 130.1	CRD - BUDGET FORMULATION PROCESS (Extended until 5/1/03 by DOE N 251.45 dated 5/29/02)
9/30/95	O 135.1	BUDGET EXECUTION-FUNDS DISTRIBUTION AND CONTROL (Extended until 5/1/03 by DOE N 251.45 dated 5/29/02)
11/01/00	O 151.1A	CRD - COMPREHENSIVE EMERGENCY MANAGEMENT SYSTEM
9/30/96	O 200.1	CRD - INFORMATION MANAGEMENT PROGRAM
3/21/03	O 205.1	CRD - DEPARTMENT OF ENERGY CYBER SECURITY MANAGEMENT PROGRAM.
9/27/95 10/26/95 5/1/95	O 210.1 Change 1 Change 2	CRD - PERFORMANCE INDICATORS AND ANALYSIS OF OPERATIONS INFORMATION

<b>DIRECTIVES LIST</b>		
<b>DATE</b>	<b>DOE DIRECTIVE NUMBER</b>	<b>SUBJECT TITLE</b>
3/22/01	O 221.1	CRD - REPORTING FRAUD, WASTE, AND ABUSE TO THE OFFICE OF INSPECTOR GENERAL
3/22/01	O 221.2	CRD - COOPERATION WITH THE OFFICE OF INSPECTOR GENERAL
11/26/97	O 225.1A	CRD - TYPE A AND B ACCIDENT INVESTIGATIONS
9/30/95 10/26/95 11/7/96	O 231.1 Change 1 Change 2	CRD - ENVIRONMENT, SAFETY & HEALTH REPORTING (DOE O 470.2A, dated 3/1/00, cancels Paragraph 5b(2).)
9/30/95 11/7/96 01/28/00	M 231.1-1 Change 1 Change 2	ENVIRONMENT, SAFETY, AND HEALTH REPORTING MANUAL DOE O 470.2A, dated 3/1/00, cancels Chapter IV. DOE N 231.1, dated 1/15/02, cancels (Paragraphs 2a, 2a(1), 2a(2), 2b(1) 2b(2), 2i(3)(a) through 2i(3)(d) of Chapter II and Appendix A
8/1/97	O 232.1A	CRD - OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION (As modified by letter Grahn/Gordon, dated 4/10/98, effective 5/5/98)
7/21/97	M 232.1-1A	OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION (As modified by letter Grahn/Gordon, dated 4/10/98, effective 5/5/98)
4/9/01	O 241.1A	CRD - SCIENTIFIC AND TECHNICAL INFORMATION MANAGEMENT
1/30/98	O 251.1A	CRD - DIRECTIVES SYSTEM
11/19/99	O 252.1	CRD - TECHNICAL STANDARDS PROGRAM
9/30/96 5/8/98	O 350.1 Change 1	CRD - CONTRACTOR HUMAN RESOURCE MANAGEMENT PROGRAMS CRD - EMPLOYEE BENEFITS
7/12/01	O 350.2	CRD - USE OF FACILITY CONTRACTOR EMPLOYEES FOR SERVICES TO DOE IN THE WASHINGTON, D.C., AREA
04/20/99	O 412.1	CRD - WORK AUTHORIZATION SYSTEM
4/18/02	O 413.1A	CRD - MANAGEMENT CONTROL PROGRAM
1/08/01	O 413.2A	CRD - LABORATORY DIRECTED RESEARCH AND DEVELOPMENT
10/13/00	O 413.3	CRD - PROGRAM AND PROJECT MANAGEMENT FOR THE ACQUISITION OF CAPITAL ASSETS
03/28/03	M 413.3-1	PROJECT MANAGEMENT FOR THE ACQUISITION OF CAPITAL ASSETS
11/24/98	O 414.1	CRD - QUALITY ASSURANCE
5/20/02	O 420.1A	CRD - FACILITY SAFETY
1/08/01	O 420.2A	CRD - SAFETY OF ACCELERATOR FACILITIES
3/13/03	O 425.1C	CRD - STARTUP AND RESTART OF NUCLEAR FACILITIES
10/14/98	O 430.1A	CRD - LIFE CYCLE ASSET MANAGEMENT (DOE O 430.2A, dated 4/15/02, cancels Paragraphs 6d(2), 6h, 7b(1), 7b(2), and 7e(16).)
4/15/02	O 430.2A	CRD - DEPARTMENTAL ENERGY AND UTILITIES MANAGEMENT
6/01/01	O 433.1	CRD - MAINTENANCE MANAGEMENT PROGRAM FOR DOE NUCLEAR FACILITIES
7/9/99 8/28/01	O 435.1 Change 1	CRD - RADIOACTIVE WASTE MANAGEMENT

<b>DIRECTIVES LIST</b>		
<b>DATE</b>	<b>DOE DIRECTIVE NUMBER</b>	<b>SUBJECT TITLE</b>
7/9/99 6/19/01	M 435.1-1 Change 1	RADIOACTIVE WASTE MANAGEMENT MANUAL
3/27/98	O 440.1A	CRD - WORKER PROTECTION MANAGEMENT FOR DOE CONTRACTOR EMPLOYEES
3/8/02	O 440.2A	CRD - AVIATION MANAGEMENT AND SAFETY
6/6/01	O 442.1A	CRD - DEPARTMENT OF ENERGY EMPLOYEE CONCERNS PRG.
5/15/00	O 443.1	PROTECTION OF HUMAN SUBJECTS
1/15/03	O 450.1	CRD – ENVIRONMENTAL PROTECTION PROGRAM
10/26/00 9/28/01	O 451.1B Change 1	NATIONAL ENVIRONMENTAL POLICY ACT COMPLIANCE PROGRAM
4/4/03	O 460.1B	CRD - PACKAGING AND TRANSPORTATION SAFETY
9/27/95 10/26/95	O 460.2 Change 1	CRD - DEPARTMENTAL MATERIALS TRANSPORTATION AND PACKAGING MANAGEMENT
9/23/02	M 460.2-1	CRD – RADIOACTIVE MATERIAL TRANSPORTATION PRACTICES MANUAL
9/28/95 6/21/95	O 470.1 Change 1	CRD - CONTRACTOR SAFEGUARDS AND SECURITY PROGRAM REQUIREMENTS (Extended until 5/14/04 by DOE N 251.53 dated 5/14/03)
10/30/02	M 470.1-1	CRD – SAFEGUARDS AND SECURITY AWARENESS PROGRAM
10/31/02	O 470.2B	CRD - INDEPENDENT OVERSIGHT AND PERFORMANCE ASSURANCE PROGRAM
6/30/00	O 471.1A	CRD - IDENTIFICATION AND PROTECTION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION
6/30/00 10/23/01	M 471.1-1 Change 1	IDENTIFICATION AND PROTECTION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION MANUAL
3/27/97	O 471.2A	CRD - INFORMATION SECURITY PROGRAM (Extended until 5/14/04 by DOE N 251.53, dated 5/14/03)
1/6/99	M 471.2-1B	CRD - CLASSIFIED MATTER PROTECTION AND CONTROL MANUAL, CHAPTER III PARAGRAPHS 1 AND 2, AND CHAPTER IV (DOE M 471.2-1C dated 4/17/01, cancels all except Chapter III paragraphs 1 and 2 and Chapter IV)
4/17/01	M 471.2-1C	CRD - CLASSIFIED MATTER PROTECTION AND CONTROL MANUAL
8/3/99	M 471.2-2	CRD - CLASSIFIED INFORMATION SYSTEMS SECURITY MANUAL (DOE N 205.3, dated 11/23/99 cancels Paragraphs 4j(2) and 4j(6) of Chapter VI, and Paragraph 12a(2)(a) of Chapter VII.) (Notice 205.4 dated 3/18/02 cancels Chapter III Section 8)
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
3/25/03	O 472.1C	CRD - PERSONNEL SECURITY ACTIVITIES
7/12/01	M 472.1-1B	PERSONNEL SECURITY PROGRAM MANUAL
12/23/02	O 473.1	CRD – PHYSICAL PROTECTION PROGRAM

<b>DIRECTIVES LIST</b>		
<b>DATE</b>	<b>DOE DIRECTIVE NUMBER</b>	<b>SUBJECT TITLE</b>
12/23/02	M 473.1-1	CRD – PHYSICAL PROTECTION PROGRAM MANUAL
6/30/00	O 473.2	CRD - PROTECTIVE FORCE PROGRAM
1/17/02	M 473.2-1A	FIREARMS QUALIFICATION COURSES MANUAL
6/30/00 12/20/01	M 473.2-2 Change 1	PROTECTIVE FORCE PROGRAM MANUAL
11/20/00	O 474.1A	CRD - CONTROL AND ACCOUNTABILITY OF NUCLEAR MATERIALS
11/22/00	M 474.1-1A	CRD - MANUAL FOR CONTROL AND ACCOUNTABILITY OF NUCLEAR MATERIALS
2/10/98 4/27/98 11/16/98	M 474.1-2 Change 1 Change 2	MANUAL FOR NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM REPORTING AND DATA SUBMISSION (Extended until 2/11/04 by DOE N 474.2 dated 2/11/03)
5/8/98	M 475.1-1	CRD - IDENTIFYING CLASSIFIED INFORMATION
9/28/01	O 481.1B	CRD - WORK FOR OTHERS (NON DOE FUNDED WORK)
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
1/6/03	O 534.1B	CRD - ACCOUNTING
8/25/00 11/8/02	O 551.1A Change 1	CRD - OFFICIAL FOREIGN TRAVEL
7/12/00	M 573.1-1	MAIL SERVICES USER'S MANUAL
5/2/01	P 141.1	DEPARTMENT OF ENERGY MANAGEMENT OF CULTURAL RESOURCES
6/10/00	P 413.1	PROGRAM AND PROJECT MANAGEMENT POLICY FOR THE PLANNING, PROGRAMMING, BUDGETING, AND ACQUISITION OF CAPITAL ASSETS
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
6/23/92	1270.2B	SAFEGUARDS AGREEMENT WITH THE INTERNATIONAL ATOMIC ENERGY AGENCY
7/14/88 10/5/88 5/18/92	2110.1A Change 1 Change 2	PRICING OF DEPARTMENTAL MATERIALS AND SERVICES
6/8/92	2300.1B	AUDIT RESOLUTION AND FOLLOWUP
2/8/90 6/5/90 1/7/93	5400.5* Change 1 Change 2	RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT

<b>DIRECTIVES LIST</b>		
<b>DATE</b>	<b>DOE DIRECTIVE NUMBER</b>	<b>SUBJECT TITLE</b>
5/15/84 5/16/88 5/16/89 9/20/91	5480.4* Change 1 Change 2 Change 3	ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS
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	5480.20A	PERSONNEL SELECTION, QUALIFICATION AND TRAINING REQUIREMENTS FOR DOE NUCLEAR FACILITIES
1/19/93	5480.30	NUCLEAR REACTOR SAFETY DESIGN CRITERIA
9/20/91	5530.1A	ACCIDENT RESPONSE GROUP
1/14/92 4/10/92	5530.3 Change 1	RADIOLOGICAL ASSISTANCE PROGRAM
5/8/85	5560.1A	PRIORITIES AND ALLOCATIONS PROGRAM
8/1/80	5610.2	CONTROL OF WEAPON DATA
5/26/94	5660.1B	MANAGEMENT OF NUCLEAR MATERIALS
9/4/92	5670.3	COUNTERINTELLIGENCE PROGRAM

<b>ACCOUNTING PRACTICES AND PROCEDURES HANDBOOK</b>		
5/2/83	Chapter V	INVENTORIES
6/30/80	Chapter X	PRODUCT COST ACCOUNTING

**Appendix I - Part II**

<b>PARTIAL DELETIONS OF DIRECTIVES</b>				
<b>DATE</b>	<b>DOE DIRECTIVE NUMBER</b>	<b>SUBJECT TITLE</b>	<b>DELETION DIRECTIVE DATE</b>	<b>SECTIONS DELETED</b>
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)
5/15/84 5/16/88 5/16/89 9/20/91	5480.4 Change 1 Change 2 Change 3	ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS	O 440.1 9/30/95 Change 1 10/26/95	Attachment 2: Paras 2c, 2d(2) - (3), 2e(1) - (8); and Attach. 3: Paras 2c,; 2d(2) - (3), 2e(1) - (7)