

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

ATTACHMENT J.2

APPENDIX B

**PERFORMANCE EVALUATION AND
MANAGEMENT PLAN**

FY 2004

BROOKHAVEN NATIONAL LABORATORY

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Performance Evaluation System

I. Introduction

This Contract Appendix sets forth the performance evaluation system (including processes, criteria, schedules, and measures) that will be used to evaluate the overall performance of Brookhaven Science Associates (BSA) in the management and operation of Brookhaven National Laboratory (BNL) in Fiscal Year (FY) 2004.

For FY 2004, in accordance with applicable provisions of the Contract, the Parties have agreed to use a Performance-Based Management System (PBMS) that includes clear and reasonable objectives, against which BSA's overall performance will be evaluated. For this purpose, the parties have agreed to an objective hierarchy consisting of Critical Outcomes, underlying Objectives, and associated weighted Performance Measures and Metrics for the assessment of BSA's performance and the resulting determination of earned fee.

The DOE Office of Science (SC) identified high-level expectations in six critical activities/functional areas that SC would use to guide its regular assessment of Laboratory performance. These critical areas are Science, Environment, Safety & Health (ES&H), Infrastructure, Business Operations, Leadership and Stakeholder Relations. SC expects SC/Headquarters (HQ) program managers, field offices, and laboratories to work in partnership to develop laboratory-specific outcomes, objectives, and measures that support these high-level expectations and to use self-assessment as a tool to achieve desired outcomes and continuous improvement.

This "Critical Outcome Process" is designed to measure overall performance and drive the improvement agenda of the Laboratory by linking Laboratory rewards, i.e., performance ratings and associated fees to a prioritized set of objectives that have been mutually developed by the Department of Energy (DOE) and BSA. DOE and BSA have mutually agreed to the specific Critical Outcomes, Objectives, and Performance Measures contained herein, and agree to a reassessment of the process, prior to the beginning of each evaluation period.

II. Critical Outcome, Objective, and Measure Development

The following concepts are used in the development of the Performance Measures and are provided for information and clarification in the process:

- A. The Critical Outcome process must be flexible to accommodate changes as planned improvements are realized and/or customer priorities vary. For example, even though the Critical Outcomes and Objectives are intended as sustainable targets over a 3-5 year and 1-3 year time frames respectively, their relative weights are expected to change more frequently. Re-prioritization of the Critical Outcomes and Objectives is a fundamental part of the annual Critical Outcome process.
- B. Critical Outcomes, their underlying Objectives, and associated Performance Measures should influence the improvement agenda of the Laboratory. They should incorporate best practices and reflect the DOE and BNL functional managers' judgment as to the key performance elements for overall successful operations. Best practices should consider cost/risk/benefit effectiveness. Examples of key elements addressed are:

- Quality of product
- Timely delivery
- Cost reduction
- Cycle time reduction
- User friendliness
- DOE requirements

- C. Performance Measures should be results-oriented and should focus on criteria that are objectively measurable and allow for meaningful trend and rate-of-change analysis where possible. They should use qualitative criteria in those cases where objective criteria will not produce meaningful evaluation results.
- D. Performance Measures may reference industry business standards that are meaningful, appropriate and consistent with DOE requirements, rather than arbitrary standards. To this end, benchmarking initiatives are encouraged. Using benchmarks to change targets should consider whether it is cost effective to make further improvements or if the target level should be raised.
- E. The relative weighting and metrics for each Performance Measure shall be established prior to the start of the performance period by mutual agreement of the Contractor and the DOE Contracting Officer. If the parties cannot reach agreement, the Contracting Officer shall have the right to establish such weights, subject to the provisions of the Prime Contract.
- F. Background and supporting information (such as purpose, means and strategies, assumptions definitions, etc), shall be documented as appropriate.
- G. Measures are to be developed in a team approach involving DOE personnel and Laboratory functional managers. Care should be taken to ensure that the resulting measures reflect performance in areas for which the Laboratory functional manager is accountable, correctly reflecting their status as responsible for the performance and desired improvement.
- H. If the desired end state of a performance measure is not achieved, and that measure is the final step in achieving its overall Objective, the accomplishment of the measure will move to a DOE requirement until the measure is complete. Lack of attention to the completion of the work identified in the measure may impact the performance ratings in subsequent fiscal years.
- I. Absence of a Performance Measure does not diminish the requirement for compliance with specified contractual requirements in that area of performance. Failure to meet a significant contractual requirement may result in the Contracting Officer overriding the Performance Measures.

III. Change Control

DOE and BSA acknowledge that implementation of this performance-based contract requires both parties to continually refine selected Performance Measures and metrics, implement data collection and reporting mechanisms, and seek benchmarks against which to set appropriate targets for performance improvement and/or measurement. Continuing effort is needed to refine the system for scoring performance in each of the Critical Outcomes included in this Appendix and for integrating these scores into an overall evaluation rating for each performance period.

The process to change aspects of performance within the fiscal year, if necessary, is described in the Standards Based Management System (SBMS) Subject Area entitled, "Critical Outcome Performance Measures."

IV. Self -Evaluation Scoring

Each Measure, Objective, and Critical Outcome is rated in accordance with the following:

OUTSTANDING	>3.5 to 4.0
EXCELLENT	>2.5 to 3.5
GOOD	>1.5 to 2.5
MARGINAL	>0.5 to 1.5
UNSATISFACTORY	≤ 0 to 0.5

Once the adjectival rating is determined, the cognizant BSA manager (owner) considers other related aspects of performance (e.g., quality, efficiency, etc.) and determines an appropriate numerical rating. For example, a performance measure that met schedule quality expectations with an adjectival rating of Excellent, but an external review indicates that the work represented a “best-in-class” effort, may warrant a 3.5 rating. Similarly, a measure that met quality requirements for an excellent rating but required substantial re-work to achieve it may warrant a numerical score on the lower end of the excellent range, perhaps a 2.6.

A roll-up score is determined by multiplying the weight of each Performance Measure in that Objective by its score. These are added together to develop an overall score for each Objective, which is then translated into an adjectival rating. The process is continued for the Critical Outcomes by multiplying the scores for each Objective within a given Critical Outcome by its corresponding weight, adding the resulting numbers to get a Critical Outcome score, and converting this score to an adjectival rating as done for the Objective level. The same process is then used to calculate an overall score, and then the adjectival rating, at the Laboratory level.

V. Self-Evaluation and Improvement Agenda

BSA and DOE will conduct a mid-year review of status against performance measures defined in Critical Outcomes 1-3. BSA is responsible to define and coordinate the process for conducting the review and to ensure the involvement of appropriate DOE counterparts and BSA management.

On an annual basis, the Laboratory will conduct a formal Self-Evaluation of its performance relative to each Critical Outcome, Objective, and Performance Measure identified. This Report will also address other significant issues or opportunities that arise from the Laboratory’s broader Integrated Assessment Program, whether or not they specifically impact the Critical Outcomes.

As part of the mid-year review and the annual self-evaluation process, both BSA and DOE will assess whether the performance measures defined (for the current and next FY) adequately reflect the scope and priorities for Laboratory management focus.

VI. DOE Evaluation

The DOE evaluation of BSA’s performance, and, in turn, the DOE determination of BSA’s earned fee, will be based primarily on the performance levels achieved against the weighted Performance Measures identified above. In addition, for each Critical Outcome area, the Contracting Officer may also consider any other relevant information directly or indirectly related to the Critical Outcome, including areas of performance monitoring defined by the Self-Assessment process, that is deemed to have had an impact (either positive or negative) on the Contractor’s performance. The fact that the Self-Assessment is “topically aligned” under a particular Critical Outcome Area does not preclude the Contracting Officer from considering the Self-Assessment’s impact upon other Critical Outcome areas. Should the Contracting Officer consider other relevant information in establishing the final performance rating for any Critical Outcome, the Contractor will receive written notice of such intent and will be given the opportunity to respond in writing. This agreement does not impact DOE’s rights under other provisions of the Prime Contract.

The Director of the Office of Science (SC-1) has the primary responsibility for evaluating Science and Technology performance (Critical Outcome 1), but input also will be sought from cognizant DOE Assistant Secretaries, Office Directors, and Program Managers. The Contracting Officer has the primary responsibility for evaluating performance relative to Critical Outcomes 2 and 3 in accordance with the Objectives, Performance Measures, and Metrics. However, the Contracting Officer shall inform SC-1 of any issues or concerns that should be considered when evaluating the Contractor’s performance in Critical Outcome 1. This is especially important in those areas where operational performance could have a significant impact on the Contractor’s ability to conduct successful research for the Department. The

Contractor has responsibility to compile the data necessary to document its performance against all measures.

VII. Critical Outcomes, Objectives, and Performance Measures

The Laboratory's Critical Outcomes for Fiscal Year 2004 are:

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

Laboratory Management and Operations - *BSA 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.*

Environmental Management - *BSA will deliver "Best-In-Class" solutions in conducting the Environmental Restoration Program. Focused upon completion, the results will be protective of the environment, cost effective, and performed in an open exchange with the community, regulators, and other stakeholders. BSA will continue to keep the commitments agreed to in the Memorandum of Understanding signed by Dr. Marburger and Mr. Holland on May 4, 2001.*

In FY 2004, the relative weights of the Critical Outcomes reflect a high priority on the success of the Laboratory's science and technology mission and the need for continued improvement and focus on the Laboratory's environmental cleanup activities. At the Objective level, the FY 2004 priorities clearly reflect an increased emphasis on BSA's self-assessment program while maintaining a balanced perspective of institutional performance consistent with SC expectations.

The Critical Outcomes, Objectives, and Measures, and their relative weights, are outlined in Table I.

Combined, the Critical Outcomes, Objectives, and Measures define the scope of planned institutional level self-assessment activities. This approach ensures that priorities and resources associated with institutional assessment activities supporting Critical Outcomes and Objectives are considered and balanced with the development of the specific measures and metrics contained in the Critical Outcome Trees.

The Critical Outcomes, Objectives, and Performance Measures agreed to for FY 2004 through the DOE/BSA Critical Outcome process are fully defined in this Appendix.

Table 1

Critical Outcomes, Objectives, and Measures	CO %	OBJ. %	MEAS. %	Element %	Sub Element %
1.0 Science and Technology	60%				
Objective 1.1 Quality		30%			
Objective 1.2 Relevance to DOE Mission		10%			
Objective 1.3 Success in Constructing & Operating Research Facilities		25%			
Objective 1.4 Research Program Management		30%			
Objective 1.5 Nanoscience Initiative		5%			
Measure 1.5.1 Preliminary Organizational Activities			35%		
Measure 1.5.2 CFN Scientific Activities			35%		
Measure 1.5.3 CFN Construction			30%		
2.0 Environmental Management	8%				
Objective 2.1 Execution of Program Activities		100%			
Measure 2.1.1 Project Completions and Other Key Milestones			100%		
3.0 Laboratory Management and Operations	32%				
Objective 3.1 Corporate Leadership		20%			
Measure 3.1.1 Strategic Partnerships			30%		
Measure 3.1.2 Laboratory Leadership			70%		
Objective 3.2 Business Processes		30%			
Measure 3.2.1 Phase III of Benchmarking Study			20%		
Measure 3.2.2 Procurement Management			20%		
Measure 3.2.3 Risk Management & Mitigation			20%		
3.2.3.1 Financial Audit				35%	
3.2.3.2 Credit Card				35%	
3.2.3.3 Cyber Security				30%	
Element 1a - Database Development					17%
Element 1b - Vulnerability Correction					17%
Element 2 – Critical and Sensitive Systems					33%
Element 3 – Account Management					33%
Measure 3.2.4 Reduce Cost of Doing Science			40%		
Objective 3.3 Management System Planning, Assessment and Improvement		20%			
Measure 3.3.1 Management System Assessment Planning			25%		
Measure 3.3.2 Consensus-based User/Peer Reviewer Maturity Determinations			15%		
Measure 3.3.3 Third Party Evaluation of the Management System Assessment Program			60%		
Objective 3.4 Improved ESH&Q - Operations Services		10%			
Measure 3.4.1 Legacy Risk Management			30%		
3.4.1.1 Strategic Plan for Unfunded Legacy Environmental Liabilities				50%	

Critical Outcomes, Objectives, and Measures	CO %	OBJ. %	MEAS. %	Element %	Sub Element %
3.4.1.2 Radiological Source Inventory Database				50%	
Measure 3.4.2 Nuclear and Radiological Facilities and Operations			20%		
3.4.2.1 Inventory Report				20%	
3.4.2.2 Management and Disposition Plan				20%	
3.4.2.3 Waste Storage Plan				25%	
3.4.2.4 Deactivation and Decommissioning Plan				20%	
3.4.2.5 Work Controls				15%	
Measure 3.4.3 Pollution Prevention			20%		
Measure 3.4.4 Safety and Health Performance			30%		
3.4.4.1 Safety Implementation Path Forward				50%	
3.4.4.2 OSHA Reportable Injury Management				50%	
Objective 3.5 Site Infrastructure, Facilities & Operations		10%			
Measure 3.5.1 Pursue Alternative Financing (AF) for Infrastructure Projects			30%		
3.5.1.1 Housing Reconstruction Project (HRP)				67%	
3.5.1.1.1 Housing Reconstruction RFP					25%
3.5.1.1.2 Housing Reconstruction Contract					75%
3.5.1.2 Energy Sciences Building (ESB)				33%	
3.5.1.2.1 ESB RFP (Includes OMB A-11 and Economic Analysis)					50%
3.5.1.2.2 ESB Contract					50%
Measure 3.5.2 Project Management			35%		
Measure 3.5.3 Infrastructure Maintenance			35%		
Objective 3.6 Communications and Trust		10%			
Measure 3.6.1 Community, Education, Government and Public Affairs Management			100%		
3.6.1.1 Communicating the Compelling Vision and Science Priorities of the Laboratory					
3.6.1.2 Internal Communications					
3.6.1.3 Issues Management					

VIII. Schedule

In order to clearly define the path forward, the following generic schedule is presented as a guide. BSA and DOE acknowledge that the nature of the processes involved demands flexibility in the schedules.

FY 2004 Performance Measures Schedule

October:

- October 1 - BSA initiates the Self-Evaluation process for the **Completed Fiscal Year**.
- Third week in October - Conduct the Fourth Quarter status review for the **Completed Fiscal Year**.

November:

- November 15 - BSA submits its Annual Self-Evaluation Report to DOE for the **Completed Fiscal Year**.

January:

- January 15 - DOE transmits its draft Annual Evaluation Report for the **Completed Fiscal Year** to BSA for comment.
- Conduct the First Quarter status review for the **Current Fiscal Year**.

February:

- February 1 - BSA submits its comments on DOE's draft Annual Evaluation Report for the **Completed Fiscal Year** to DOE.
- Second week in February - DOE transmits the final DOE Annual Evaluation Report for the **Completed Fiscal Year** to BSA.

March:

- DOE and BSA begin drafting the Critical Outcomes, Objectives, and Performance Measures for the **Succeeding Fiscal Year**.

April:

- DOE/BSA Management Retreat to assess customer strategic needs, and refine the Critical Outcomes, Objectives, and Performance Measures for the **Succeeding Fiscal Year**.
- Conduct the Mid-year (Second Quarter) status review for the **Current Fiscal Year**.

June:

- June 30 - DOE and BSA will have developed a workable draft on the Critical Outcomes, Objectives, and Performance Measures for the **Succeeding Fiscal Year**.

July:

- Conduct the Third Quarter status review for the **Current Fiscal Year**.

September:

- September 30 - The Critical Outcomes, supporting Objectives, and related Performance Measures for the **Succeeding Fiscal Year** will be ready to be incorporated into DOE's Prime Contract with BSA.

IX. Definitions

Activity/Functional Area - The strategic areas of mission accomplishment outlined in the Director of the Office of Science expectations for Science Laboratory's program performance in the areas of Science, Leadership, Environment, Safety & Health, Infrastructure, Business Operations, or Stakeholder Relations. These form the basis for the Laboratory's Critical Outcomes, Objectives, and Measures.

Critical Outcome - Performance end state having the highest level of strategic value or impact to DOE, BSA, or affected stakeholders; represent a sustainable target over a minimum of 3 to 5 years.

Critical Outcome Trees - The complete set of Critical Outcomes, Objectives, and Measures for a given fiscal year; synonymous with this Appendix.

Objective - A statement of desired outcomes for an organization or activity. Objectives are intended to be sustainable targets over a 1-3 year timeframe and form a complete, non-redundant set of results for evaluating progress toward achievement of the Critical Outcomes.

Measure - A quantitative or qualitative method for characterizing performance. Performance Measures are specific to the performance period, i.e., the fiscal year, and require the development of metrics (expectations) to facilitate adjectival ratings.

Metric (a.k.a. Expectation) - The desired condition or target level of performance for each measure.

Result - The actual condition or performance level for each measure.

Benchmark - A standard or point of reference for measurement usually derived from values found in other institutions or organizations.

Outstanding - Significantly exceeds the standard of performance; achieves noteworthy results.

Excellent - Exceeds the standard of performance, although there may be room for improvement in some elements. Better performance in all other elements more than offsets this.

Good - Meets the standard of performance. Deficiencies do not substantively affect performance.

Marginal - Below the standard of performance; deficiencies are serious and may affect overall results; management attention and corrective action are required.

Unsatisfactory - Significantly below the standard of performance; deficiencies are serious, may affect overall results, and urgently require senior management attention.

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1.0 Critical Outcome - Science and Technology

BNL WILL DELIVER INNOVATIVE, FOREFRONT SCIENCE AND TECHNOLOGY ALIGNED WITH DOE STRATEGIC GOALS IN A SAFE, ENVIRONMENTALLY SOUND, AND EFFICIENT MANNER AND WILL CONCEIVE, DESIGN, CONSTRUCT, AND OPERATE WORLD-CLASS USER FACILITIES.

The weight of this outcome is 60% of total.

The Director of the Office of Science (SC-1) has primary responsibility for evaluating the performance of Laboratory Science and Technology programs. In carrying out this responsibility, the Assistant Secretaries and Office Directors are likely to request assistance from the Program Managers under whose jurisdiction the various individual Laboratory programs fall.

In performing this evaluation, the Assistant Secretaries and Office Directors have available input from the following sources:

1. DOE Program Managers who carry out periodic reviews of the programs they fund. These reviews usually include use of independent technical experts. The Program Managers may use written reviews as a basis for evaluating the quality of the science and technology performed by the Laboratory and its relevance to their programmatic goals.
2. The Science and Technology Advisory Committee of the BSA Board that oversees the internal reviews of science and technical programs at Brookhaven. Independent review committees whose membership is drawn from the external scientific and engineering communities review each major Laboratory program on an 18-month cycle. The committees evaluate Laboratory divisions and programs with respect to the quality and performance of the staff, the quality and timeliness of the work, and the relevance of the programs to the goals of the Laboratory and sponsoring agencies. Reviews include consideration of the Performance Measures described below. The Committee's written reports, and the Laboratory's responses are made available to the BSA Board for Brookhaven, DOE Contracting Officers, and to relevant DOE Program Managers.
3. BNL Self-Assessments, which include Department Self-Assessments, Independent Peer Review, and Department and Lab-level Annual Self-Evaluations.

1.1 Objective – Quality

The weight of this objective is 30%.

Reviewers will evaluate the overall quality of the research performed. Depending on the nature of the program, reviewers will consider the following:

Science: Success in producing original, creative scientific output that advances fundamental science and opens important new areas of inquiry; success in achieving sustained progress and impact on the field; and recognition from the scientific community, including awards, peer-reviewed publication, citations, and invited talks.

Technology: Whether there is a solid technical base for the work; the intrinsic technical novelty of the research; the importance of technical contributions made to the scientific and engineering knowledge base underpinning the technology program; and recognition from the technical community.

1.2 Objective - Relevance to DOE Mission

The weight of this objective is 10%.

Reviewers will consider whether the research fits within and advances the missions of DOE; contributes to U. S. leadership in the international scientific and technical communities; contributes to the goals and objectives of the Strategic Plans of DOE and other national programs; and the extent of productive interaction with other Science and Technology programs. Depending on the nature of the program, reviewers will consider the following:

Science: The program's track record of success in making scientific discoveries of technological importance to DOE missions and U.S. industry; the degree of industrial interest in follow-on development of current research results; and the effective use of national research facilities that serve the needs of a wide variety of scientific users from industry, academia, and government laboratories.

Technology: The value of successfully developing pre-commercial technology for DOE, other federal agencies, and the national economy; the program's risks and costs; and, where appropriate, the degree of industrial interest, participation, and support.

1.3 Objective - Success in Constructing and Operating Research Facilities

The weight of this objective is 25%.

Reviewers will consider whether the construction and commissioning of new facilities is on time and within budget; whether facility performance specifications and objectives are achieved; the reliability and safety of operations; adherence to planned schedules; and the cost-effectiveness of maintenance and facility improvements.

Reviewers will also assess the quality, innovation and achievements in designing and developing new facilities that will provide the next generation of research tools.

Reviewers of user facilities will also consider whether the user access program is effective, efficient, and user-friendly; the quality of the proposal evaluation process; the strength and diversity of user participation; the productivity of the research supported, both in science and technology; and the level of satisfaction among user groups.

Reviewers will consider the extent to which BNL provides effective and efficient leadership in the development of the Spallation Neutron Source (SNS) Project. In this project, the Laboratory will perform assigned tasks and produce scheduled deliverables for the Spallation Neutron Source in accordance with the Inter-Lab Memorandum of Agreement (MOA) and the approved annual work plans. Expectations for BNL performance in this area are reflected in the following Table.

Rating	Criteria
Outstanding	Deliver annual work plan elements below cost and ahead of schedule.
Excellent	Deliver annual work plan elements on cost and schedule, including up to 50% of contingency.
Good	Deliver annual work plan elements within BNL project cost and/or schedule, including greater than 50% but less than or equal to 100% of contingency.
Marginal	Delivery of annual work plan elements exceeding cost and/or schedule, including contingency, such that BNL project critical path is impacted.
Unsatisfactory	Delivery of annual work plan elements exceeding cost and/or schedule, including contingency, such that overall SNS project critical path is impacted.

1.4 Objective - Research Program Management

The weight of this objective is 30%.

Reviewers will consider the quality of research plans; whether technical risks are adequately considered; whether use of personnel, facilities, and equipment is optimized; success in meeting budget projections and milestones; the effectiveness of decision-making in managing and redirecting projects; success in identifying and in avoiding or overcoming technical problems; the effectiveness with which technical results are communicated to maximize the value of the research results and to gain appropriate recognition for DOE and the Laboratory; effectiveness in developing, managing, and transferring to industry intellectual property and technical know-how associated with research discoveries; and the degree to which customer and stakeholder expectations are consistently met.

1.5 Objective - Nanoscience Initiative

The weight of this objective is 5%.

BSA will develop and implement the Nanoscience initiative at BNL. This will include the development of an organizational structure at the Scientific Department level, the implementation of the “Jumpstart” program, and initiation of the Center for Functional Nanomaterials (CFN) project.

1.5.1 Preliminary Organizational Activities

The weight of this measure is 35%.

- A. Establish a Scientific Advisory Committee (SAC) to advise Laboratory management on CFN activities.
- B. Develop a Proposal Review Panel to review CFN jumpstart proposals from independent investigators.

1.5.2 CFN Scientific Activities

The weight of this measure is 35%.

- A. Develop a CFN organizational structure for science and construct a plan for the growth of the science portfolio.
- B. Implement the user science program and host users.
 - 1. Including User Coordinator; User Support Office that will schedule user visits and oversee other logistical issues.
 - 2. Establish a resource allocation committee to guide the scheduling of equipment within the Jumpstart program.
 - 3. Initiate and establish a training program for users.
 - 4. Develop an experimental safety review process for user proposals that is consistent with BNL management requirements (SBMS).

1.5.3 CFN Construction

The weight of this measure is 30%.

The objective of this measure is to complete Title II – Detail Design in FY 2004.

Measure

- A BSA will submit by 12/31/03 a quality set of documents, to support an External Independent Review (Preliminary Design), as required by DOE Manual 413.3-1 in accordance with the approved CFN Project Execution Plan
- B. Within 195 days from Critical Decision (CD)-2 authorization BNL will submit a quality set of documents, to support an Independent Project Review (Detail Design), as required by DOE Manual 413.3-1 in accordance with the approved CFN Project Execution Plan.

Performance Metric

A meeting with DOE and the BNL CFN project management team to determine the rating based on the results of the Independent Preliminary Design and the submittal of and acceptance of documents to support the Detail Design Review.

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2.0 Critical Outcome – Environmental Management

Brookhaven Science Associates (bsa) will deliver “best-in-class” solutions in conducting the Environmental Management program (em) and support the Department Of Energy, including both DOE-EM and the DOE office of science (SC) in its balanced decision making for environmental cleanup. BSA is committed to completing the Superfund portion of the cleanup by Fiscal Year 2005 (fy05). The cleanup will be protective of the environment, risk based, cost effective, consistent with DOE-SC expectations for long-term response action, and performed in an open exchange with the community, regulators, and other stakeholders. Brookhaven National Laboratory (bnl) will continue to keep the commitments agreed to in the Memorandum of Understanding signed by Dr. Marburger and Mr. Holland on May 4, 2001. Additionally, BSA will execute the strategic initiatives outlined in the Performance Management Plan (PMP) and will complete all activities in accordance with the bnl environmental management baseline.

The weight of this Outcome is 8% of total.

2.1 Objective - Execution of Program Activities

The weight of this Objective is 100%.

BSA will expertly, expeditiously, and economically plan, conduct, and complete decontamination and decommissioning of facilities; removal and disposal of wastes; and remediation of soils and groundwater. These projects will be safely but aggressively undertaken, closely controlled, and focused on completion by FY05. BSA will aggressively manage cost and schedule performance within the approved baseline parameters and achieve all major Interagency Agreement milestones and Gold Chart Metrics on or before their commitment date with the regulatory agencies and DOE.

2.1.1 Measure - Project Completions and Other Key Milestones

The weight of this Measure is 100%.

BSA will be evaluated on the quality of work planning and schedule management via the achievement of project completions, key milestones and completion of work packages in accordance with the approved BNL Environmental Management Baseline. These key task activities directly support completion of the EM Program at BNL, the PMP strategic and critical path activities and achievement of the End State. The work packages, completion dates and completion criteria are contained in Table 1.

Performance Level Metrics:

For Fiscal Year 2004 (FY04) performance levels and ultimate fee earned will be based solely upon the number of Work Packages completed during the fiscal year.

$$\text{FY04 Fee Earned} = \frac{\text{Total Fee Available in Critical Outcome 2.0} \times \text{Number of Work Packages Completed}}{\text{Number of Scheduled Work Package Completions}}$$

For FY05 performance levels and ultimate fee earned will be based solely upon completion on all remaining Work Packages and hence completion of the BNL EM Program.

Conditions:

- The specified dates for the project completions may be changed via DOE and BNL’s formal baseline change control proposal (BCP) procedure. The change control level for these milestones are specified in the Baseline and in most cases are Level 2b and above. Level 3 changes will be made through formal changes to Appendix B.
- Accelerated FY05 work packages may be substituted for delayed FY04 work packages in a one-for-one ratio. (See Table 1A)
- Completion of milestones and other work package completions are dependent upon FY04/05 funding being provided in accordance with the FY04/05 Work Authorization Plan (WAP) and timely completion of Government Furnished Services and Information (GFSI).

In case of a discrepancy between the Work Packages Completion Criteria identified in Tables 1/1A and the approved BNL EM Baseline, the completion criteria in the approved BNL Baseline prevails.

Table 1: FY 2004 Key Activities and Project Completions

Work Package	Date	Completion Criteria
Work Package 103 Operable Unit (OU) I South Boundary Pump and Treat System-Work Package Completion.	30-Sep-04	Construction is complete. An Operational Readiness Evaluation (ORE) has been conducted and major punch list items and findings completed. An Operations & Maintenance Manual has been prepared and approved by the Environmental Protection Agency/Department of Conservation (EPA/DEC). A Startup Report has been prepared and approved by the EPA/DEC.
Work Package 106 OU III-South Boundary Pump and Treat- Work Package Completion.	30-Sep-04	Construction is complete. An ORE has been conducted and major punch list items and findings completed. An Operations and Maintenance Manual has been prepared and approved by the EPA/DEC. A Startup Report has been prepared and approved by the EPA/DEC.
Work Package 109 OU III-Middle Road Groundwater Treatment System- Work Package Completion.	30-Sep-04	Construction is complete. An ORE has been conducted and major punch list items and findings completed. An Operations and Maintenance Manual has been prepared and approved by the EPA/DEC. A Startup Report has been prepared and approved by the EPA/DEC.
Work Package 107 Industrial Park Groundwater Treatment System- Work Package Completion.	30-Sep-04	Construction is complete. An ORE has been conducted and major punch list items and findings completed. An Operations and Maintenance Manual has been prepared and approved by the EPA/DEC. A Startup Report has been prepared and approved by the EPA/DEC.

Work Package 110 OU III Bldg 96 Remediation and poly chlorinated biphenyl (PCB) Soils-Work Package Completion.	30-Sep-04	The cleanup objectives have been met. Oak Ridge Institute for Science Education (ORISE) has had 30 days to review the report and provide comments. BNL has had 30 days to incorporate comments and submit the draft Closeout report to DOE for EPA/DEC review.
Work Package 113 Carbon Tet Groundwater Remediation- Work Package Completion.	30-Sep-04	Construction is complete. An ORE has been conducted and major punch list items and findings completed. An Operations and Maintenance Manual has been prepared and approved by EPA/DEC. A Startup Report has been prepared and approved by the EPA/DEC.
Work Package 114 Western South Boundary Remediation-Work Package Completion.	30-Sep-04	Construction is complete. An ORE has been conducted and major punch list items and findings completed. An Operations and Maintenance Manual has been prepared and approved by EPA/DEC. A Startup Report has been prepared and approved by the EPA/DEC.
Work Package 139 Industrial Park East Remediation System-Work Package Completion.	30-Sep-04	Construction is complete except for remaining punchlist items. All extraction wells, pumps, piping, treatment, equipment, buildings, instrumentation and electric utilities have been secured in their permanent position and connected. Completion letter submitted to DOE.
Work Package 142 OU III North Street Remediation System-Work Package Completion.	30-Sep-04	Construction is complete except for remaining punchlist items. All extraction wells, pumps, piping, treatment, equipment, buildings, instrumentation and electric utilities have been secured in their permanent position and connected. Completion letter submitted to DOE.
Work Package 140 Tritium Low Flow Pumping Remediation System-Work Package Completion.	30-Sep-04	Construction is complete. An ORE has been conducted and major punch list items and findings completed. An Operations & Maintenance Manual has been prepared and approved by EPA/DEC. A Startup Report has been prepared and approved by the EPA/DEC.
Work Package 136 OU I WM Sludges – Work Package Completion	30-Sep-04	Waste has left Waste Control Specialists (WCS) and is enroute to ultimate disposal facility.
Work Package 127 Boneyard – Work Package Completion	30-Sep-04	10 High Activity Vaults have been processed and disposed of.
Work Package 154 EM Liability – Work Package Completion	30-Sep-04	Treatment and disposal of the Allied Technology Group (ATG) Mixed waste.

Table 1A: Accelerated Completions

Work Package	Date	Completion Criteria
Work Package 101 Bldg 811 Underground Storage Tanks (USTs) and Soils -Work Package Completion (RS 13C, 14C)	30-Sep-05	The cleanup objectives have been met. ORISE has had 30 days to review the report and provide comments. BNL has had 30 days to incorporate comments and submit the draft Closeout report to DOE for EPA/DEC review.
Work Package 105 OU I Chemical/Glass Holes -Work Package Completion.	30-Sep-05	The cleanup objectives have been met. ORISE has had 30 days to review the report and provide comments. BNL has had 30 days to incorporate comments and submit the draft Closeout report to DOE for EPA/DEC review.
Work Package 134 OU III Sr90 Remediation System - Work Package Completion. (RS 72C,73C,74C,75C)	30-Sep-05	Construction is complete. An Operational Readiness Evaluation (ORE) has been conducted and major punch list items and findings completed. An Operations and Maintenance Manual has been prepared and approved by EPA/DEC. A Startup Report has been prepared and approved by the EPA/DEC.
Work Package 117 OU V Peconic River Remediation -Work Package Completion (RS 65C)	30-Sep-05	Record of Decision approved and placed in the Administrative Record. Cleanup has been completed in accordance with the Operable Unit V Peconic River Record of Decision: the on-site sections of the river have been cleaned up to an average of 1 ppm mercury with a goal of not exceeding of 2 ppm within the excavated areas; the off-site sections of the river have been cleaned up to an average of 0.75 ppm mercury with a goal of not exceeding 2 ppm within the excavated areas; riverbed and wetland restoration and re-vegetation have been completed per the Record of Decision; all primary and secondary wastes are removed, packaged for disposal, and transported off BNL site; a Closeout Report has been prepared, reviewed, revised and accepted by EPA/DEC.
Work Package 115 North Street East Groundwater Treatment System – Work Package Completion	30-Sep-05	Construction is complete except for remaining punchlist items. All extraction wells, pumps, piping, treatment, equipment, buildings, instrumentation and electric utilities have been secured in their permanent position and connected. Completion letter submitted to DOE.
Work Package 128 Airport/Long Island Power Authority (LIPA) Remediation System – Work Package Completion	30-Sep-05	Construction is complete except for remaining punchlist items. All extraction wells, pumps, piping, treatment, equipment, buildings, instrumentation and electric utilities have been secured in their permanent position and connected. Completion letter submitted to DOE.
Work Package 119 OU VI EDB Plume Remediation -Work Package Completion.	30-Sep-05	Construction is complete except for remaining punchlist items. All extraction wells, pumps, piping, treatment, equipment, buildings, instrumentation and electric utilities have been secured in their permanent position and connected. Completion letter submitted to DOE.
Work Package 158 Brookhaven Graphite Research Reactor (BGRR) Comprehensive Risk Assessment (CRA),	30-Sep-05	Final ROD to Administrative Record.

Feasibility Study (FS), Proposed Remediation Action Plan (PRAP), and Record Of Decision (ROD) -Work Package Completion		
Work Package 123 BGRR Below Ground Duct (BGD)-Work Package Completion. (F45C)	30-Sep-05	BGD filters and liners have been removed and the waste has been packaged and shipped offsite; the final BGD Completion Report has been submitted to DOE for regulator approval.
Work Package 129 BGRR Bldg and Grounds Disposition-Work package completion	30-Sep-05	LTRA S&M Plans and procedures are developed, all wastes have been disposed of at an approved disposal site, completion memo has been transmitted to BAO.
Work Package 125 BGRR Project Management and Support-Work package completion	30-Sep-05	There are no EM-specific completion criteria related to this work package.
Work Package 176 BGRR Project Closeout Activities -Work Package Completion (F44C,46C, 88C)	30-Sep-05	Canal and below ground duct have been isolated; Building 708 has been demolished and the waste shipped offsite; monitoring wells have been installed; BGRR footprint has been backfilled, graded and paved; final status survey has been completed; a completion has been prepared and CD-4 approval has been obtained.
Work Package 131 OU I Remediation Hazardous Waste Main Facility (HWMF) - Work Package Completion (RS78C)	30-Sep-05	The cleanup objectives have been met. ORISE has had 30 days to review the report and provide comments. BNL has had 30 days to incorporate comments and submit the draft Closeout report to DOE for EPA/DEC review. Waste has been shipped.
Work Package 174 Building 650 Hoppers - Work Package Completion (F 90C)	30-Sep-05	The draft Closeout report is submitted to DOE for EPA/DEC review.

Work Package 177 Boneyard Transuranics (TRU) Waste	30-Sep-05	Transportation of the AmBe source and the Pu vault to an approved DOE receiving facility (off the BNL site).
Work Package 160 HFBR S&M	30-Sep-05	Complete annual S&M program, complete records of inspection and maintenance and waste management records.
Work Package 170 RA Program Management and Support	30-Sep-05	There are no EM-specific completion criteria related to this work package.

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3.0 Critical Outcome – Laboratory Management and Operations

BSA 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.

3.1 Objective – Corporate Leadership

The weight of this objective is 20%.

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.

3.1.1 Measure – Strategic Partnerships

The weight of this measure is 30%.

Consistent with the Office of Science approved strategic agenda for the laboratory, and the BSA Corporate Strategic Plan for Growth of Non-DOE R&D Funding FY03-FY04 identified under performance measure 3.1.1.1 in FY 2003's Appendix B, BSA will endeavor to establish partnerships or programs with non-DOE entities to enhance the laboratory's research programs.

Performance Metric

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

Rating	Criteria
Outstanding	Consistent with the Office of Science approved strategic agenda for the laboratory and the "BSA Corporate Strategic Plan for Growth of Non-DOE R&D Funding FY03-FY04," identify and implement a select few top priority actions necessary to support critical elements of the strategic agenda, and deliver new substantial partnerships or programs for enhanced non-DOE funding at BNL in accordance therewith.
Excellent	Consistent with the Office of Science approved strategic agenda for the laboratory and the "BSA Corporate Strategic Plan for Growth of Non-DOE R&D Funding FY03-FY04," identify a select few top priority actions necessary to support critical elements of the agenda, and deliver confirmation of emerging partnerships with non-DOE entities that have the potential to sponsor substantial research programs/activities at BNL.
Good	Consistent with the Office of Science approved strategic agenda for the laboratory and the "BSA Corporate Strategic Plan for Growth of Non-DOE R&D Funding FY03-FY04," identify a select few top priority actions necessary to support critical elements of the agenda, and take actions identifying further substantial partnerships or programs for enhanced non-DOE funding at BNL in accordance therewith.
Marginal	Failure to implement priority actions from strategic agenda and take actions at the Corporate level to initiate substantial partnerships or programs for enhanced non-DOE funding at BNL.
Unsatisfactory	Failure to prioritize and take actions at the corporate level to initiate substantial partnerships or programs for enhanced non-DOE funding at BNL.

*Substantial partnerships are perceived to strategically align the laboratory programs/initiatives and have the potential to grow in excess of \$500K.

3.1.2 Measure – Laboratory Leadership

The weight of this measure is 70%.

BSA 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:

1. Conduct corporate management assessments in various areas of Laboratory operations.
2. Demonstrate corporate involvement that will result in enhancing and/or improving effective operation of the following programs; Standards-Based Management System (SBMS), Procurement, Integrated Safety Management (ISM).
3. Facilitate 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).
4. Demonstrate involvement in implementing programs/initiatives that enhance the scientific position, prestige, and viability of BNL as a Department of Energy National Laboratory.
5. Develop and pursue a strategic hire list for FY 2004 in support of the Laboratory's long-term strategic agenda.
6. Provide proven management systems and processes for enhancing business operations.
7. Demonstrate BSA corporate financial involvement in the future of the Laboratory.

Performance Metric

Rating	Criteria
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

3.2 Objective - Business Processes

The weight of this objective is 30%.

3.2.1 Measure - Phase III of Benchmarking Study

The weight of this measure is 20%.

Purpose and Background

BSA, in FY 2003 with the assistance of a commercial contractor, The Hackett Group, conducted a Benchmarking Study of business functions within Finance, Information Technology and Procurement. The Hackett Group assisted BSA in studying 13 business processes' functions, comparing BNL to top performing organizations, identifying areas of strengths and areas with opportunities for improvement. BSA shall use the results on this study over the next several years as follows:

- FY 2004 – Evaluate the results and develop an implementation plan
- FY 2005 – Implement results based on the implementation plan
- FY 2006 – Follow up analysis to track improvement

Measure

In moving towards best practices demonstrated by top performing organizations, identified by Hackett, BSA will continue with a professional benchmarking organization to develop an Implementation Plan. Based on the plan, a prioritized list of activities will be developed to maximize the results of the Benchmarking Study. The BSA plan will provide the rationale for incorporating or deviating from Hackett's recommendations.

Performance Metric

Rating	Criteria
Outstanding	At least one of the Plan's prioritized activities have been implemented in FY 2004
Excellent	At least one of the Plan's prioritized activities have been initiated in FY 2004
Good	BSA Implementation Plan has been developed
Marginal	BSA drafted Implementation Plan
Unsatisfactory	No progress in development of BSA Implementation Plan

3.2.2 Measure - Procurement Management

The weight of this measure is 20%.

Acquisition Management strives to procure quality goods and services at best value in accordance with customer requirements and expectations, while meeting the requirements of BNL's Procurement policies and procedures as well as the prime contract for the management and operation of the Brookhaven National Laboratory. However, deficiencies and weaknesses in the current BNL procurement function have been highlighted in both internal and external assessment reports. Some of these weaknesses require in-depth evaluation to identify root causes and develop workable and innovative solutions. The Laboratory has developed an Acquisition Management System Improvement Project Plan to address and provide the appropriate exposure, attention, and response to issues and concerns regarding the procurement function at BNL.

Measure

BSA will meet all of the Milestones as identified in its Acquisition Management System Improvement Project Plan Milestone Schedule.

FY04 PROCUREMENT MEASURE MILESTONE AND CRITERIA			
AM MILESTONE WBS	MILESTONE TITLE	MILESTONE COMPLETION DATE	MILESTONE COMPLETION CRITERIA
2.2.5	PRE-AWARD/AWARD: SUBMIT FINAL REPORT WITH RECOMMENDATIONS	6/30/2004	Pre-award Benchmarking Study completion and final report with recommendations issued.
2.3.5	CONTRACT CLOSE-OUT: SUBMIT FINAL REPORT WITH RECOMMENDATIONS	9/9/2004	Pre-award Benchmarking Study completion and final report with recommendations issued.
2.6	PROCUREMENT IMPROVEMENT RECOMMENDATIONS COMPLETED	9/9/2004	Procurement improvement recommendations completed.
3.1.5	PPM ORGANIZATIONAL IMPROVEMENTS COMPLETED	3/26/2004	Baseline organizational implementation actions resulting from contract administration benchmarking study, Issue & Decision paper and Laboratory senior management approval of I&D paper.
3.2.1.1.4	PRE-AWARD IMPROVEMENTS COMPLETED	9/9/2004	Pre-award Improvements completed.
3.2.1.2.4	CONTRACT ADMINISTRATION IMPROVEMENTS COMPLETED	3/31/2004	Process improvements outlined in approved Contract Administration I&D paper are implemented.
3.4.5.10	SUPPLIER INFORMATION SYSTEM COMPLETE	4/1/2004	Supplier Information System (SIS) fully integrated with PeopleSoft.

Performance Metric

Rating	Criteria
Outstanding	All Six Milestones are completed within 30 days of the approved schedule
Excellent	Five Milestones are completed within 30 days of the approved schedule
Good	Three Milestones are completed within 30 days of the approved schedule.
Marginal	Two Milestones are completed within 30 days of the approved schedule
Unsatisfactory	One Milestone is completed within 30 days of the approved schedule

3.2.3 Measure - Risk Management and Mitigation

The weight of this measure is 20%

3.2.3.1 Financial Audit

The weight of this measure is 35%.

Measure

Strong internal management controls are necessary to assure that business operations are effective and efficient, as well as in compliance with applicable regulations and requirements. This requires that periodic risk assessments be performed on controls, policies and practices to identify areas of substantial risk as well as any weaknesses and drive the appropriate corrective actions(s). The Laboratory is aware of the DOE's expectations to utilize third party external reviews as a method to mitigate risk in areas of vulnerability. The Laboratory recognizes that financial operations are a key function and are inherently an area of vulnerability and shall mitigate this risk utilizing an independent CPA firm to conduct a review.

Performance Metric

BSA will contract for an independent CPA firm to perform a certified audit of BNL's financial statements covering FY 2003 (most recent complete year).

Rating	Criteria
Outstanding	Clean certified audit report opinion
Excellent	Qualified financial report opinion as a result of cause/effect beyond BSA management control
Good	Qualified financial report opinion as a result of cause/effect under BSA management control
Marginal	Audit not completed/in progress
Unsatisfactory	CPA firm is unable to certify BSA's financial statements (Disclaimer opinion)

3.2.3.2 Credit Card

The weight of this measure is 35%.

Measure

Well-designed purchase card programs streamline the acquisition process, resulting in savings in time and money. However, such decentralized procurement methods entail risk. Therefore, it is important that strong internal control systems be in place to protect against fraud, waste and abuse. The Laboratory's controls include a vigorous monthly oversight program with random selection of specific card-holder records, on-line central review of credit card purchases, annual program management review, pre-purchase authorizations and approving officials. A series of credit card reviews were conducted during FY 2003.

Performance Metric

BSA will perform a risk-based assessment of the laboratory credit program during FY 2004. This will consider and prioritize all recommendations from the Credit Card Oversight Program and cardholder management reviews conducted in FY 2003 as well as any other appropriate risk management tactics. PPM will conduct the self-assessment which will result in an exposure rating (low, medium, or high) of the credit card program. From this assessment, a risk management plan will be developed and implemented.

Rating	Criteria
Outstanding	Vulnerability rating is considered very low based on implementation of all credit card risk management plan recommendations
Excellent	Vulnerability rating is considered low based on implementation. Implement 80–99% of the credit card risk management plan recommendations.
Good	Perform risk management assessment and develop risk management plan
Marginal	Perform credit card risk management assessment
Unsatisfactory	Did not perform credit card risk management assessment

3.2.3.3 Cyber Security

The weight of this measure is 30%.

1. Computer Scanning

Information Technology Division (ITD) will administer a vigorous internal and external computer-scanning program that will look for vulnerabilities of the computers and network at the Laboratory to reduce illegal intrusions from inside and outside of the network. We will track correction of the high-risk vulnerabilities that are detected. We realize that some of the vulnerabilities identified by scanning are “false positives” and that correcting others will interfere with the proper function of customized operating systems or interfere with necessary applications. We will therefore need to maintain a database of false positives and uncorrectable vulnerabilities. We will consider a vulnerability corrected if, after identification by a given scan, it is either gone by the next scan or is identified as uncorrectable. In the first year, we will set up the database and begin to use it to track corrections. We will use two measures to monitor the implementation of this.

- a. **Database Development.** This element monitors the implementation of the software to track vulnerabilities. The measure of this element, *performed quarterly*, is as follows:

Metrics

Rating	Criteria
Outstanding	Final Database of correctable vulnerabilities complete.
Excellent	All subnets scanned. Vulnerabilities identified on all subnets but not yet classified as correctable or not.
Good	Pilot testing. Limited number of subnets scanned. Vulnerabilities identified on these subnets classified as correctable or not.
Marginal	Database software implemented
Unsatisfactory	No progress

The weight of this element is 17%.

- b. **Vulnerability Correction.** This element tracks the correction of high-risk vulnerabilities. The measure of this element, *performed quarterly*, is as follows:

Metrics

Rating	Criteria
Outstanding	>50% of high-risk vulnerabilities corrected.
Excellent	>37.5% of high-risk vulnerabilities corrected.
Good	>25% of high-risk vulnerabilities corrected.
Marginal	<12.5% of high-risk vulnerabilities corrected.
Unsatisfactory	No progress

The weight of this element is 17%.

2. Critical and Sensitive Systems

ITD will assess risks and analyze threats to determine the optimum security measures for Brookhaven's "critical" or "sensitive" computer systems.

With the BSA system owners, Cyber Security will identify "critical" or "sensitive" systems. ITD then will ensure that each undergoes a security review, and that the appropriate level of protection is applied.

The measure of this element is as follows:

Rating	Criteria
Outstanding	Critical and sensitive systems identified; 90% of the security reviews are undertaken and protection levels applied.
Excellent	Critical and sensitive systems identified; 75% of security reviews undertaken and protection levels applied.
Good	Critical and sensitive systems identified 50% of security reviews undertaken and protection levels applied.
Marginal	Critical and sensitive systems identified and security reviews undertaken. No protection applied.
Unsatisfactory	No progress

The weight of this element is 33%.

3. Account Management

BNL has already developed an automatic process to gather computer account information on foreign nationals working on-site. This program will be extended to regulate the access of *remote* foreign nationals to the Laboratory's critical and sensitive systems. The methods used must be somewhat modified because the DOE Office of Science has said that remote access is not considered a visit so that I-473 forms are not required for foreign nationals who will never come on-site. (We expect that this will be stated in the final version of the draft DOE order 142.X.) This program will ensure that 1) a designated official approves the remote 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. The process will check users currently logged into the critical and sensitive systems against their approved times at the Laboratory, and their permission for access, as specified in the Guest Information System (GIS).

By the end of the first quarter FY 2004, BNL will develop a web-based account form that, when submitted, will query the GIS to verify the remote user's status. Active status authorizes the Account Management Office to create computer account(s) requested on the form.

The measures of this element are as follows:

Rating	Criteria
Outstanding	Account Management Form implemented.
Excellent	Account Management Form developed.
Good	Account Management Form design completed
Marginal	Account Management Form design initiated.
Unsatisfactory	No progress.

The weight of this element is 33%.

3.2.4 Measure - Reduce Cost of Doing Science

The weight of this measure is 40%.

The Laboratory has performed a review that focused on reducing the cost of doing science via improving efficiency in support function operations, reducing the General and Administrative funding requirements and on departmental overheads costs. As a result of this review six specific areas have been targeted for efficiency improvements and/or cost savings. BNL is committed to make changes in the following six functional areas in support of this goal. The laboratory will deliver a report describing actions taken demonstrating cost savings or cost savings to be achieved as a result of actions being implemented.

1. Information Technology
2. Photography and Graphic Arts
3. Safety and Quality
4. Instrumentation and Calibration
5. Integrated Planning Process
6. Standards Based Management Systems (SBMS)

Performance Metric

Rating	Criteria
Outstanding	5 or more functional areas achieve demonstrated cost savings
Excellent	4 functional areas achieve demonstrated cost savings
Good	3 functional areas achieve demonstrated cost savings
Marginal	2 functional areas achieve demonstrated cost savings
Unsatisfactory	1 or less of the functional areas achieve demonstrated cost savings

3.3 Objective – Management System Planning, Assessment and Improvement

The weight of this objective is 20%.

Provide a Management System Planning, Assessment and Improvement process for effective performance management and ensure BSA & DOE senior management confidence in the self-assessment program.

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.

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. Beginning in FY 2003, BSA embarked on an initiative to drive improvement in the Management System planning and assessment to establish and sustain their adequacy, effectiveness, and efficiency.

The Laboratory is also pursuing continuation of the management system Maturity Evaluation process that has been highly successful in verification of the QA program.

In addition to the specific measures for discrete performance improvements, BSA and DOE will build on the process deployed in FY 2003. To ensure objectivity of the evaluation in FY 2004, Laboratory Management and DOE have agreed to continue the third party evaluation process introduced in FY 2003.

3.3.1 Measure - Management System Assessment Planning

The weight of this measure is 25%.

Using the process developed in FY 2003 for planning management system assessments, as well as the results of the FY 2003 third party evaluation, modify and document revisions to the Integrated Assessment Program processes published process in SBMS. Document management system 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
- Financial Management
- Hazardous Material transportation

- Integrated Planning
- Intellectual Property
- Legal
- Life Cycle Asset Management
- Property Management
- Quality Management
- Radiological Control
- Records Management
- Safeguards and Security
- Standards Based Management System
- Training and Qualifications
- Work for Others
- Work Planning and Control
- Worker Safety and Health

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

Performance Metric

Rating	Criteria
Outstanding	All completed on schedule
Excellent	19 completed on schedule
Good	17 completed on schedule
Marginal	15 completed on schedule
Unsatisfactory	< 15 completed on schedule

3.3.2 Consensus-based User/Peer Reviewer Maturity Determinations

The weight of this measure is 15%.

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

- Emergency Preparedness
- Intellectual Property
- Property Management
- Standards Based Management System

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

Rating	Criteria
Outstanding	4 of 4 completed by September 30, 2004
Excellent	3 of 4 completed by September 30, 2004
Good	2 of 4 completed by September 30, 2004
Marginal	1 of 4 completed by September 30, 2004
Unsatisfactory	No items completed by September 30, 2004

3.3.3 Third Party Evaluation of the Management System Assessment Program

The weight of this measure is 60%.

Using the independent third-party review team's results from the FY 2003 evaluation, modify the Management System Self-Assessment Evaluation protocol and the criteria used by the review team as necessary. This will be done jointly with BSA and DOE.

Using key members (if not the whole team) of the third party evaluation team formed in FY 2003 assessment program and the modified protocol, the team will evaluate the management systems planning and assessment activities using those systems outlined in 3.3.1.

During the FY 2004 cycle, the third party review team will also "validate" recent revisions and recommend any future revisions as appropriate for use in subsequent years.

Metrics

As determined by the criteria and Third Party evaluation.

3.4 Objective - Improved ESH&Q - Operations Services

The weight of this objective is 10%.

3.4.1 Measure - Legacy Risk Management

The weight of this measure is 30%.

3.4.1.1 Strategic Plan for Unfunded Legacy Environmental Liabilities

The weight of this measure is 50%.

The Environmental Management (EM) Comprehensive Environmental Response Compensation and Liability Act (CERCLA) cleanup of the BNL site is currently nearing its intended completion. The immediate goal of the EM program is to complete cleanup of its baseline activities by the end of FY 2005. Several additional liabilities have been identified which have not and will not be added to the EM baseline and will be transferred to the Office of Science, as site landlord. In a case example (i.e., cleanup of lead contaminated soils at the Central Steam Facility), the remediation is not currently included in the EM program and the DOE has instructed the Laboratory to pursue alternate resources to expedite the remediation of the area. A list of "Unfunded Environmental Liabilities" has been drafted by Laboratory staff and reviewed with the DOE. Many of the issues identified in this list pose regulatory (e.g., storage of wastes for periods >1 year), environmental (e.g., contaminated media), and social risks to BNL.

Laboratory and DOE staff agreed that these issues need to be actively managed, and a path forward is needed to better define the scope and priority of the issues and to seek/identify funding resources to implement cleanup.

This measure provides incentives to BSA to effectively manage the legacy environmental liabilities in harmony with BSA's core mission and stakeholder values and minimize the environmental and regulatory risk posed by these issues. The measure promotes a thorough investigation and review of existing known liabilities and preparation of comprehensive planning documents to support the prioritization and eventual projectization of high-priority projects. Planning documents will be comprehensive, well written, and integrated with BNL mission goals.

BSA will manage these activities under the direction of the Environmental & Waste Management Services Division.

Task #	Task	Milestone
1	BSA, DOE, and the regulatory agencies will negotiate a process for addressing remediation of projects/activities not included in the current EM scope.	Remedial process agreed to by BSA, DOE, and regulators (EPA, NYSDEC, and SCDHS): December 31, 2003.
2	Comprehensive identification of legacy issues	List of legacy issues with supporting documentation: 30 days after Appendix B approval.
3	Prioritize issues according to multi ESH, business, stakeholder criteria, and include an evaluation of how each project will benefit the conduct of science at BNL.	Prioritization report: 60 days past Task 2 delivery
4	<p>Prepare documentation to support Project Initiation and/or Project Definition for the high-priority projects identified in Task 3. This documentation will be prepared using a tailored approach to the DOE system for "<i>Project Management for the Acquisition of Capital Assets</i>," DOE M 413.3-1 (approved 3/28/03). For some projects, sufficient engineering and characterization is likely to have been completed. For those projects, the Project Definition documentation will be completed. Other projects are poorly defined. For those projects, Project Initiation documentation will be completed.</p> <p>Under the tailored approach, Project Initiation documentation would include a regulatory strategy, performance requirements analysis (i.e., desired end state), mission need statement (including project manager, drivers, constraints and assumptions, resource needs and schedule, and a summary of development planning to date). Project Initiation documentation would be suitable to support characterization and engineering funds (as required). Project Definition documentation will include exit strategy/completion criteria, conceptual design (i.e., 15% design), life cycle cost estimate, and project execution plan.</p>	High-priority project work packages developed: May 1, 2004
5	Identify funding options for high-priority projects identified in Task 3. Prepare funding requests (e.g., Activity Data Sheets, Field Work Proposals, line item, etc.) and submit to the appropriate budget process (3PBP, FWP, etc.).	Funding requests submitted to appropriate process: June 30, 2004.

Scoring is based on satisfactory task completion by the milestone date commitment. Performance shall be measured as follows:

Rating	Criteria
Outstanding	Missed 0 milestones
Excellent	Missed 1 milestones
Good	Missed 2 milestones
Marginal	Missed 3 milestones
Unsatisfactory	Missed 4 milestones

3.4.1.2 Radiological Source Inventory Database

The weight of this measure is 50%.

Objective

Implement the site-wide rollout of the radiological source inventory database.

Purpose and Supporting Information

The Radiological Control Division (RCD) has overall responsibility for the radioactive source accountability program for BNL. This program maintains a database of all accountable radioactive sources. The 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 promote the efficient use of existing sources and result in overall improvement in the management and control of BNL accountable sources. A source inventory database similar to that proposed would likely have prevented several previous instances of discovering radioactive material outside of a radiologically controlled area.

Performance Metric

Rating	Criteria
Outstanding	Full implementation of the system functional requirements described in the design specification.
Excellent	Web based implementation for some custodian data input and remote source data records updates.
Good	Development of database specification requirements document, based on user survey, for interactive web access to database.
Marginal	Static reports and tables available on web.
Unsatisfactory	No action taken.

3.4.2 Measure - Nuclear and Radiological Facilities and Operations

The weight of this measure is 20%.

Objective

To reduce the risk and liability of excess nuclear and radiological materials on-site.

Purpose and Supporting Information

The Laboratory's Environment, Safety, and Health mission includes the reduction of risk through the implementation of safety programs, radiological control, nuclear materials management, and environmental stewardship. Since the late 1940s, the Laboratory has used and accumulated a large number of high-activity radioactive sources and nuclear material that have become excess and created vulnerabilities in the safety systems. The timely disposition and secure storage of these materials is required to reduce the nuclear risk associated with these vulnerabilities. To minimize the potential generation of future legacy risks, it is imperative to strategically manage the timely disposition of the high-risk radiological and nuclear material. The Laboratory is developing a focused short and long-term nuclear strategy to better manage and ultimately dispose of its high risk, excess, legacy, and unused nuclear and radiological material inventory. This inventory collectively is identified as the Brookhaven orphan materials.

The Laboratory plans to identify orphan nuclear and radiological materials and review the various disposition paths for these materials identified as excess to current programmatic use. The plan will evaluate the materials, define viable material end states, and provide recommendations and facilitate external interfaces for their disposition. Materials with defined disposition paths will be reviewed to verify the continuing viability of those disposition paths and to determine if alternatives exist to reduce cost or provide reuse applications and provide clear economic or technical benefit to BNL or the Department of Energy (DOE).

This measure is intended to support the Laboratory's nuclear strategic plan. The basic thrust of the nuclear strategic plan is to: (1) keep "low-risk" radiological facilities from becoming nuclear facilities, (2) reduce the nuclear material footprint, (3) maintain a minimum nuclear facility capability for current and future work, and (4) improve the safeguarding of high-risk nuclear material.

Performance Metric

The performance metric rating for each measure below is determined by the timely completion of stated milestone in accordance with criteria.

3.4.2.1 Inventory Report

The weight of this measure is 20%.

Determine ownership and provide an inventory report of all Laboratory unused, legacy, and orphan nuclear and radiological materials (primarily sources) that are excess to current program need.
(Milestone: 12/31/03)

Performance Metric

Rating	Criteria
Outstanding	Milestone achieved two weeks early and is of acceptable quality to DOE
Excellent	Milestone achieved and is of acceptable quality to DOE
Good	Milestone achieved within + 30 days and is of acceptable quality to DOE
Marginal	Milestone achieved greater than + 30 days but within +90 days and is of acceptable quality to DOE
Unsatisfactory	Milestone achieved greater than +90 days or is of unacceptable quality to DOE

3.4.2.2 Management and Disposition Plan

The weight of this measure is 20%.

Develop an orphan radiological and nuclear materials management and disposition plan.
(Milestone: 3/31/04)

Performance Metric

Rating	Criteria
Outstanding	Milestone achieved two weeks early and is of acceptable quality to DOE
Excellent	Milestone achieved and is of acceptable quality to DOE
Good	Milestone achieved within + 30 days and is of acceptable quality to DOE
Marginal	Milestone achieved greater than + 30 days but within +90 days and is of acceptable quality to DOE
Unsatisfactory	Milestone achieved greater than +90 days or is of unacceptable quality to DOE

3.4.2.3 Waste Storage Plan

The weight of this measure is 25%.

Develop a plan to incorporate storage into the mission of the Waste Management Facility.
(Milestone: 8/30/04)

Performance Metric

Rating	Criteria
Outstanding	Milestone achieved two weeks early and is of acceptable quality to DOE
Excellent	Milestone achieved and is of acceptable quality to DOE
Good	Milestone achieved within + two weeks and is of acceptable quality to DOE
Marginal	Milestone achieved on 9/30/04 and is of acceptable quality to DOE
Unsatisfactory	Milestone not completed by 9/30/04

3.4.2.4 Deactivation and Decommissioning Plan

The weight of this measure is 20%.

Develop a Deactivation and Decommissioning (D&D) plan for the Building 490 PuBe sources.
(Milestone: 8/30/04)

Performance Metric

Rating	Criteria
Outstanding	Milestone achieved two weeks early and is of acceptable quality to DOE
Excellent	Milestone achieved and is of acceptable quality to DOE
Good	Milestone achieved within + two weeks and is of acceptable quality to DOE
Marginal	Milestone achieved on 9/30/04 and is of acceptable quality to DOE
Unsatisfactory	Milestone not completed by 9/30/04

3.4.2.5 Work Controls

The weight of this measure is 15%.

Objective

The objective of this measure is to promote increased efficiency and effectiveness of work controls that support activities in radiological areas.

Purpose and Supporting Information

Radiological access control software systems have existed for many years and are currently in use at multiple commercial nuclear utilities and several DOE sites. These systems tie together existing training and exposure databases with an electronic RWP system and promote efficient use of these resources in the field.

The greatest cost savings are to be realized at facilities with significant radiological exposures and a high frequency of access into posted radiological areas (e.g., Collider-Accelerator). If the evaluation justifies the expense, a system will be deployed at one high-dose BNL facility as a pilot.

Measure

BSA will evaluate the efficiency and cost savings of implementing a commercially-available radiological work controls system at Collider-Accelerator. The evaluation shall include costs of implementation that include both equipment and software support, administrative costs such as development of procedures, and maintenance costs.

Metric

The thoroughness of the evaluation and the quality of report provided to management determine the performance metric rating.

Rating	Criteria
Outstanding	Same as Excellent plus an evaluation conducted and documented of one non-BNL facility already using an automated work controls system
Excellent	Same as Good plus at least 2 commercially available work control packages evaluated against BNL technical specifications
Good	Technical specifications for implementation at C-A developed and documented
Marginal	Market survey of available work control systems and associated technical specifications conducted and documented
Unsatisfactory	No action taken

3.4.3 Measure - Pollution Prevention

The weight of this measure is 20%.

Objective

BSA will continue to develop and promote programs that improve environmental performance, effectively and efficiently managing and/or reducing environmental risks.

Purpose and Supporting Information

Investment in pollution prevention can help BSA reduce costs, create a safer workplace, and help protect the environment at the same time. The Laboratory's Pollution Prevention (P2) is focused on incorporating P2 into work planning (facility design, experimental review, process assessment, and work planning). Proposals for funding P2 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 P2 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 P2 goals are incorporated into the evaluation criteria for funding P2 projects. Additionally, having clear evidence of site-wide management commitment to, and implementation of, P2 initiatives, helps the Laboratory to be recognized as leaders in the DOE community and improves our chances of obtaining additional P2 funds. Savings and benefits from P2 projects only begin to accrue upon implementation, therefore successful implementation of proposed projects benefits the Laboratory and the measure includes implementation incentives.

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 P2 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 P2 objective in their organization's Environment Management System (EMS) Program.

- ESH&Q Directorate
 - Community, Education, Government, and Public Affairs (CEGPA) Directorate and Director's Office
 -
2. Pollution prevention proposals that are selected and funded by the P2 Council shall implement the projects in a timely manner.

Performance Level Metrics

Rating	Criteria
Outstanding	All organizational units demonstrated involvement in the P2 Program and all funded projects are fully implemented by August 30, 2004.
Excellent	Eight out of nine organizational units demonstrated involvement in the P2 Program and all funded projects are fully implemented by September 30, 2004.
Good	Seven out of nine organizational units demonstrated involvement in the P2 Program.
Marginal	Six out of nine organizational units demonstrated involvement in the P2 Program.
Unsatisfactory	Less than five of organizational units demonstrated involvement in the P2 Program.

3.4.4 Measure - Safety and Health Performance

The weight of this measure is 30%.

3.4.4.1 Safety Implementation Path Forward

The weight of this measure is 50%.

In FY 2003, BSA hired DuPont Safety Resources to benchmark the Laboratory's safety program against DuPont's 12 Essential Safety Management Elements. These elements were evaluated against the following safety performance levels:

- Level I – Fundamentals Minimum-adequate performance; may lack some basic systems and processes
 - Focus is on unsafe conditions and trailing indicators of performance
- Level II – Awareness Compliance with standards is generally high, but need help to identify problems, gaps and ways to improve safety management systems and processes.
 - Management understands its responsibilities in managing and improving safety performance, but tends to delegate planning and execution to Safety Group
- Level III Skills Line Management is involved in most aspects of the safety program, but needs help to develop the skills to drive the Safety Management System to excellence
- Level IV – Excellence Line Management is fully involved in leading, planning and executing the safety program
 - Systems and processes are working well; safety climate and attitudes are excellent
 - Communication flow is excellent in all directions; audits include focus on behavior
- Level V – World Class Safety goals and objectives are a prominent part of the business plan
 - All standards are aligned with and support the goals, objectives and plans
 - Most employees feel responsible for their co-workers' safety and act accordingly

- o Reaching self-sustained safety excellence; safety thinking permeates all aspects of work

During a DuPont-led Leadership Safety Workshop, BSA senior management committed to improving its safety performance by raising its performance levels in all 12 elements to the Excellent Level within 2 years (a 25 step improvement). These improvements will strengthen BNL's Integrated Safety Management Program, will advance our progress toward implementing the tenets of the Voluntary Protection Program, and will enhance our ability to audit successfully against ILO-OSH-2001 Guidelines.

For FY 2004, the Director's Safety Committee will develop and conduct a review process to determine improvements in the BNL Safety Programs against the DuPont Benchmark. DOE will have an opportunity to observe, participate, and concur in all aspects (e.g., planning, performance, and results) of the Director's Safety Committee review. This review will be completed by August 30, 2004.

FY 2004 Performance Evaluation

Rating	Criteria
Outstanding	≥ 15 Safety Performance Steps Improvement
Excellent	13 – 14 Safety Performance Steps Improvement
Good	10 – 12 Safety Performance Steps Improvement
Marginal	7 – 9 Safety Performance Steps Improvement
Unsatisfactory	< 7 Safety Performance Steps Improvement

3.4.4.2 OSHA Reportable Injury Management

The weight of this measure is 50%.

Background

The FY 2004 Occupational Injury Management measure has been developed to ensure continuation of BSA efforts to create a workplace conducive to worker safety and health and meet the DOE Office of Science (SC) injury/illness rate reductions. The SC expectation for injury/illness rates at SC laboratories is a Lost Workday Case Rate (LWCR) [or Days Away, Restricted, or Transferred (DART) rate] of 0.23 for FY07. For FY05, SC has established an interim goal of a DART rate = 0.50. For FY04, SC has established a progress point goal of a DART rate = 0.66. The BNL FY03 DART was 0.88.

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

Days Away, Restricted, or Transferred (DART) rate.

Where:

DART rate (per 100 FTEs) =

$$\frac{\text{Number of Days Away, Restricted or Transferred cases} \times 200,000}{\text{Total Hours Worked}}$$

For FY 2004, BSA will work to maximize improvement in its DART rate. The FY 2004 BSA occupational injury management performance metric will use a DART rate = 0.66 as the performance measure target rate. The time period used for this BSA metric will be from October 1, 2003 to September 30, 2004. The BNL performance value is calculated from the DOE Computerized Accident/Incident Reporting System (CAIRS).

Performance Incentive

Rating	Criteria
Outstanding	BNL DART ≤ 0.60
Excellent	>0.60 and ≤ 0.75
Good	>0.75 and ≤ 0.95
Marginal	>0.95 and ≤ 1.05
Unsatisfactory	>1.05

3.5 Objective - Site Infrastructure, Facilities and Operations

The weight of this objective is 10%.

BSA 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.

3.5.1 Measure – Pursue Alternative Financing (AF) for Infrastructure Projects

The weight of this measure is 30%.

Purpose, Means, and Strategies

Available infrastructure funding at BNL (capital replacement, capital renewal) has not been adequate to meet past, current, and future needs. Under funding 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.

BSA 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 some needed projects. The 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 FY 2003, BSA continued to develop an alternatively financed building project by:

1. Making opportunities known to potentially interested parties through solicitations, advertisement, 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 the **BNL Housing Reconstruction Project**.
4. Developing and submitting to DOE an OMB A-11/Economic Analysis on the Housing Reconstruction Project.
5. Developing and submitting the Performance Specification for the Energy Sciences Building (due 9/30/03).

For FY 2004, a two-pronged approach is planned. The first part, whose entire completion is contingent on a favorable resolution of its OMB A-11 analysis, is to continue the effort to develop the alternatively financed **BNL Housing Reconstruction Project**. The second part, whose entire completion is also contingent on its OMB A-11 analysis, is to continue to develop the alternatively financed **Energy Sciences Building**.

Measures

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

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

Note: Both of the following measures will be graded according to what milestones had the potential to be delivered within the fiscal year.

3.5.1.1 BNL Housing Reconstruction Project (HRP)

The weight of this measure is 67%.

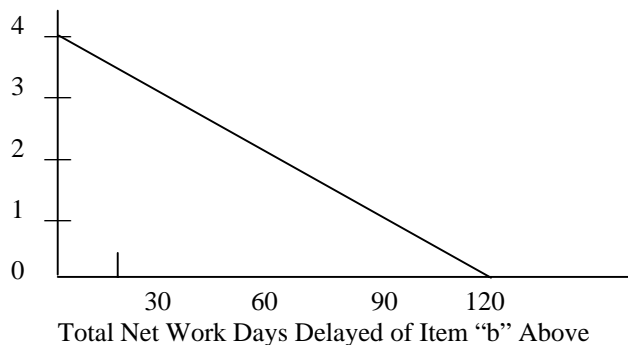
3.5.1.1.1 Housing Reconstruction RFP

The weight of this element is 25%.

- a) DOE Returns Approved RFP and OMB A-11/Economic Analysis to BSA* T₀
- b) BSA Issues RFP to Developers* T₀ + 4 Weeks

* Assumes these were not achieved in FY 2003

Metric



Rating	Criteria
Outstanding	>3.5 to 4.0
Excellent	>2.5 to 3.5
Good	>1.5 to 2.5
Marginal	>0.5 to 1.5
Unsatisfactory	≤0 to 0.5

3.5.1.1.2 Housing Reconstruction Contract

The weight of this element is 75%.

Metric*

Rating	Criteria
Outstanding (4.0)	Offeror/Developer selected and contract awarded by $T_o + 18$ weeks
Excellent (3.0)	Offeror/Developer selected and contract awarded by $T_o + 24$ weeks
Good (2.0)	Offeror/Developer selected and contract awarded by $T_o + 36$ weeks
Marginal (1.0)	Offeror/Developer selected and contract awarded by $T_o + 38$ weeks
Unsatisfactory (0)	Offeror/Developer selected and contract awarded by $T_o + > 38$ weeks

*Assumes developer bids are fair and reasonable according to the prevailing market conditions.

3.5.1.2 Energy Sciences Building (ESB)

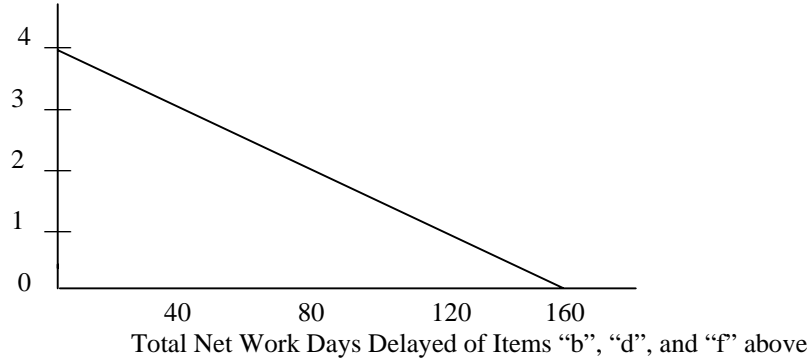
The weight of this measure is 33%.

3.5.1.2.1 ESB RFP (Includes OMB A-11 and Economic Analysis)

The weight of this element is 50%.

- | | |
|--|-----------------|
| a) BSA receives DOE comments on Performance Specification | T_o |
| b) BSA submits a complete RFP (Including A-11/Economic Analysis) to DOE | $T_o + 8$ Weeks |
| c) BSA Receives DOE Comments on RFP | T_1 |
| d) BSA Incorporates Comment Resolutions to RFP and returns to DOE | $T_1 + 6$ Weeks |
| e) DOE Returns Approved RFP (including A-11 Analysis/Economic Analysis to BSA) | T_2 |
| f) BSA Issues RFP to Developers | $T_2 + 4$ Weeks |

Metric (for part 1 of ESB)



Note: Delivering early on one item will improve delivering late on the other items. Example: Item “d” is delivered 15 work days early, item “b” had been delivered 25 work days late, and item “f” had been delivered on time, therefore, the Total Net Work Days Delayed of items B, D, and F would be 10 days.

Rating	Criteria
Outstanding	>3.5 to 4.0
Excellent	>2.5 to 3.5
Good	>1.5 to 2.5
Marginal	>0.5 to 1.5
Unsatisfactory	≤0 to 0.5

3.5.1.2.2 ESB Contract

The weight of this element is 50%.

Metric*

Rating	Criteria
Outstanding (4.0)	Offeror/Developer selected and contract awarded by T ₂ + 18 weeks
Excellent (3.0)	Offeror/Developer selected and contract awarded by T ₂ + 24 weeks
Good (2.0)	Offeror/Developer selected and contract awarded by T ₂ + 36 weeks
Marginal (1.0)	Offeror/Developer selected and contract awarded by T ₂ + 38 weeks
Unsatisfactory (0)	Offeror/Developer selected and contract awarded by T ₂ + > 38 weeks

*Assumes space charges or G&A are adequate payback mechanisms, and that developer bids received are fair and reasonable according to prevailing market conditions.

3.5.2 Measure - Project Management

The weight of this measure is 35%.

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

Rating	Criteria
Outstanding	(PM) = 0.90 to 1.00
Excellent	= 0.80 to 0.89
Good	=0.70 to 0.79
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:

Actual Present Year Funds [Line Item + GPP] Costed

Total Planned [Line Item + GPP] Costed

Notes:

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

PROJECT SCHEDULE COMPLIANCE (GPP and In House Energy Management [IHEM])

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

Description of Proposed Method:

1. BSA 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. Major GPP Projects with TEC > 1500K will be tracked similar to line items.
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 DOE in continuation of current approval process.

PROJECT SCHEDULE COMPLIANCE (Line Item and Major GPP)

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

(^1) Key controlled Milestones

Description of Proposed Method:

1. BSA 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 and Major GPP projects with key controlled milestones falling in the current fiscal year.
3. Determine current year milestones completed on or ahead of schedule.
4. Major GPP Projects are those with TEC > 1500K. Milestones for these projects will be approved as presented in the PE Monthly Report.

Notes:

- a. Key controlled milestones are those described in the approved Project Management Plan:
 - Design Start
 - Design Complete
 - Construction Start
 - Construction Complete
- b. Construction complete is defined as “substantially complete.”
- c. “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.

Notes:

- a. Justifiable Baseline Change Proposals (BCPs) will be approved by DOE for legitimate scope changes or reductions (i.e., due to program changes, reasonable unforeseen project conditions, new regulatory requirements, etc.)

Plant Engineering is not currently managing any projects classified as “Strategic Systems” under LCAM (formerly Major Projects and Major System Acquisitions).

3.5.3 Measure - Infrastructure Maintenance

The weight of this measure is 35%.

Purpose, Means, and Strategies

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

The first 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 (BSA’s ability to repair problems and restore service).

The second is indicator of Condition Assessment Survey (CAS) progress. CAS is a DOE program designed to survey buildings to determine their physical state and identify the magnitude of corrective actions (repair, overhaul, replacement) needed to achieve the desired condition state. CAS is important in accurately determining the maintenance and capital renewal backlogs that exist at BNL.

Infrastructure Reliability Index (RI)

The weight of this measure is 100%.

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

Electrical System Reliability (ESR):

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

Performance Measure

Rating	Criteria
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.

Total Customer Hours – Unplanned Outage Customer Hours

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):

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

Performance Measure

Rating	Criteria
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.

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

3.6 Objective - Communications and Trust

The weight of this objective is 10%.

3.6.1 Measure – Community, Education, Government and Public Affairs Management

The weight of this measure is 100%.

The Laboratory will maintain the foundation of trust and confidence it has built by: cultivating existing relationships and building partnerships with key stakeholders, elected and appointed officials, businesses, civic leaders, educators and other important constituencies; effectively communicating the Laboratory's scientific initiatives and accomplishments; working to fulfill the education mission shared with DOE to increase public understanding of science; and enhancing employee communication and involvement opportunities.

The Laboratory is expected to incorporate into CEGPA plans, programs and processes public relations best practices and the results of Laboratory-based formative and evaluative research. The Laboratory will strive to reach, measure and maximize relationships with "science interested and attentive" publics and policy makers and establish a long-term (e.g., three to five years) planning process that builds upon the advances in management and communication it achieves each year to inform these publics about the Laboratory's research and science initiatives.

3.6.1.1 Communicating the Compelling Vision and Science Priorities of the Laboratory

For FY 2004, the Laboratory's communication efforts will stress the science priorities and initiatives as identified through the Lab's institutional planning: the Center for Functional Nanomaterials, upgrades to the National Synchrotron Light Source, RHIC (especially research results that will be presented at the annual Quark Matter conference), homeland security programs, the NASA Space Radiation Laboratory, and computational biology.

The Laboratory will integrate its community, education, government and public affairs activities to align with supporting these priorities. Using a team approach that includes representatives from the above groups, strategic plans will be updated or written and then implemented as these initiatives develop. A focus on funding agencies, the media, users, elected officials, employees, educators, and stakeholders will be included in the planning and implementation processes.

Quality communications with the media and science attentive publics about the Laboratory's science priorities will be emphasized. This will be achieved by strengthening relationships with the press, and developing high caliber

press releases, informational materials and website information. Stakeholder interests, concerns, and expectations will be considered. Science education initiatives and well-established outreach programs will concentrate on the identified science projects.

The Laboratory's science vision and priorities will be brought to the attention of policy makers and decision makers. The Laboratory will support senior management efforts and will participate in one-on-one and group meetings with these stakeholders.

The Laboratory will meet the above requirements for three science initiatives in FY 2004.

Recognizing its role in supporting the U.S. Department of Energy and DOE's Office of Science's broader communications challenge, the Laboratory will also participate in at least one major DOE or DOE Office of Science event.

3.6.1.2 Internal Communications

The Laboratory will continue to implement the Employee Communications and Involvement program developed in FY03. Four areas will be focused on: incorporating feedback from the employee focus groups, collaboration efforts with Human Resources, two-way communication opportunities, and line management communications training to build management awareness of the importance of improving employee dialogues. The Employee Communications and Involvement Advisory Group will be asked to provide guidance in identifying issues important to employees. In addition, the community involvement process will be used to provide a systematic approach to address those issues.

3.6.1.3 Issues Management

There is a systematic, established process at the Laboratory that helps to identify issues, trends and stakeholder attitudes that can affect the Laboratory. Recognizing these issues provides opportunities for the Lab to develop strategies and tactics to deal with them. During FY04, Level I managers will be queried and their feedback will be used to ensure the information provided in the system fits their needs. The Laboratory will expand access to the system to Level II managers who have been identified by their direct reports.

Performance Metric

An independent third-party review team, the Communications and Trust Advisory Panel, will evaluate the results of meeting the above objective. The individuals on the panel are recognized as experts in the fields of public affairs, community, communications and web design.

The program will be measured against the nationally recognized Baldrige Criteria for Approach, Deployment and Results.