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U. S. DEPARTMENT OF ENERGY
IDAHO OPERATIONS OFFICE

Performance Evaluation Measurement Plan for Bechtel BWXT Idaho, LLC

Contract No. DE-AC07-99ID13727

Evaluation Period: October 1, 2000 – September 30, 2001

Approval: _____
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Performance Evaluation Measurement Plan
Bechtel BWXT Idaho, LLC
Contract No. DE-AC07-ID13727

The Idaho National Engineering and Environmental Laboratory (INEEL) is a science-based, applied engineering national laboratory. The INEEL combines scientific, engineering system, and business management expertise through operational excellence to execute multi-program missions for DOE. The primary focus of this contract is to complete DOE program missions while developing, strengthening, and expanding the quality of the INEEL science base in support of DOE and federal missions.

The Performance Evaluation and Measurement Plan (PEMP) covers the administration of the award fee provisions of Contract No. DE-AC07-99ID13727 with Bechtel BWXT Idaho, LLC (BBWI) regarding performance incentives and allocation of total available fee. PEMP 2001 evaluation period is October 1, 2000 through September 30, 2001.

The PEMP is structured to reflect the goals and objectives of the current DOE Strategic Plan, the EM Paths to Closure Plan, and the INEEL Institutional Plan. The PEMP also implements the Department of Energy's final rule (62 FR 34842) issued June 1997 requiring the adoption of performance-based contracting concepts. These performance-based concepts are incorporated into the PEMP and require development of performance measures used to evaluate a contractor's accomplishments on either a subjective basis, objective basis, or performance based incentives. Final fee determinations are based upon definitive performance accomplishments.

The PEMP utilizes a balanced scorecard model as a performance evaluation method to translate the INEEL mission strategy into critical outcomes, objectives, and criteria. Through the use of this balanced scorecard model it is DOE-ID's goal to focus INEEL priorities, leverage diverse mission capabilities, align workforce to all performance objectives, and eliminate a narrow focus regarding performance outcomes.

The Critical Outcomes in the PEMP define success in terms of results that must be accomplished in the next five years. The five year focus is then broken down into objectives that are multiple year initiatives in which significant progress must occur to support the critical outcomes identified above. This process not only focuses the contractor on short term goals for the evaluation period but also the far-reaching objectives of the INEEL for the entire term of the contract. This performance evaluation and reporting system will ensure that performance expectations are institutionalized throughout all ID and BBWI organizations. It will also provide a method to attain performance status for DOE-ID and BBWI in which performance issues can be identified, addressed and resolved in a timely manner.

In addition to the performance requirements of the PEMP, DOE-ID expects BBWI to effectively execute the FY2000 Program Execution Guidance (PEGs), related work plans, and all contract requirements. Execution of the PEGs is considered "expected" level of performance by BBWI with no performance or award fee associated with the effort. PEGs are to be performed within budget and must be aligned with authorized work packages and associated direct/indirect funding. DOE-ID also requires compliance with environment, safety and health (ES&H) standards and disciplined conduct of operations for the protection of the employees, environment and the public.

The following five critical outcomes have been defined as the basis for BBWI's performance-based evaluation and fee determination.

Operational Excellence—Perform work in a safe and compliant manner, within an approved technical operations basis, which includes administrative management systems, ESH&Q, Conduct of Operations, etc as required by contract.

Mission Accomplishment—Position the INEEL as a modern sustainable National Laboratory by supporting and executing overall programs in target DOE mission areas within the determined cost, scope and schedule.

Integrate R&D with Operations—Demonstrate added value by integrating R&D activities to support INEEL programs and missions and subsequently translate these solutions on a national basis.

INEEL Revitalization—Revitalize the INEEL's science and engineering base and facilities, ensuring excellence in technical areas required by INEEL's mission roles.

Leadership—Provide systems, infrastructure, behavior, and vision resulting in mission accomplishment and preeminent national laboratory performance.

The Fee Determination Official (FDO) is the Manager, Idaho Operations Office. The content of the PEMP can be revised through mutual agreement between DOE-ID and BBWI and a formal change control process. However, if the parties cannot reach agreement on changes to the PEMP the FDO shall have the right to unilaterally establish changes as stated in H.31, Creation of Performance-Based Incentives Process. The FDO may unilaterally change the matters in this Plan, providing BBWI receives notice of changes at least 30 calendar days prior to the beginning of thee evaluation period to which the changes apply as provided in I.49, DEAR 970-5204-54, Total Available Fee: Base Fee Amount and Performance Fee Amount.

The criteria and measures within each Critical Outcome will be the primary means for evaluation of the contractor's performance. However, as stated in I.66, DEAR 970-5204-86, Conditional Payment of Fee, Profit or Incentives of the contract, the FDO will consider any other information available which relates to the contractor's performance of all other contract requirements as set forth in the Statement of Work, PEGs, or work authorization directives, or similar documents in the final determination of fee earned.

CONTENTS

1.0 Critical Outcome—Operational Excellence 1

1.1 Critical Objective: Sustain operational excellence through successful ISM, which includes VPP, Conduct of Operations, Conduct of Maintenance, and other related functional areas 1

1.1.1 Performance Criterion: Integrated Safety Management (ISMS) 1

1.2 Critical Objective: Improve management of radiological work and radiological contamination 3

1.2.1 Performance Criterion: Reduce contamination events 3

1.3 Critical Objective: Improve the INEEL Maintenance Management Program 4

1.3.1 Performance Criterion: Improve the INEEL Maintenance Management Program 4

1.4 Critical Objective: Sustain a responsive and compliant Safeguards and Security Program 6

1.4.1 Performance Criterion: Implement a workable system for providing appropriate access to INEEL laboratories and facilities by foreign nationals . 6

1.5 Critical Objective: Improve the Project Management System 7

1.5.1 Performance Criterion: Establish, manage, and implement cost and schedule baselines of construction projects 7

1.6 Critical Objective: Achieve full environmental regulatory compliance 8

1.6.1 Performance Criterion: Improve environmental compliance 8

Appendix A—Section 1.0, Performance Based Incentives (PBIs) 10

2.0 Critical Outcome—Mission Accomplishment 16

2.1 Critical Objective: Meet commitments to compliance agreements 16

2.1.1 Performance Criterion: Ship 3,100 m^3 transuranic (TRU) waste out of Idaho 16

2.1.2 Performance Criterion: Meet treatment and disposal goals for MLLW and LLW 16

2.1.3 Performance Criterion: Transfer TMI-2 spent nuclear fuel to dry 16

2.1.4 Reserved 16

2.1.5 Reserved 16

2.1.6 Performance Criterion: Meet all required treatment milestones in accordance with the Site Treatment Plan 17

2.1.7 Performance Criterion: Manage liquid waste inventory at the Tank Farm 17

2.1.8 Performance Criterion: Accomplish Waste Area Group (WAG) 7 Draft RI/FS 18

2.1.9 Performance Criterion: Accomplish activities which support initiation of WAG 3 ICDF operation 19

2.1.10 Performance Criterion: Meet Voluntary Consent Order Milestones 20

2.1.11 Performance Criterion: Implement QA Standard RW-0333P 20

2.1.12 Performance Criterion: Achieve the listed milestones to show balanced progress across the entire Environmental Restoration program 20

2.1.13 Performance Criterion: Ongoing fuel receipts and transfers 21

2.2 Critical Objective: Provide world-class science and technology to support ongoing DOE missions 22

2.2.1 Performance Criterion: Produce science and technology products recognized to be state of the art and support current customer science and technology needs to enhance INEEL's capabilities to meet mission requirements 23

2.2.2 Performance Criterion: Produce science and technology products recognized to be state of the art and that support current Environmental Quality needs ... 24

2.2.3 Performance Criterion: Maintain the Nuclear Energy leadership role in nuclear safety 25

2.2.4 Performance Criterion: Produce science and technology products that are recognized to be state of the art and support current customer Energy Resources needs 26

2.2.5 Performance Criterion: Support current National Security Program needs 27

2.3 Critical Objective: Successfully execute work scope on schedule and within budget.. 28

2.3.1 Performance Criterion: Continue to meet Special Manufacturing Capability (SMC) annual production requirements 28

2.3.2 Performance Criterion: Continue to support the NR test plan, maintain the TRA infrastructure and maximize performance on the ATR incentives 28

2.3.3 Performance Criterion: Implement strategies from EM 28

2.3.4 Performance Criterion: Implement key FY 2001 projects and activities 29

Appendix A—Section 2.0, Performance Based Incentives (PBIs) 30

3.0 Critical Outcome—Integrate Research and Development and Operations 56

3.1 Critical Objective: Science and Technology solutions 56

3.1.1 Performance Criterion: Science and technology support EM mission 56

3.1.2 Performance Criterion: Alternatives to the EM baseline 57

3.2 Critical Objective: Execute INEEL programs through use of integrated internal and external scientific, technical, and operational resources 59

3.2.1 Performance Criterion: Establish and implement INEEL processes 59

3.3 Critical Objective: Apply INEEL technology, experience, and capabilities 60

3.3.1 Performance Criterion: Use technical developments from both Operations and R&D 60

3.3.2 Performance Criterion: Deploy INEEL technologies and solutions on a national and international basis 60

4.0 Critical Outcome INEEL Revitalization 62

4.1 Critical Objective: Revitalize INEEL infrastructure to better support DOE's mission and the initiatives of the INEEL institutional plan 62

4.1.1 Performance Criterion: Provide the physical infrastructure and capital equipment needed to support the Subsurface Science Initiative 62

4.2 Critical Objective: Enhance the INEEL's scientific capabilities and broaden its scientific expertise in DOE mission-critical areas 62

4.2.1 Performance Criterion: Meet the goals for improvement described in the Scientific Excellence and Eminence Index 63

4.2.2 Performance Criterion: Strengthen the INEEL's scientific computing and simulation capabilities 64

4.3 Critical Objective: Enhance the scientific and technical capability of the INEEL to address DOE- Environmental Management (EM) needs for the complex 64

4.3.1 Performance Criterion: Complete the Complex-wide Vadose Zone and Long Term Stewardship Science and Technology roadmaps 64

4.3.2 Performance Criterion: Develop preeminent subsurface science research capabilities at INEEL consistent with the defined responsibilities of INEEL to EM 65

4.4 Critical Objective: Develop and maintain capabilities in advanced nuclear applications that improve the economics, environmental acceptability, safety and proliferation-resistance of nuclear energy 67

4.4.1 Performance Criterion: Demonstrate ability to produce results that promote the development and advancement of DOE-NE defined nuclear programs 68

4.5 Critical Objective: Enhance the use of INEEL capabilities to support DOE's Energy Efficiency, Fossil Energy and Office of Science missions 69

4.5.1 Performance Criterion: Develop unique INEEL leadership roles for performing the mission-related work of Energy Efficiency, Fossil Energy and Office of Science 69

4.6 Critical Objective: Continue to develop and apply capabilities in National Security to identify and diminish risks associated with the proliferation of weapons of mass destruction and terrorism, and enhance environmental security 71

4.6.1 Performance Criterion: Increase support to DOE in its international efforts to reduce the risks of proliferation and to enhance environmental security, over the next three years 71

4.6.2 Performance Criterion: Over the next three years, assure efficient use of existing INEEL capabilities and resources to meet the needs of DOE and other national security missions 72

4.7 Critical Objective: Implement the staffing plan for scientists and engineers, ensuring it reflects the assumptions to appropriately staff critical mission areas identified in the INEEL Institutional Plan 72

4.7.1 Performance Criterion: Establish and maintain a workforce which is structured consistent with the INEEL institutional plan and specific program goals to effectively and efficiently achieve the critical mission areas 72

5.0 Critical Outcome Leadership 74

5.1 Critical Objective: INEEL employees demonstrate understanding of and perform in alignment with INEEL mission, vision, and values 74

5.1.1 Performance Criterion: Establish and institutionalize the processes, planning systems, and management approaches to obtain support for and alignment to the INEEL's strategic goals and objectives 74

5.2 Critical Objective: Integrate and align management systems to institutionalize a consistent management approach 74

5.2.1 Performance Criterion: Execute a business decision process which results in comprehensive management decisions 74

5.3 Critical Objective: Provide stewardship through effective, efficient, and comprehensive resource management to maximize mission results 75

5.3.1 Performance Criterion: Develop and execute a comprehensive cost and budget formulation and execution management methodology 75

5.4 Critical Objective: Provide stewardship through comprehensive capital investment and infrastructure management 75

5.4.1 Performance Criterion: Continue to implement improvements into the INEEL Infrastructure Long-Range Plan and planning process that better optimizes the existing infrastructure, provides better visibility to future requirements/needs through in depth integration of missions/programs across the INEEL 75

5.4.2 Performance Criterion: Develop and implement a long-term Information Technology strategy that includes business and scientific computing and is in alignment with the INEEL Institutional Plan and the Infrastructure long-range plan 77

5.5 Critical Objective: Optimally structure and productively use the workforce to achieve INEEL missions 78

5.5.1 Performance Criterion: Maintain a workforce that is consistently structured with the INEEL Institutional Plan and specific program goals to effectively and efficiently achieve the overall INEEL mission 78

5.6 Critical Objective: Clearly demonstrate leadership in making informed decisions about the future success of the INEEL 78

5.6.1 Performance Criterion: Sustain a leadership approach that considers the necessary information to provide well informed, integrated solutions to solve INEEL challenges 78

Performance Evaluation Measurement Plan
October 1, 2000 – September 30, 2001

1.0 Critical Outcome—Operational Excellence

Fee: $3.8M (11%)

Lead: Jerry Bowman—DOE-ID Paul Divjak—INEEL

Perform work safely, within compliance, and with an approved technical operations basis, which includes administrative management systems, ESH&Q, Conduct of Operations, Conduct of Maintenance, etc., as required by contract.

1.1 Critical Objective: Sustain operational excellence through comprehensive use of Integrated Safety Management, which includes the Voluntary Protection Program, Conduct of Operations, Conduct of Maintenance, and other related functional areas.

1.1.1 Performance Criterion: Sustain Integrated Safety Management at the INEEL so that all aspects of work are aligned to Integrated Safety Management principles.

Accountability: Robert Stallman—DOE-ID Lee Watkins—INEEL

Description: For this performance period, the focus will be on self-assessment, feedback on the adequacy of controls, and continuous improvement and institutionalization of the Integrated Safety Management culture. The Facility Evaluation Board is a key element of the integrated contractor oversight process and is the primary vehicle to assess sustained continuous improvement. The board is lead by a senior BBWI Manager with a team of assigned subject matter experts. Facility Evaluation Board reviews are line management evaluations of the approved and implemented Integrated Safety Management System infrastructure, including implementation of Quality Assurance and Conduct of Operations, emphasizing effective work control practices. Compliance with Operating and Maintenance procedures will be part of the required elements for assessment in the facility evaluation boards. The board will periodically conduct a comprehensive, multidisciplined review of each INEEL facility area.

Justification: In FY 2000, Bechtel BWXT Idaho, LLC (hereafter BBWI) was incentivized to develop a comprehensive integrated assessment process and a risk-based assessment schedule for FY 2001. Because the Facility Evaluation Board is an important aspect of self-assessment, as well as an innovative and potentially highly effective assessment tool, its successful implementation will help ensure that Integrated Safety Management controls put in place in FY 2000 are being implemented and institutionalized through a continuous improvement processes. Facility Evaluation Board reviews are line management evaluations of the implemented Integrated Safety Management system, including implementation of Quality Assurance and Conduct of Operations, and emphasizes effective work control practices. The board will assess compliance with Operating and Maintenance procedures. Through the board reviews, BBWI will improve the safety culture and raise the level of operational productivity and efficiency. The Facility Evaluation Board is the baseline for continuous improvement.

It is essential that management continue to focus on the safety assessment review/technical safety requirement upgrades. The safety analysis review/technical safety requirement (SAR/TSR) upgrades are the foundation for identifying hazards in the workplace and establishing the safety envelope for operations. They are critical to safe and efficient operation of the INEEL facilities.

The Voluntary Protection Program (VPP) focuses on worker involvement in workplace safety, which is considered critical to the INEEL safety program and the continuation of Integrated Safety Management. The Voluntary Protection Program firmly establishes worker involvement as a part of the INEEL safety culture and reinforces the connection between safety and productivity.

1.1.1.1 Measure: DOE-ID will review the FEBs against the approved criteria and check the consistency of the FEB results with those of DOE's oversight activities at the time of the FEB assessment.
[Fee: $513K]

Accountability: Robert Stallman—DOE-ID William Gay—INEEL

Facility Evaluation Board reviews will be conducted at each of the following Site areas:

- Central Facilities Area
- Test Area North
- Test Reactor Area
- Idaho Nuclear Technology and Engineering Center
- Radioactive Waste Management Complex
- Waste Reduction Operations Complex
- Idaho Falls Facilities and Idaho Research Center
- Specific Manufacturing Capability.

Conduct a rigorous self-assessment (Facility Evaluation Board assessments) at each site area in accordance with the Criteria Review and Approach Documents approved by the Site Operations Director, BBWI. Assessments conducted in FY 2001 will establish a performance baseline, including a site-wide rating system. This baseline will be derived from the results of self-assessments by Site areas that support continuous improvement within the Integrated Safety Management System (ISMS). (Each Site area will receive a grade in selected ISMS functional areas as determined by the Site Operations Director, BBWI. The performance metrics will be based on these grades and on the "binning" of deficiencies in the selected ISMS functional areas.) Concurrence in the self-assessment grading system and review scope, including functional and operational areas, is by Facility Evaluation Board review and by the Deputy Assistant Manager for Operations, DOE-ID.

Basis of Validation: A Facility Evaluation Board report and briefing to INEEL Senior Management will be provided for each review conducted. DOE-ID will review the FEBs against the approved criteria and check consistency of the FEB results with those of DOE-ID's oversight activity at the time of the FEB assessment.

Fee Allocation: The maximum fee for this measure is $513,000 for completion of 8 FEBs as defined above.

The fee percentage to be paid will be based on completion of the reviews, as listed below:

- RWMC 10%
- SMC 10%
- TRA 15%
- WROC 10%
- IFF/IRC 10%
- TAN 15%
- CFA 10%

- INTEC 20%.

1.1.1.2 Measure: Complete the safety assessment review/technical safety requirement (SAR/TSR) upgrades defined in PLN 489, Rev. 1, for The Idaho Nuclear Technology and Engineering Center, Test Reactor Area, Test Area North and Power Burst Facility in accordance with the approved scope and schedule. **[Fee: $510K]**

Accountability: Bob Boston—DOE-ID Gerald Paulson—INEEL

Basis of Validation: 50% of the fee will be paid for on time submittal of SAR/TSR upgrades per PLN-489 rev 1. Up to 50% of the fee will be paid based upon a set of quality criteria. The set of quality criteria will be jointly agreed to by BBWI and DOE-ID. BBWI will provide an analysis of how quality requirements were met. DOE-ID will provide a validation of the analysis. This will allow for a review to ensure that each deliverable meets the minimum set of quality criteria. Validation will be based on the cost, scope (includes quality), and schedule of the SAR/TSR documents submitted to DOE-ID.

Fee Allocation: The maximum available fee for this measure is as follows:

FY 2001 $ 510,000
FY 2002 $ 570,000

To earn full incentive fee, BBWI will meet DOE requirements for cost, scope (includes quality) and schedule. BBWI must meet the scope and schedule of the current DOE-approved SAR/TSR Implementation Plan revision (BBWI PLN-489, rev. 1). The incentive fee will be based on the ratio of the number of actual deliverables to the number of deliverables defined in Plan PLN-489, rev. 1.

If the actual cost of work performed exceeds the budgeted cost of work performed by 30% for the total plan in a fiscal year, the earned incentive fee will be reduced by 30%.

1.1.1.3 Measure: Achievement of VPP Star Status by 9/30/01. **[Fee: $114K]**

Accountability: Jerry Bowman—DOE-ID Dick Watkins—INEEL

Basis of Validation: Recommendation by onsite EH Assessment team of VPP Star Status by September 30, 2001.

Fee Allocation: VPP Star Status earns 100% fee for this measure of $114,000.

1.2 Critical Objective: Improve management of radiological work and radiological contamination.

1.2.1 Performance Criterion: Reduce contamination events by reducing the area of contamination, reducing radiological exposure and demonstrating improvement in management and control of radiological work.

Accountability: Ken Whitham—DOE-ID Skip Singer—INEEL

Description: The INEEL can significantly improve operational and cost efficiency and reduce radiological risk of ongoing work by reducing the size of radiological areas at the INEEL.

Justification: Attention to implementing radiologically sound work practices and properly controlling or eliminating the radiological hazards associated with loose contamination areas are key elements in the

Department of Energy and INEEL's As-Low-As-Reasonably-Achievable (ALARA) and Integrated Safety Management programs. Implementation of the principles of ALARA can identify and help eliminate the causes of radiological contamination incidents and reduce radiological exposure, resulting in more efficient and cost effective operations to better meet the needs of our customers. Reduction of these contamination areas will add cost efficiencies to INEEL work by removing radiological control requirements from future work in the decontaminated areas.

1.2.1.1 Measure: Reduce the size of the radiologically contaminated area at the INEEL. See PBI 1.2.1.1. Section 1.0, Appendix A. **[Fee: $225K]**

1.2.1.2 Measure: Improve radiological exposure management for Test Reactor Area radiological work. See PBI 1.2.1.2. Section 1.0, Appendix A. **[Fee: $50K]**

1.2.1.3 Measure: Improve the Test Reactor Area radiological performance to reduce the number of radiological events. See PBI 1.2.1.3, Section 1.0, Appendix A. **[Fee: $110K]**

1.3 Critical Objective: Improve the INEEL Maintenance Management Program to ensure that maintenance work is accomplished cost effectively and safely in support of mission accomplishment.

1.3.1 Performance Criterion: Improve the INEEL Maintenance Management Program to ensure that maintenance work is accomplished cost effectively and safely in support of mission accomplishment.

Accountability: Bill Leake—DOE-ID Lee Watkins—INEEL

Description: BBWI will evaluate the current Maintenance Management Program and implement improvements necessary to establish a more effective program. Current industry practices will be applied to ensure that the program has appropriate performance indicators such that management can monitor the effectiveness of the program by each site area and the INEEL as a whole.

Justification: A significant amount of funding is expended each year on maintaining INEEL assets. It has become more and more apparent—as there has been a significant increase in unplanned equipment breakdowns and overall unreliability impacting INEEL's ability to achieve mission objectives—that the INEEL Maintenance Management Program has not been effective. The INEEL assets in question have aged considerably and in some cases are being used differently than originally intended or designed. In addition, the Office of the Inspector General has identified deficiencies in the management of maintenance at the INEEL. Furthermore, the administrative and computer systems used to manage the maintenance management function are outdated and inadequate compared to those of industry. It is necessary to renovate the INEEL Maintenance Management Program (processes/systems, procedures, computer tools, people skills, etc.).

1.3.1.1 Measure: The contractor must develop, institutionalize and implement the INEEL Maintenance Management Program, including the establishment of performance measures, implementation of documentation and training, and implementing a means for assessing maintenance backlogs. **[Fee: $456K]**

Accountability: Brian Conlon—DOE-ID John Clymo—INEEL

Milestone 1: By 3/31/01, the contractor must establish a set of performance measures that will be used to measure the effectiveness of the INEEL Maintenance Management Program.

Milestone 2: By 6/30/01 the contractor must develop and implement the documentation and training requirements necessary to institutionalize the INEEL Maintenance Management Program. This documentation will incorporate requirements of the applicable DOE directives.

Milestone 3: By 9/30/01 the contractor must have a system implemented that provides the ability to analyze and prioritize the backlog of maintenance (deferred and Backlog of Maintenance and Repair [BMAR]).

Milestone 4: By 9/30/01 the contractor shall demonstrate at TRA and at one other site area that the INEEL Maintenance Management Program is implemented.

Basis of Validation: DOE Order 4330.4B and DOE-ID Directives (ID O 433.A) on Maintenance Management. The system must have the necessary attributes to be effective in managing maintenance, be compliant with DOE directives on maintenance management and be consistent with current industry practices as appropriate to the INEEL workscope. Out year performance will be evaluated against Maintenance Implementation Plans, Site Maintenance Action Plans, established performance measures, and observed conduct of maintenance.

Fee Allocation: Fee for this measure is $456K. Because of the critical importance of achieving the milestones associated with this measure, milestones 1 through 4 must be achieved to receive the fee allocated to this measure. Partial fee may be earned for late delivery provided that the delivery is coordinated in advance and the milestone is completed within the fiscal year. No follow-on out year fees will be available until these measurements are met; future fee may go unearned or be reduced.

1.3.1.2. Measure: With no adverse impact to priority 1 and 2 work orders, the contractor will achieve a sitewide meantime to repair (MTTR) for priority 3 work orders of sixty days by 9/30/01. TRA and INTEC will also achieve the sixty-day MTTR. **[Fee: $228K]**

Accountability: Brian Conlon—DOE-ID Bill Gay—INEEL

Basis of Validation: The MTTR will be calculated from validated data provided through the Maintenance Management System based upon established parameters for this measure. Passport system outputs, maintenance backlogs, and deferred maintenance reports will also be used. Exceptions to this measure must be agreed to by the DOE-ID Maintenance Manager and the Deputy Assistant Manager for Operations.

Fee Allocation: The maximum fee for this measure is $228,000.

1.3.1.3 Measure: By 9/30/02 the contractor must achieve a 95% completion rate of required preventive maintenance activities for all of the INEEL. By 9/30/01, the contractor must achieve a 75% completion rate of required preventive maintenance activities for all of the INEEL. TRA and INTEC must also achieve a 75% completion rate. **[Fee: $228K]**

Accountability: Brian Conlon—DOE-ID Bill Gay—INEEL

Basis of Validation: The completion rate will be calculated from validated FY2001 performance data, based upon established parameters for this measure. Passport System performance data, equipment lists, and equipment history records will be used to support validation. Exceptions to this measure must be agreed to by the DOE-ID Maintenance Manager and the Deputy Assistant Manager for Operations.

Fee Allocation: The maximum fee for this measure is $228,000.

1.3.1.4 Measure: The contractor must maintain a craft work force within the Test Reactor Area Maintenance Organization (TRAMO) of sufficient size and mix necessary to support the Test Reactor Area. In particular, this measure is an indication of the ability of the maintenance organization to maintain the workforce necessary to support the maintenance needs of the Advanced Test Reactor and Test Reactor Area. **[Fee: $228K]**

Accountability: Brian Anderson—DOE-ID Bill Gay—INEEL

Basis of Validation: Unfilled craft vacancies in the TRAMO organization at TRA as a cumulative total measured at the end of Fiscal Year 2001. Unfilled vacancies are the number of TRAMO craft positions that are unfilled below the authorized staffing level. This measure is calculated using standard FTE accounting practices.

Fee Allocation: The maximum fee for this measure is $228,000; future fee may go unearned or be reduced. An unfilled vacancy is a vacancy below the authorized staffing level as measured by authorized FTEs.

FEE PAYMENT SCHEDULE

Unfilled Vacancies	Fee Earned
<1.0 FTE	100%
1.5 to ≥ 1.0 FTE	95%
2.0 to ≥ 1.5 FTE	90%
2.5 to ≥ 2.0 FTE	80%
3.0 to ≥ 2.5 FTE	70%
3.5 to ≥ 3.0 FTE	50%
> 3.5 FTE	No Fee

1.4 Critical Objective: Sustain a responsive and compliant Safeguards and Security program for the INEEL.

1.4.1 Performance Criterion: Implement a workable system for providing appropriate access to INEEL laboratories and facilities by foreign nationals (visitors, temporary assignees, and employees) while maintaining compliance with the INEEL Safeguards and Security Program.

Accountability: Jim Werner/Bob Green—DOE-ID Jerry Ethridge/John Noon—INEEL

Description: Development of a Foreign National Access and Work control Program that fully recognizes the nature of the INEEL multi-programs and that meets all applicable DOE regulations and requirements.

Justification: Access by foreign nationals to U.S. Department of Energy laboratories and facilities has become a national concern. The INEEL is a multiprogram laboratory with many programs affiliated with international entities (for example, Environmental Management). Further, the success of many programs depends on the ability to employ and retain the best talents available, many of whom are foreign

nationals. The mission-driven need to share information with foreign nationals is perceived to conflict with the need to maintain security integrity. DOE has a need to improve the management of these conflicting needs at its laboratories so that an optimum balance is achieved.

1.4.1.1 Measure: (1) Develop and implement a set of recommendations for modifying our systems to accommodate the needs of security and mission accomplishment. Recommendations should take into consideration the measurement of our ability to efficiently meet programmatic needs for foreign visitors/staff. Present the recommendations to DOE-ID management for approval by February 28, 2001. (2) As a pilot, follow the recommendations that will meet the needs of the new Fusion Project (housed in TRA-666/666A); that is, reasonably arrange for the presence of foreign nationals where needed at site facilities while still conforming to all DOE security requirements by April 30, 2001. **[Fee: $190K]**

Accountability: Jim Werner/Bob Green—DOE-ID Jerry Ethridge/John Noon—INEEL

Basis of Validation: DOE-ID will determine the success of the implementation of the recommendations in the pilot case. They will determine whether the arrangement to share information and use expertise for the mission was optimized without compromising security requirements. The results of this determination will be documented, and INEEL senior management will be briefed.

Fee Allocation: The maximum fee available is $190,000.

1.5 Critical Objective: Improve the Project Management System to increase program efficiency and output.

1.5.1 Performance Criterion: Establish, manage, and implement cost and schedule baselines of construction projects at the INEEL while working safely and identifying cost savings.

Accountability: Bill Leake—DOE-ID Asa Kelley—INEEL

Description: The performance measures for this period concentrate on demonstrating that project management processes have been implemented. Projects must have technical, cost, and schedule baselines agreed upon by BBWI and DOE-ID. They should be tied to mission needs and scheduled for optimum efficiency. Cost savings must be considered at all times.

Justification: The purpose of this measure is to increase performance on projects to meet baselines, with an emphasis toward cost savings. These savings can be applied to other high-priority projects or needs.

1.5.1.1 Measure: A list of GPP, line-item, general purpose capital equipment projects and operating-funded construction projects will be identified for each site area and agreed upon by BBWI and DOE-ID. Milestones will be established for selected projects. Milestones can include project authorization, title designs, construction start and complete, systems operation testing complete, and turnover to operations. **[Fee: $380K]**

Accountability: Wayne Shigley—DOE-ID Asa Kelley—INEEL

Fee Allocation: The maximum fee available on this measure is $380,000.

Basis of Validation: Payment of the fee is according to the following schedule of milestones achieved.

95% of Milestones Achieved = 100% fee

90% of Milestones Achieved	=	95% fee
85% of Milestones Achieved	=	85% fee
75% of Milestones Achieved	=	50% fee
<70% of Milestones Achieved	=	No fee

For each of the above agreed upon projects that exceeds the Total Project Cost (TPC) baseline, the fee earned above will be reduced by 5%, not to exceed the available fee for this measure. For each of the above agreed upon projects that under runs the Total Project Cost (TPC) baseline by 5% or more, the fee earned above will be increased by 5%, not to exceed the available fee for this measure. All baseline change proposals (BCPs) throughout the project must be approved by DOE-ID. Project baselines will not be changed to account for poor performance.

1.5.1.2 Measure: Establish construction cost reduction goals in a plan for improvement and implementation to be delivered to DOE-ID by 5/1/01. Implement specific actions to reduce construction costs, develop metrics and measure actual cost performance in accordance with the DOE-ID approved plan. **[Fee: $190K]**

Accountability: Wayne Shigley—DOE-ID John Howanitz—INEEL

Fee Allocation: The maximum fee available for this measure is $190,000.

Basis of Validation: Validation will be based on the timeliness and effective implementation of the specific actions identified in the DOE-ID approved plan that both BBWI and DOE-ID have agreed can be measured in FY01.

1.6 Critical Objective: Achieve full environmental regulatory compliance.

1.6.1 Performance Criterion: Improve environmental compliance performance.

Accountability: Teresa Perkins—DOE-ID Ron Guymon—INEEL

Description: BBWI will demonstrate improvement as indicated by a reduction in the number and severity of violations and a strong commitment to continuous improvement.

Justification: If the INEEL is to provide leadership to the DOE complex in solving environmental problems, and gain support of stakeholders as a competent and trustworthy institution, it must exhibit a strong commitment to full and uncompromising regulatory compliance, self disclosure of identified noncompliance, and continuous improvement.

1.6.1.1 Measure: (1) Number of citations received; (2) severity of citations including any fines assessed; (3) commitment to effective corrective actions; (4) effective self-disclosure and follow-up; (5) innovative approaches to achieve compliance; (6) involvement of the workforce; (7) effective communication between BBWI and DOE-ID, between BBWI management and workers, and between BBWI and regulatory agencies; (8) accurate, consistent, and reproducible required environmental reports (e.g., RCRA biennial report, annual Idaho hazardous waste report, Emergency Planning and Community Right-to-Know Act/Superfund Amendments and Reauthorization Act of 1986 (EPCRA/SARA) reports, emission inventories.) **[Fee: $304K]**

Accountability: Teresa Perkins—DOE-ID Ron Guymon—INEEL

Basis of Validation: Best available information from the State of Idaho and the Environmental Protection Agency and evidence of effective actions and corrective actions will be used to validate contractor performance.

Fee Allocation: The maximum fee available for this measure is $304,000.

1.6.1.2 Measure: Improve the INEEL Pollution Prevention Program. **[Fee: $76K]**

Accountability: Chuck Ljungberg—DOE-ID Ron Guymon/Lee Smith—INEEL

Basis of Validation:

1. Effect a 5% reduction in waste generated from the 1999 baseline for all routinely generated wastestreams.
2. Increase the office materials recycling program to encompass all site locations.
3. Reduce D&D generated waste by 10% as measured against a FY 2001 baseline established after receipt of FY 2001 funding. Reduction examples include recycling, sale, reuse, and backfill usage. Should the Moratorium on recycling change or have further impacts, the PEMP and/or waste baseline would be re-negotiated.
4. Update and increase participation to 80% in the INEEL P2 awareness program, which supports the Integrated Safety Management System, ISO 14001, and compliance objectives.

Fee Allocation: The maximum fee available on this measure is $76,000.

Section I – Fee Information

Maximum Available Incentive Fee:

$225,000

Section II – Critical Outcome, Objective and related information

Critical Outcome Section No.	Objective No.	Criterion No.	Measure No.
1.0 Operational Excellence	**1.2**	**1.2.1**	**1.2.1.1**

Section III – Performance Measure

Title

Radiologically Contaminated Area Reduction

Section IV – Accountability

DOE-ID	**INEEL**
Ken Whitham	**Skip Singer**

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

Reduce the size of the radiologically contaminated area at the INEEL based on the table below.

JUSTIFICATION:

Attention to implementing radiologically sound work practices and properly controlling or eliminating the radiological hazards associated with loose contamination areas are considered to be key elements in the Department of Energy and INEEL's As-Low-As-Reasonably-Achievable (ALARA) and Integrated Safety Management programs. Implementation of the principles of Integrated Safety Management, Operations Excellence, Conduct of Operations, and ALARA can identify and help eliminate the causes of radiological contamination incidents and reduce radiological exposure, resulting in more efficient and cost effective operations to better meet the needs of our customers. Reduction of loose contamination areas will add cost efficiencies to INEEL work by removing radiological control requirements from future work in the decontaminated areas.

ASSUMPTIONS:

1. The result of the FY 2000 Cost Benefit Analysis should be used as the basis for defining the areas agreed to by DOE and INEEL as available for reduction at each facility.
2. Discovery of contamination areas not identified in the baseline will not be included in this incentive for the current fee period. DOE-ID and BBWI will normalize the baselines for the subsequent annual fee periods. This normalization will add any new areas to the incentive when appropriate for decontamination based on a cost benefit analysis.
3. Definition of the contamination area includes high contamination areas.
4. Contamination areas (CAs) will be based on documented information in the individual facility, INEEL ALARA reports, and radiological control records.
5. The baseline CA excludes agreed upon permanent CAs, such as the Advanced Test Reactor Compartment, as documented in the associated cost benefit analysis.
6. Increases in a contamination area resulting from unplanned events will be subtracted from the decontamination total during the current fee period. However, CAs that result from an unplanned event and subsequently cleaned up during the fee period will have a net zero affect on the CA baseline.

7. The fee rate base "x," award per square foot, will be recalculated annually, based on a ratio of maximum annual fee divided by 25% of the established baseline available square feet.
8. The minimum square feet to be decontaminated is 5000 ft^2 before fee is earned.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

Performance expectations are based on the annually established baseline of the INEEL's contamination areas. For FY 2001, of the total 250,000 ft^2 of contaminated area at the INEEL a baseline of 40,458 ft^2 has been identified for potential decontamination. The percentage of the total available incentive fee earned will be awarded based on the average percent of square footage reduced, using the following values:

Area reduction percentage	Fee Award (See Assumption 8)
> 20% area reduction	Fee = 1.2 ($18.54)($ft^2$ cleaned)
16 – 20% area reduction	Fee = 1.15 ($18.54)($ft^2$ cleaned)
11 – 15% area reduction	Fee = 1.1 ($18.54)($ft^2$ cleaned)
0 – 10% area reduction	Fee = 1 ($18.54)($ft^2$ cleaned)

The contamination area reduction is calculated using the above table. Percentage reductions are to be rounded to the closest percentage category using standard rounding techniques.

The contamination area will be rebaselined at the beginning of each performance period.

BASIS FOR VALIDATION:

The contamination area reduction incentive covers all INEEL facilities operated by BBWI and all of its subcontractors.

To calculate this incentive, the INEEL contamination area baseline will be based on the agreed-to results of cost benefit analyses that identify the contaminated areas available for reduction at each facility. These areas will be documented in the FY 2000 cost benefit analysis, individual facility and INEEL ALARA reports, and radiological control records. The contamination area baseline will be reestablished at the start of each fiscal year. This incentive includes all facilities applicable to contract No. DE-AC07-99ID13727.

Validation will be performed annually by DOE-ID's Nuclear Safety Branch, with support from the respective DOE-ID facility representatives. A statistically significant sample of the appropriate contamination areas and their associated records will be reviewed for recordability classification and accurate counts.

The contamination area will be rebaselined at the beginning of each performance period.

Negotiation of the basis for this incentive may be reopened at the request of either party, based on changes in factors that would affect the calculation of the performance indicator.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information

Maximum Available Incentive Fee:

$50,000

Section II – Critical Outcome, Objective and related information

Critical Outcome Section No.	Objective No.	Criterion No.	Measure No.
1.0 Operational Excellence	**1.2**	**1.2.1**	**1.2.1.2**

Section III – Performance Measure

Title

Radiological Exposure Management for Test Reactor Area

Section IV – Accountability

DOE-ID	INEEL
Brian Anderson	**Skip Singer**

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

Improve radiological exposure management for Test Reactor Area radiological work.

JUSTIFICATION:

Attention to implementing radiologically sound work practices and properly controlling or eliminating the radiological hazards associated with loose contamination areas are considered to be key elements in the Department of Energy and INEEL's As-Low-As-Reasonably-Achievable (ALARA) and Integrated Safety Management programs. Implementation of the principles of Integrated Safety Management, Operations Excellence, conduct of Operations, and ALARA can identify and help eliminate the causes of radiological contamination incidents and reduce radiological exposure, resulting in more efficient and cost effective operations to better meet the needs of our customers. Reduction of loose contamination areas will add cost efficiencies to INEEL work by removing radiological control requirements from future work in the decontaminated areas.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 NE/NR budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

Fee Allocation: The fee will be earned for total dose equivalent based on the following equation:

$18K(X - Y), not to exceed $50,000 each fiscal year

Where

X = the dose equivalent target value for all Test Reactor Area activities, in person-rem, to be agreed upon by BBWI and DOE-ID management, consistent with the accepted principles of ALARA prior to the start of FY 2001.

Y = measured total dose equivalent for all Test Reactor Area activities for the fiscal year.

If X - Y is less than zero, no fee is earned.

Minimum Fee: $0

Maximum Fee: $50,000.

Significant changes in radiological work scope may cause the target value to be revised consistent with the accepted principles of ALARA. Changes to this value will be by mutual agreement between DOE-ID and BBWI.

BASIS FOR VALIDATION:

Successful implementation of the five core functions of Integrated Safety Management is an essential part of work activities in radiological areas. One measure of success is reduced personnel radiation exposure. The performance measure for this incentive is total personnel radiation exposure, as measured by total dose equivalent, for work on Test Reactor Area activities, as indicated by RCIMS.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information

Maximum Available Incentive Fee:

$110,000

Section II – Critical Outcome, Objective and related information

Critical Outcome Section No.	Objective No.	Criterion No.	Measure No.
1.0 Operational Excellence	**1.2**	**1.2.1**	**1.2.1.3**

Section III – Performance Measure

Title

TRA Radiation Event Reduction

Section IV – Accountability

DOE-ID	INEEL
Brian Anderson	**Skip Singer**

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

The INEEL will improve the Test Reactor Area radiological performance to reduce the number of radiological events by reducing the number of events for:

A. Reportable skin contamination
B. Reportable contaminated scrubs w/unknown employee
C. Reportable clothing contamination
D. Particle events
E. Reportable spills/radioactive material outside controlled areas

BBWI will categorize reportable events as defined in MCP-190, "Event Investigation and Occurrence Reporting," and as agreed to by DOE-ID. Particle events are defined as events where one or more particles (> 1000 d/m) are found outside of a contamination area (CA). This does not include personnel contamination events or scrubs found contaminated during release surveys in TRA-622, as these events are tracked separately.

JUSTIFICATION:

Attention to implementing radiologically sound work practices and properly controlling or eliminating the radiological hazards associated with loose contamination areas are considered to be key elements in the Department of Energy and INEEL's As-Low-As-Reasonably-Achievable (ALARA) and Integrated Safety Management programs. Implementation of the principles of Integrated Safety Management, Operations Excellence, Conduct of Operations, and ALARA can identify and help eliminate the causes of radiological contamination incidents and reduce radiological exposure, resulting in more efficient and cost effective operations to better meet the needs of our customers.

BASELINE

The funding for this activity is part of BBWI's FY 2001 NE/NR budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

Fee Allocation: Fee will be earned for reduced radiological events based on the following equation:

RPI = [(400 × A) + (300 × B) + (200 × C) + (200 × D) + (400 × E)]/FY 2000 totals.

The total of this equation will then be normalized by multiplying it by the RWP hour ratio of FY 2001 to FY 2000.

BASIS FOR VALIDATION:

Each event will only be counted in one of the categories (A through E) above. For example, a single person with both skin and clothing contamination would be counted under Category A). In addition, radiological events that involve multiple reportable categories (for example, skin and clothing) will be calculated using the category with the highest multiplier.

In the case of multiple workers contaminated from one event, each contaminated worker is counted as a separate contamination event.

The RPI will be calculated and rounded to the nearest two decimal places.

The fee will be determined based on the following performance criteria:

RPI < or = 0.90	Payment $ = 100%
0.9 < RPI < 1.02	Payment $ = 100% - (RPI - 0.9)10%/0.02
RPI > or = 1.02	No fee earned

Minimum Fee: $0

Maximum Fee: $110,000

Note 1: No mid-fiscal year interim payments will be made under this incentive.

Note 2: The incentive will be reevaluated and rebaselined at the end of the evaluation period.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

2.0 Critical Outcome—Mission Accomplishment

Fee: $20.0M (59%)

Lead: Lisa Green—DOE-ID Paul Divjak—INEEL

Position the INEEL as a modern and sustainable national laboratory by supporting and executing overall programs in target DOE mission areas within the determined cost, scope, and schedule.

2.1 Critical Objective: Meet commitments to compliance agreements on schedule, within cost, and, as appropriate, through the integration of science and technology.

2.1.1 Performance Criterion: Ship 3,100 m^3 transuranic (TRU) waste out of Idaho by December 31, 2002 (cubic meters shipped per year).

Accountability: L. Fritz—DOE-ID Lee S. Sygitowicz—INEEL

Description: Ship 3,100 m^3 of TRU waste out of the State of Idaho by December 31, 2002.

Justification: The criterion is important to the INEEL because it will permit continuation of DOE spent nuclear fuel shipments to the INEEL and meet the Settlement Agreement.

2.1.1.1 Measure: Ship 1,160 m^3 to WIPP by September 30, 2001. (Total shipped at the end of FY 2001 is 1,256 m^3). The total of 1,256 m^3 represents the quantity shipped under the current contract. The overall shipment total is 1,282 m^3. See PBI 2.1.1.1, Section 2.0, Appendix A. **[Fee: $2,900K]**

2.1.2 Performance Criterion: Meet treatment and disposal goals for mixed low-level waste and low-level waste.

2.1.2.1 Measure: Meet 2001 Treatment and Disposal goals for mixed low-level waste and low-level waste by September 30, 2001. See PBI 2.1.2.1, Section 2.0, Appendix A. **[Fee: $800K]** (See PBI for Change Control 01CC14)

2.1.3 Performance Criterion: Transfer TMI-2 spent nuclear fuel to dry storage by June 1, 2001.

Accountability: Peter Dirkmaat—DOE-ID Larry Ferrell—INEEL

Description: BBWI will continue dewatering, drying, interim storage, and shipping operations at Test Area North and transfer all remaining TMI-2 spent nuclear fuel to dry storage by June 1, 2001.

Justification: The June 1, 2001 criterion is of critical importance to the INEEL because it meets a Federal District Consent Order milestone of the Settlement Agreement

2.1.3.1 Measure: Complete remaining transfers of TMI-2 spent nuclear fuel to dry storage by 6/1/01. See PBI 2.1.3.1, Section 2.0, Appendix A. **[Fee: $2,100K]**

2.1.4 Reserved.

2.1.5 Reserved.

2.1.6 Performance Criterion: Meet all required treatment milestones in accordance with the Site Treatment Plan. (Note that transuranic waste is covered under 2.1.1. Volume of waste processed through the High Level Liquid Waste Evaporator is covered under 2.1.7.2.)

Accountability: L. Fritz—DOE-ID Lee S. Sygitowicz/Jim Valentine—INEEL

Description: BBWI will continue working to meet Site Treatment Plan milestones.

Justification: The criterion is important to the INEEL because the Site Treatment Plan is implemented with a legally enforceable consent order.

2.1.6.1 Measure: Meet all required milestones for FY 2001 in accordance with the Site Treatment Plan. **[Fee: $680K]**

Basis of Validation: The performance will be validated by the: Integrated Waste Tracking System (IWTS) for mixed low-level waste (MLLW); through the tracking of the number of filters leached and debris treated in monthly performance reviews and milestone tracking for high-level waste (HLW);HLW; and approved documentation submitted to the State of Idaho.

Assumptions:

- State-approved changes in STP milestones negotiated under Section 2.1.1 and 2.1.2 of the Site Treatment Plan will be accepted as changes to this PEMP measure.
- Resolution of the 2000 RCRA notice of violation will not impact the operation of the HLW facilities, the filter leach, or debris treatment processes.
- The approved permit for debris treatment is received and will not impose changes or additional requirements to those in the draft permit.
- Onsite or commercial treatment capability and capacity is available during the fiscal year.
- The INEEL proposed closure schedule for WERF is approved by the State of Idaho.

Fee Allocation: Fee for this measure is $680,000. All Site Treatment Plan milestones must be met for payment of this recommended fee. No fee will be paid if any Site Treatment Plan milestone is not met.

2.1.7 Performance Criterion: Manage liquid waste inventory at the Tank Farm.

Accountability: Joel Case—DOE-ID James Valentine—INEEL

Description: Continue to manage the liquid waste at the Tank Farm through a variety of activities, including waste minimization, developing a HLW path forward, and evaporating the liquids in the tanks.

Justification: The criterion is important to the INEEL because all work is targeted to reduce Tank Farm inventory to support ceasing use of pillar and panel tanks by 2003 and cease use of the entire Tank Farm by 2012, and make all high-level waste road-ready by 2035. Cease use is defined in Notice of the Noncompliance/Consent Order, Modification 2, Section 6.20.G as emptying the tanks to their heels, "i.e., the liquid level in each tank will be lowered to the greatest extent possible by the use of existing transfer equipment."

2.1.7.1 Measure: Develop technology and implement a valid path forward for sodium-bearing, liquid waste. **[Fee: $700K]**

The following items will be completed in support of this measure:

- Select the effective sorbent bed material to remove cesium from sodium-bearing waste to support the Cs/IX transuranic grout alternative by August 1, 2001
- Develop expected high- and low-activity fraction product compositions for the estimated sodium-bearing waste feed variations, from solvent extraction treatment of sodium-bearing waste by September 1, 2001.

Basis of Validation: Submittal of the identified information via letter or technical report to DOE-ID by the defined date will constitute completion of this measure. BBWI submittals will have completed internal review prior to transmittal to DOE-ID.

Assumptions: DOE will shortly issue the Final Idaho High-Level Waste and Facility Disposition EIS. Soon after, a ROD will be issued. Upon issuing the ROD, DOE may modify the current HLW baseline and incorporate an appropriate PEMP item more closely associated with decisions in the ROD.

Fee Allocation: Fee for this measure is $700,000. Fee will be split equally between the two deliverable items, with 50% of the fee provided for completion of the sorbent bed material selection, and the remaining 50% provided for the completion of development of the fraction product compositions.

2.1.7.2 Measure: Empty tanks WM-184 and WM-186 to the heel level; place them out of service; and reduce the volume in WM-181 through blending. See PBI 2.1.7.2, Section 2.0, Appendix A.
[Fee: $1,100K]

2.1.7.3 Measure: Submit to DOE-ID an effective final RCRA Tank Farm Closure Plan by December 8, 2000. **[Fee: $500K]**

Basis of Validation: The December 8, 2000 submittal will have incorporated all the DOE-ID comments BBWI has obtained by November 13, 2000, will have ID's approval to modify or waive select comments and must be determined by DOE to be a high-quality plan expected to be approved by the regulator.

Assumptions:

- The December 8, 2000 final submittal date is based on receiving all DOE-ID comments by November 13, 2000.
- If DOE-ID comments are not received by November 13, 2000, the December 8, 2000 date will delay day for day.
- The December 8, 2000 date supports the NONCO to submit the plan to the State of Idaho by December 31, 2000.
- The closure approach presented to Idaho DEQ in July 2000 is not modified by DOE or Idaho DEQ.

Fee Allocation: Fee for this measure is $500,000 and is considered a final payment. Failure to comply with the "basis of validation" will forfeit the anticipated fee payment. No fee will be paid if the December 8, 2000 date is missed and the assumptions prove valid.

2.1.8 Performance Criterion: Accomplish Waste Area Group (WAG) 7 Draft RI/FS by March 31, 2002.

Accountability: K. Hain—DOE-ID Lee Smith—INEEL

Description: BBWI will complete installation and monitoring of nuclear probes and instrumented probes in selected locations within the Subsurface Disposal Area. Data analysis will be initiated from the monitoring network, interbed geochemical properties and inventory updates in preparation for the remedial investigation and baseline risk assessment. All scope will be performed in accordance with the approved characterization plan.

Justification: The criterion is important to the INEEL because it provides data critical to the WAG 7 baseline risk assessment and RI/FS.

Assumptions:

- Agencies concur on type and location of WAG 7 probes by January 31, 2001.
- To deliver the Draft Work Plan Addendum by December 31, 2000 requires the final statement of work to be signed by October 10, 2000.
- To meet the OU7/13-14 commitments, agency concurrence is required on the WAG 7 path forward by October 10, 2000.

2.1.8.1 Measure: Start Type B probe installation by June 1, 2001. **[Fee: $475K]**

Basis of Validation: BBWI will complete its measure by the specified deadline to earn 50% of the fee. Insertion of the first Type B probe will define the start of Type B probe installation. Insertion of 10 additional probes during FY01 will earn the other 50% of the available fee.

Fee Allocation: Total fee for this measure is $475,000. Fifty percent ($237,500) will be paid for insertion of the first probe and five percent ($23,750) will be paid for insertion of each of the next 10 probes.

2.1.8.2 Measure: Submit the OU 7-13/14 draft operational remedial investigation/feasibility study RI/FS work plan addendum to DOE-ID by December 31, 2000. **[Fee: $475K]**

Basis of Validation: ~~Acceptance~~ Submittal of the draft remedial investigation/feasibility study work plan addendum ~~by~~ to DOE-ID by 12/31/2000 of sufficient quality to immediately transmit to the agencies for review ~~to the regulators without a technical correction cycle will define submission of the work plan determined by DOE to be a high-quality path forward expected to be approved by the regulator.~~ (01CC01, 3/5/01)

Fee Allocation: Fee for this measure is $475,000.

2.1.9 Performance Criterion: Accomplish activities, which support initiation of WAG 3 ICDF operation by July 15, 2003.

Accountability: K. Hain—DOE-ID Lee Smith—INEEL

Description: Complete the conceptual design for the INEEL CERCLA Disposal Facility.

Justification: The criterion is important to the INEEL because the INEEL CERCLA Disposal Facility is critical for the timely disposal of INEEL CERCLA waste.

2.1.9.1 Measure: Issue draft SSSTF Title I (30%) design concurrently to DOE-ID and the agencies by November 1, 2000; issue draft ICDF Title I (30%) design concurrently to DOE-ID and the agencies by

April 26, 2001; issue draft SSSTF Title II (90%) design/RA work plan concurrently to DOE-ID and the agencies by September 25, 2001. See PBI 2.1.9.1, Section 2.0, Appendix A. **[Fee: $660K]**

2.1.10 Performance Criterion: Meet Voluntary Consent Order Milestones.

Accountability: J. Snook—DOE-ID Mary Magleby—INEEL

Description: BBWI will focus on correcting site-wide items out of compliance with the Resource Conservation and Recovery Act (RCRA) across the INEEL.

Justification: The criterion is important to the INEEL because it meets a Consent Order requirement and avoids significant fines and penalties.

2.1.10.1 Measure: Meet all milestones delineated in Appendices A and B of the Consent Order Action Plan within the overall budget. See PBI 2.1.10.1, Section 2.0, Appendix A. **[Fee: $550K]**

2.1.11 Performance Criterion: Implement Quality Assurance Standard RW-0333P for all nonlicensed Spent Nuclear Fuel activities.

Accountability: Peter Dirkmaat—DOE-ID Larry Ferrell—INEEL

Description: Complete the audit for QA Standard RW-0333P that was implemented for all non-licensed Spent Nuclear Fuel activities during FY 2000. The audit will be performed by non-M&O employees using National Spent Nuclear Fuel Program QA procedures.

Justification: The criterion is important to the INEEL because it supports Settlement Agreement requirements.

2.1.11.1 Measure: Implemented program passes an audit. **[Fee: $100K]**

Basis of Validation: DOE will document its evaluation of the implementation of the QA standard RW-0333P for all non-licensed spent nuclear fuel activities. DOE will assess implementation of all applicable 18 elements and supplements.

Assumptions: None

Fee Allocation: The fee for this measure is $100,000. Payment is as follows:

- Maximum award 100% - no significant conditions adverse to quality
- 90% of maximum award – no more than 3 significant conditions adverse to quality
- 85% of maximum award – no more than 5 significant conditions adverse to quality
- No fee will be paid for more than 5 significant conditions adverse to quality.

2.1.12 Performance Criterion: Achieve FFA/CO enforceable milestones to show balanced progress across the entire Environmental Restoration program.

Accountability: Katie Hain—DOE-ID Lee Smith—INEEL

Description: This measure covers multiple WAGs, except WAGs 3 and 7, with signed records of decision.

Justification: Continued Environmental Restoration remediation activities required in accordance with the Federal Facilities Agreement and Consent Order (FFA/CO).

Assumptions:

- Projects are funded to the level requested in the Detailed Work Plan effective October 1, 2000. Insufficient funding will cause the measure to be renegotiated.
- Regulatory agencies meet review deadlines as specified in the FFA/CO or project documents, or both. Regulatory agency extensions will result in the schedule being extended by the same amount of time extended.
- The Allied Technology Group will obtain its Toxic Substances Control Act (TSCA) permit by February 2001 and can accept V-tank waste. If the Allied Technology Group does not obtain the permit within the allotted time, the appropriate measures will be reevaluated.
- Any change in regulations governing this work will cause the measure to be renegotiated.
- There will be no changes to the currently agreed-upon approach to select in situ bioremediation, monitored natural attenuation, and pump and treat. The public will not request an additional 30-day review period for the proposed plan. The public will agree with the approach outlined in the proposed plan.
- The V-tanks remedial action will be planned in a V-tanks-specific Remedial Design/Remedial Action (RD/RA) work plan. Sampling data will be available in time to complete the draft work plan on schedule. The Environmental Protection Agency (EPA) and the Idaho Department of Health and Welfare (IDHW) will not change the specifics of the actions agreed upon in the OU 1-10 record of decision.
- Excavated soil can be stored or disposed of at the INEEL CERCLA Disposal Facility. The EPA and IDHW will agree with the sampling strategy to determine which soils require excavation.
- The WAG 7 Remedial Investigation/Feasibility Study (RI/FS) schedule is not changed; therefore, the WAG 10 RI/FS schedule is not impacted.
- Agreements reached previously with the agencies regarding groundwater treatment will remain valid; changes to those agreements will cause the measure to be renegotiated.
- DOE-ID review of 2.1.9.1 measures will occur during BBWI's operational review board reviews.

2.1.12.1 Measure: Complete all enforceable FFA/CO deadlines listed in the DWP for the first two quarters of FY 2001. **[Fee: $265K]**

Basis of Validation: BBWI will complete its measure by the specified deadline to earn full fee. Agreement by regulators is not a measure of validation.

Fee Allocation: The fee for this measure is $265,000. BBWI will lose a fraction of fee equal to the fraction of milestones missed. An all-or-none approach is not considered since each measure can be individually influenced by factors outside the control of the contractor.

2.1.12.2 Measure: Complete all enforceable FFA/CO deadlines listed in the DWP for the second two quarters of FY 2001. **[Fee: $265K]**

Basis of Validation: BBWI will complete its measure by the specified deadline to earn full fee. Agreement by regulators is not a measure of validation.

Fee Allocation: The fee for this measure is $265,000. BBWI will lose a fraction of fee equal to the fraction of milestones missed. An all-or-none approach is not considered since each measure can be individually influenced by factors outside the control of the contractor.

2.1.13 Performance Criterion: Ongoing fuel receipts and transfers

Accountability: Pete Dirkmaat—DOE-ID Larry Ferrell—INEEL

Description: BBWI will plan for domestic spent nuclear fuel receipts at the INEEL and for storage of these spent nuclear fuel transfers upon their receipt at the INEEL.

Justification: The criterion is important to the INEEL because it allows the DOE to continue progress toward closing the West Valley Demonstration Project.

2.1.13.1 Measure: BBWI will declare readiness to receive the West Valley fuel shipment by April 20, 2001. **[Fee: $150K]**

Basis of Validation: ~~Readiness to receive fuel will encompass preparation of all required procedures, training of personnel to the required procedures, readiness at the Central Facility Area (including the Gantry crane and lifting fixtures, and onsite transportation plan) and readiness at Test Area North (including preparation and approval of a safety analysis for the storage), as well as any Hot Shop activities (lifting fixtures, work platforms, resources) that need to occur to place the casks into storage.~~

Readiness to receive the West Valley fuel will encompass preparation of required receipt and handling procedures, training of personnel to the applicable procedures, and preparation and implementation of the onsite transportation plan to transport the two West Valley casks on the railcars from the Scoville railway siding to the Idaho Nuclear Technology and Engineering Center (INTEC) railway siding at the south end of the facility. Readiness to receive the casks for temporary storage at INTEC will include preparation or review of receipt and temporary storage procedures as required, training of personnel to the applicable procedures, and modification and approval of plant safety documentation to incorporate the temporary storage of the West Valley fuel on the railcars on the INTEC railway siding. **(01CC06, 2/26/01)**

Fee Allocation: The fee for this measure is $150,000.

2.1.13.2 Measure: ~~Upon receipt of the West Valley fuel, BBWI will place it into storage at Test Area North (TAN) within 35 days.~~ **[Fee: $50K]** BBWI will place the West Valley SNF into temporary interim storage on the railcars on the railway siding inside the INTEC access control fence line when received. The two casks, TN-REG and TN-BRP, will be used for temporary storage of the West Valley SNF at INTEC. **(01CC07, 2/26/01)**

Assumptions: A location other than TAN may be used if it is in the best interests of DOE-ID and BBWI to place the West Valley spent nuclear fuel into temporary interim storage other than at TAN until the planned trade study in FY 2001 regarding the long-term viability of TAN is completed. West Valley does not institute revision to the current approach.

Basis of Validation: There are two TN casks the TN-REG and TN-BRP. These are dual-purpose casks to be used for transportation and storage. These casks will be placed on a dry storage pad within 35 days after they arrive at the CFA facility (placement of the casks will be the basis of acceptance). The storage location will have an approved SAR addressing the safe storage of these casks.

Fee Allocation: The fee for the measure is $50,000.

2.2 Critical Objective: Provide world-class science and technology for the ongoing DOE missions. (Missions covered by 2.2 include Environmental Restoration and Waste Management, Nuclear

Engineering, and Environmental Restoration and Waste Management program areas such as Transuranic and Spent Nuclear Fuel.)

2.2.1 Performance Criterion: Develop science and technology products that are currently in transition from basic science to application which address a broad range of EM technology needs throughout the complex.

Accountability: George Schneider—DOE-ID Ray Stults—INEEL

Description: BBWI is developing a long-term technical program focused on core research that enables understanding of environmental processes, development of new tools to gather data, and the actual collection of baseline environmental technical data, which are an important component in a comprehensive environmental science program and includes problem-driven specific research. This performance criterion focuses on developing the core environmental research activities.

Justification: Technical uncertainty pertaining to contaminant fate and transport will continue to be important to DOE for many years, particularly in the context of environmental remediation and long-term stewardship of DOE lands. A recent evaluation (gap analysis) of the Environmental Quality Research and Development portfolio by the Strategic Laboratory Council states that significant gaps exist in a variety of areas and that the area of highest priority is environmental restoration.

2.2.1.1 Measure: Install the secondary ion mass spectrometry (Hot SIMS) system and demonstrate operation within 60 days of installation. See PBI 2.2.1.1, Section 2.0, Appendix A. **[Fee: $80K]**

2.2.1.2 Measure: Develop a scientific basis for determining the feasibility of using applied electrical fields to modify the shallow subsurface redox potential in soils to either enhance or lessen the removal of contaminants, particularly cesium, from INEEL soils. The science will involve in situ and bioremediation and phytoremediation of native species as an alternative to mechanical methods of soil removal and disposal to clean up low levels of surficial and shallow contamination of soils on the INEEL site.
[Fee: $50K]

Accountability: George Schneider—DOE-ID Melinda Hamilton—INEEL

Justification: Cleanup of areas of moderately contaminated soil typically involves removing the existing vegetation from the area, stripping the soil to some depth, then disposing of the soil. Developing a method that is less destructive of the native ecology and more cost effective is desirable.

Basis of Validation: The INEEL will evaluate the control of shallow subsurface redox potential by applying electrical fields to enhance or degrade in situ phyto- and bioremediation by native or introduced species of bacteria and/or plants for cleaning contaminated soils. This in situ treatment is to limit the mobility of mobilized contaminants, particularly cesium within the treatment (e.g., root or biologically active) zones. An external institution, anticipated to be the National Science Foundation (NSF) CenSSIS Center, is expected to be involved. The center has expertise in applied field electro-kinetics and has done work in controlling the mobility of contaminants and stimulating bacterial and plant growth with applied electrical fields,both in the initial feasibility study and in the development of a proposal for future work in this area.

The initial feasibility study will be based on limited laboratory and field studies. The overall effort will include extracting cesium from soil with existing vegetation at selected sites at the INEEL (e.g., Stationary Low Power Reactor), and laboratory-based research and development to elucidate mechanisms controlling Cs movement in the rhizosphere.

Fee Allocation: $50K

2.2.1.3 Measure: Development of new numerical models to predict the fate and transport of contaminants in the vadose zone at the INEEL in order to predict the removal of mobile contaminants from groundwater by natural processes in the vadose zone. **[Fee: $100K]**

Accountability: George Schneider—DOE-ID James Seydel—INEEL

Basis of Validation: This effort will include (1) selecting the appropriate next step in developing the smoothed particle hydrodynamics (SPH) or moving particle semi-implicit (MPS) or weighted least squares (WLS) method for subsurface flow applications from among the following three: (a) surface catalyzed chemical reactions, (b) small particle transport and surface deposition, (c) surface tension effect on liquid transport (by Nov. 30, 2000); and (2) developing and demonstrating a Lagrangian SPH model with transient, subsurface flow of water through a representative porous and/or fractured media with the physical effects of phenomena (a), (b), or (c) above, as selected in the first milestone (~~March 31, 2001~~ August 31, 2001). **(01CC17, 3/5/01)**

(1) Selection of the appropriate next step in developing the smoothed particle hydrodynamics (SPH) method for subsurface flow applications from among the following three (a) surface catalyzed chemical reactions, (b) small particle transport and surface deposition, (c) surface tension effect on liquid transport (November 30, 2000); and (2) development and demonstration of a Lagrangian SPH model with transient, subsurface flow of water through a representative porous and/or fractured media with the physical effects of phenomena (a), (b), and (c) above, as selected in the first milestone (March 31, 2001).

Fee Allocation: $100K (the request for the fee ... be increased from $100K to $125K is not approved at this time due to the unavailability of unallocated fee) **(01CC17, 3/5/01)**

2.2.2 Performance Criterion: Provide science and technology solutions to meet specific INEEL technical needs within an agreed schedule.

Accountability: George Schneider—DOE ID Paul Kearns—INEEL

Description: Significant needs exist within the INEEL Environmental Management programs that must be addressed to enable efficient execution of its cleanup mission. Research and Development and Operations have been analyzing the needs and developing the required science and technology to address those needs. Several needs have near-term requirements, and the requisite technologies have been or are nearly developed and ready for deployment.

Justification: Development and delivery of the technologies are required to support programmatic milestones and enable key cleanup objectives.

2.2.2.1 Measure: Field-test nonintrusive surface and probe-hole-deployed characterization and imaging technology. See PBI 2.2.2.1, Section 2.0, Appendix A. **[Fee: $159K]** **(See PBI for 01CC09, 2/26/01)**

2.2.2.2 Measure: Install and operate instrumented boreholes and wells adjacent to INTEC percolation ponds by August 31, 2001. See PBI 2.2.2.2, Section 2.0, Appendix A. **[Fee: $183K]** **(See PBI for 01CC10, 2/26/01)**

2.2.2.3 Measure: Investigate, develop, and demonstrate a simplified tank solids sampling method and solids level detection to support development of the preliminary characterization baseline for the Tank Farm tank heels. **[Fee: $183K]**

Accountability: George Schneider—DOE-ID Michael Connolly—INEEL

Basis of Validation: A test report documenting the technology/devices and performance will be submitted to DOE-ID by August 31, 2001.

Fee Allocation: $183K

2.2.3 Performance Criterion: Maintain the Nuclear Energy leadership role in nuclear safety.

Accountability: James Werner—DOE-ID James Lake—INEEL

Description: The Gen IV reactor program represents an effort by DOE-Nuclear Energy to design the next-generation nuclear reactor that makes substantial advances in proliferation resistance, waste reduction, safety performance, and economics. The DOE Strategic Plan establishes requirements to identify credible candidate designs by 2005 for next-generation nuclear power plants capable of being deployed in the 2030 time frame.

Justification: The roadmapping efforts identified in this measure are critical for positioning the INEEL to effectively assist DOE-NE in their development of a Gen IV program. Strategic objectives will be defined in the roadmapping effort that will shape the next 30 years of the program.

2.2.3.1 Measure: In the role as the Nuclear Energy Lead Laboratory, assist DOE in their development of a next-generation reactor program in FY 2001. **[Fee: $200K]**

- By January 1, 2001, issue a Gen IV goals document to guide the roadmapping.
- By June 30, 2001, issue a draft Gen IV roadmap for the program.
- By November 1, 2000, begin the FY 2001 Gen IV roadmapping program by establishing the integrating committee and by issuing an approved program plan.

Accountability: James Werner—DOE-ID Ralph Bennett—INEEL

Basis of Validation: INEEL will provide letters of transmittal of each product on or before the specified dates. In the event that any of the delivery dates are modified by DOE-NE, they will be documented for DOE-ID in writing from the Gen IV roadmap project manager.

Fee Allocation: $200K

2.2.3.2 Measure: Establish and maintain widely accessible user facilities that support the Research and Development enterprise in FY 2001 by preparing the STAR facility and meeting the yearly milestones for facility development and startup of experiments in the STAR program management plans by September 30, 2001. **[Fee: $100K]**

Accountability: James Werner—DOE-ID David Lucoff—INEEL

Basis of Validation: The INEEL will provide letters of transmittal of each product on or before the specified dates. In the event that any of the delivery dates are modified by the customer, they will be documented for DOE-ID in writing from the Fusion Safety program management.

Fee Allocation: $100K

2.2.4 Performance Criterion: Produce science and technology products that are recognized to be state of the art and support current customer Energy Resources needs. Enhance capabilities in order to support DOE missions in Energy Resources with focus on DOE Energy Efficiency, Fossil Energy, and SC.

Accountability: James Werner—DOE-ID Barry Short—INEEL

Description: The INEEL currently performs science and technology work for DOE Energy Efficiency, Fossil Energy, and SC necessary to meet DOE Energy Resources' missions. Results and products from this work must be completed to further the mission. Detailed planning, management support, and infrastructure and capital equipment are needed to maintain and enhance INEEL's role in support of these customers.

Justification: DOE Energy Efficiency, Fossil Energy, and SC programs rely on INEEL's completion of science and technology work for accomplishing their Energy Resources mission. DOE's Energy Resources mission goal calls for the promotion of secure, competitive, and environmentally responsible energy systems that serve the needs of the public. Much of the science and technology that these programs conduct has direct application to DOE's Environmental Management Programs and can be leveraged to support that mission.

2.2.4.1 Measure: Eliminate key technical barriers to cost effective use of crop residues and dedicated biomass crops. **[Fee: $50K]**

Accountability: James Werner—DOE-ID Barry Short—INEEL

Justification: INEEL's Bioenergy Initiative leverages existing expertise and development of additional strengths to meet the nation's future energy needs. Initial planning and definition of niches has been developed. The next step in forwarding the effort is to obtain external funding for the designated thrust areas.

Basis of Validation: Accomplish ~~one~~ two of the following bioenergy project milestones. The specific milestone will depend on winning competitive project awards by September 30, 2000. If (a) Industrial Membrane Filtration and Short-Bed Fractal Separation Systems for Separating Monomers from Heterogeneous Plant Material is selected for funding, then set up the hybrid membrane pilot-scale system for long-term testing, September 30, 2001. Or, if Conversion of Biomass to Organic Acids Using Acidophilic Bioprocessing is selected for funding, identify Acidophilic Anaerobes in collections, March 31, 2001. Or, if CFD Modeling, Shape Optimization and Feasibility Testing of Advanced Black Liquor Nozzle Designs for Improved Energy Efficiency is selected for funding, characterize splash-plate nozzles and develop methods for controlling droplet size distribution, September 30, 2001. (This may not be competitive but rather a corporate project for Bechtel.) Demonstrate strong integration and support of the three directorates that support agriculture, biotechnology, and energy efficiency programs for the Bioenergy Initiative. **(01CC15, 2/26/01)**

Fee Allocation: $50K. 60% of the available fee is earned upon completion of the first project's milestone ($30K) and 40% of the available fee is earned upon completion of the second project's milestone ($20K). **(01CC15, 2/26/01)**

2.2.4.2 Measure: Become a key contributor to DOE-FE/EE's advanced power systems program—in the areas of clean fuels and process improvement. **[Fee: $300K]**

Accountability: James Werner—DOE-ID Barry Short—INEEL

Basis of Validation: INEEL will provide documentation that each of the following projects were accomplished by the specified dates: 1) the first INEEL natural gas vehicle will be fueled at the INEEL Idaho Falls natural gas fueling station by August 31, 2001; 2) life-cycle testing will be completed and the first, vehicle-size battery pack for hybrid electric vehicles will be reported by ~~March 31, 2001~~ September 15, 2001; 3) the unique calendar life modeling will be completed and a report delivered for the Advanced Technology Development (ATD) Program Generation 1 lithium-ion batteries by March 31, 2001; 4) the National Parks Initiative baseline data repot for the four infrastructures (transportation, energy facilities and information) will be issued by August 31, 2001; and 5) the Systems Analysis Management Plan for the National Parks Initiative will be issued by December 31, 2000. **(01CC12, 2/26/01)**

Fee Allocation: $300K. The total fee will be allocated equally among the five items of this measure (i.e., $60K each). Completion of any item beyond a milestone will result in a 2% reduction of the available fee per calendar day up to the total fee.

2.2.5 Performance Criterion: Support current National Security Program needs.

Accountability: Victor Pearson—DOE-ID Laurin Dodd-INEEL

Description: It is recognized that the INEEL has unique capabilities that can be applied to solve U.S. and DOE National Security challenges. Many benefits are realized from the INEEL's involvement in National Security activities, such as, important National Security requirements are being addressed; core capabilities and infrastructure important to all INEEL missions are improved; and technology developed for National Security applications are being used to improve INEEL operations and solve environmental issues.

Justification: This period focuses on ensuring a high level of performance and proper alignment of INEEL capabilities and National Security resources with the needs of U.S. National Security interests, in the areas of advanced sensors, integrated defense systems, material science applications, and critical infrastructure protection.

2.2.5.1 Measure: Deliver all sensor and materials detection systems and Integrated Defense Systems products to National Security clients per agreed upon cost and schedule as identified in the DOE-ID approved program management plans. These include the Air Support Operations Center, Electronic Combat Systems Integration, and Chemical Demilitarization programs. **[Fee: $200K]**

Accountability: Vic Pearson—DOE-ID Bill Motes—INEEL

Basis for Validation: Delivery of Integrated Defense Systems per program management plan-established schedule.

Fee Allocation: $200K

2.2.5.2 Measure: Meet key performance measures and milestones for the Critical Infrastructure Program initiative per the DOE-ID-approved program plan to be developed by October 31, 2000. **[Fee: $100K]**

Accountability: Vic Pearson—DOE-ID Bill Motes—INEEL

Basis of Validation: Execution of the FY 2001 elements of the Critical Infrastructure Protection Program Plan.

Fee Allocation: $100K

2.2.5.3 Measure: Begin programmatic use of the Material Science Laboratory by April 1, 2001. **[Fee: $100K]**

Accountability: Vic Pearson—DOE-ID Laurin Dodd—INEEL

Basis of Validation: Funded DOE or National Security Work-for-Others projects, evidencing use of the Material Science Laboratory and its special capabilities.

Fee Allocation: $100K

2.3 Critical Objective: Successfully execute work scope on schedule and within budget in mission areas and other assigned programs.

2.3.1 Performance Criterion: Continue to meet Special Manufacturing Capability (SMC) annual production requirements and maintain the necessary infrastructure to support these production goals.

Accountability: Ray Furstenau—DOE-ID Dave Kudsin—INEEL

2.3.1.1 Measure: Fully satisfy the annual armor production requirements at 100% final quality while achieving or exceeding project schedule milestones for establishing additional armor production capabilities. See PBI 2.3.1.1, Section 2.0, Appendix A. **[Fee: $1,672K]** (See PBI for u1CC08, 2/26/01)

2.3.2 Performance Criterion: At the Advanced Test Rector/Test Reactor Area (ATR/TRA), continue to support the Nuclear Research test plan, maintain the TRA infrastructure and maximize performance on the ATR incentives.

Accountability: Ray Furstenau—DOE-ID Dave Lucoff—INEEL

Description: Safely and effectively operate the ATR at the least possible cost, while maximizing work scope within available funds.

Justification: This work scope supports appropriation-funded work for Naval Reactors and Nuclear Energy.

2.3.2.1 Measure: ATR Operating Performance. See PBI 2.3.2.1, Section 2.0, Appendix A. **[Fee: $1,858.8K]**

2.3.2.2 Measure: TRA/ATR Cost Efficiency. See PBI 2.3.2.2, Section 2.0, Appendix A. **[Fee: $300K]**

2.3.2.3 Measure: Advanced Test Reactor Utilization. See PBI 2.3.2.3, Section 2.0, Appendix A. **[Fee: $600K]**

2.3.3 Performance Criterion: Implement strategies from Environmental Management and Waste Management's (EM's) analysis of the funding gap. **[Fee: $689,200K]**

Accountability: Enoch Miles—DOE-ID Susan Stiger—INEEL

Description: Implement the results of EM's analysis of the funding gap. The analysis established an integrated strategy for closing the gap.

Justification: The criterion is important to the INEEL because it represents a best management practice for addressing compliance with enforceable agreements.

2.3.3.1. Measure: TBD

Basis of Validation: TBD

Assumptions: TBD

Fee Allocation: The fee for this criterion is $689,200.

2.3.4 Performance Criterion: Implement key FY 2001 projects and activities identified in the INEEL Infrastructure Long-Range Plan (LRP).

Accountability: Bill Leake—DOE-ID Jerry Ethridge—INEEL

Description: The plan encompasses all those functions and facilities (e.g., buildings, structures, property, systems, utilities, fleet, telecommunications, inventory, warehousing property pools, networks, etc.) necessary to accomplish assigned missions. The Long-Range Plan is based on a comprehensive life-cycle analysis that addresses all infrastructure at the INEEL. The Long-Range Plan identifies the condition of the current infrastructure and projects future needs and dispositions efficiently and is supportable. The Long-Range Plan is consistent with and supports the Institutional Plan and individual program plans and requirements. It is updated as needed to reflect changes in the Institutional Plan and Strategic Plans.

Justification: The Infrastructure Long-Range Plan is the mechanism by which the DOE Strategic and INEEL Institutional plans are implemented from an infrastructure-needs perspective. The Long-Range Plan itself identifies the specific objectives to be achieved, why those objectives are necessary, and the date by which the objectives are to be completed. The plan defines what specific objectives must be achieved to effectively support and ensure that INEEL-assigned missions are achieved successfully.

Owing to the critical importance of the objective and step nature of the measurement plans, all measures must be achieved. No follow-on out-year fees will be available until these measurements are met; future fee may go unearned.

2.3.4.1 Measure: This measure is a placeholder and will cover the implementation of selected recommendations from the INEEL Infrastructure Long-Range Plan. Decisions on this measure will be completed by December 31, 2000. **[Fee: $750K]**

Assumptions: The Long-Range Plan is issued in a satisfactory manner as scheduled in FY 2000.

Basis of Validation: TBD

Fee Allocation: The amount of subjective fee reserved for this measure is $750,000.

2.3.4.2 Measure: By May 31, 2002, complete Materials Test Reactor fuel transfers to INTEC Dry Storage. See PBI 2.3.4.2, Section 2.0, Appendix A. **[Fee: $250K]**

2.3.4.3 Measure: By March 31, 2001, have the CPP-603 Basin ready to commence deactivation. **[Fee: $100K]**

Basis of Validation: One hundred percent of available fee earned if basin scanning activities are completed and basins have been formally turned over to Deactivation Program by March 31, 2001.

Fee Allocation: The amount of objective fee reserved for this FY 2001 performance measure is $100,000.

2.3.4.4 Measure: By September 30, 2001, have removed the contaminated water (approximately 30,000 gallons) from the TRA-660 reactor canal to eliminate risk to the environment. **[Fee: $250K]**

Assumptions: Full project funding is received. The TRA evaporation pond continues operation through project completion.

Basis of Validation: All standing water is removed from the TRA-660 reactor canal.

Fee Allocation: The fee for this measure is $250,000. No fee is earned if the September 30, 2001 date is missed.

Section I – Fee Information
Maximum Available Incentive Fee: **$2,900,000**

Section II – Critical Outcome, Objective and related information			
Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.1**	**2.1.1**	**2.1.1.1**

Section III – Performance Measure

Title

1,160 m^3 to the Waste Isolation Pilot Plant (WIPP)

Section IV – Accountability

DOE-ID	INEEL
L. Fritz	L. Sygitowicz

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

2.1.1.1 Measure: Ship 1,160 m^3 to the Waste Isolation Pilot Plant (WIPP) by September 30, 2001. (Total shipped at the end of FY 2001 is 1,256 m^3.)

Outyear Measure: Ship 1,482 m^3 to WIPP by September 30, 2002. (Total shipped at the end of FY 2002 is 2,738m^3.)

Outyear Measure: Ship 3,100 m^3 of TRU waste out of Idaho by December 31, 2002.
Note: The FY01 and FY02 quantities represent shipment totals under this contract.

JUSTIFICATION:

The criterion is important to the INEEL because it will permit continuation of DOE Spent Nuclear Fuel Shipments to the INEEL and meet the Settlement Agreement.

ASSUMPTIONS:

- WIPP remains open without interruption to receive both mixed and nonmixed waste from the INEEL.
- A sufficient number of TRUPACT II shipping containers is available to support shipping rate. This assumption is only valid if BBWI is compliant with the current approved shipping schedule.
- The INEEL receives site characterization and transportation authority for solidified waste by 2/15/01.
- DOE-CAO supports re-certification audits at the frequency to maintain shipping rates.
- WIPP requirements remain the same or become less stringent than they currently are.
- Interruptions to transportation are minimal due to highway construction, natural phenomena, labor disputes, jurisdictional disputes, lawsuits, or conditions beyond the control of BBWI.
- The INEEL retrievable inventory of 22,000 drums is sufficient to yield 15,000 shippable drums
- A Class II permit modification for 10:1 compositing of headspace gas sampling can be implemented by 1/1/01 and the currently approved 5:1 compositing remains in effect until then
- The Advanced Mixed Waste Treatment Facility has no detrimental impact on staffing, facilities, shipping, etc.
- The Detailed Work Plan submitted by BBWI is approved by DOE-ID and authorizes work to proceed.
- External audits of RWMC Operations and/or the 3100 m3 Project will be scheduled at a minimum of two weeks in advance to minimize impacts to the Project Shipping Schedule.
- INEEL ISMS/VPP requirements will not increase over those identified and implemented in FY00

- Permit modifications to RWMC facilities affecting the Project will be approved within the current regulatory time-frames.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 Waste Management budget as documented in the approved FY 2001 Detailed Work Plan

Section VI - Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

This is a multi-year performance measure. The available fee amount will be earned in accordance with the schedule provided below. No fee will be earned in any year unless a minimum of 75% of the cumulative shipping schedule through that FY is met. This does not preclude the contractor from earning the full fee available or the fee associated with meeting 75% of the goal if the shipping schedule is recovered in subsequent years. Recovery of a previous year's schedule to a cumulative 75% will be paid from accrued fee.

Earnings Schedule

- Fee accrued based on shipping schedule at $2500/m^3$
- Fee paid based on actual shipments according to the following schedule:

  Up to 75% of cumulative total for year paid at $1250 per m^3
  76%–95% of cumulative total for year paid at $1400 per m^3
  96% or higher of cumulative total for year paid at $1500 m^3

- Fee accrued but not paid will be awarded to contractor upon completion of $3100m^3$ shipped by 1/31/03
- If Settlement Agreement milestone is missed by more than 31 days, then no fee is paid for shipments made after 1/31/03.

Fee earned based on 100% of yearly quantity shipped

Year	Qty (m^3)	Annual Fee Pool	Cum Fee Accrued	Fee Earned	Cum Fee Earned	Cum Fee Withheld
2001	1160	$2,900,000	$2,900,000	$1,740,000	$1,740,000	$1,160,000
2002	1482	$3,705,000	$6,605,000	$2,223,000	$3,963,000	$2,642,000
2003	362	$905,000	$7,510,000	$543,000	$4,506,000	$3,004,000

Fee paid if milestone met (12/31/02) $7,510,000

Penalty for shipment schedule completed within 31 days after milestone (from fee withheld)
Within 1-7 days after milestone $500K penalty
Within 8-14 days after milestone $1000K penalty
Within 15-31 days after milestone $1500K penalty

BASIS FOR VALIDATION:

Performance will be verified by documented TRU waste shipments to WIPP and total disposed volume of 3,100 m^3 by December 31, 2002.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information

Maximum Available Incentive Fee:

$800,000

Section II – Critical Outcome, Objective and related information

Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.1**	**2.1.2**	**2.1.2.1**

Section III - Performance Measure

Title

Low-Level (LLW) and Mixed Low-Level Waste (MLLW) Treatment and Disposition

Section IV – Accountability

DOE-ID	INEEL
L. Fritz	**L. Sygitowicz**

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

BBWI will (a) Expedite disposition of mixed low-level waste (MLLW) from INEEL MLLW storage facilities, and (b) manage the processes and facilities to treat and dispose of low-level waste generated at the INEEL. Meet 2001 treatment and disposal goals for mixed low-level waste and low-level waste by September 30, 2001.

Dispose of ~~400~~ 800 m^3 mixed low-level waste (MLLW) by September 30, 2001.
Dispose of 3186 m^3 low-level waste (LLW) by September 30, 2001.
Treat 1200 m^3 of low-level waste (LLW) by September 30, 2001.
~~Treat 100 m^3 of mixed low-level waste (MLLW) by September 30, 2001.~~

~~This treatment volume represents volume above the STP commitment volumes for treatment of MLLW already covered by PEMP measure 2.1.6.1. The volumes assumed to be negotiated with the IDEQ to be met for measure 1.2.6.1 include: 45 cubic meters of incineration, 5 cubic meters of stabilization.~~ **(01CC14, 2/26/01)**

JUSTIFICATION:

The criterion is important to the INEEL because it represents good management practices in order to comply with existing environmental regulations and DOE orders.

ASSUMPTIONS:

- On-site, DOE off-site, or commercial treatment capability and capacity will be available during the fiscal year to support the MLLW treatment goal.
- Disposal and treatment goals for LLW may be adjusted based on actual availability of LLW generated during the fiscal year.
- ~~MLLW disposal capacity continues to be available through the commercial sector.~~
- The volume for MLLW disposal is additional volume to STP commitment volumes for MLLW backlog reduction/treatment already covered by PEMP measure 2.1.6.1. The committed volumes in the STP include the following: 25 cubic meters for macroencapsulation, 72.5 cubic meters for commercial treatment, 5 cubic meters for stabilization. These commitments can be met through commercial treatment and subsequent disposal, but the associate volume can only be accounted for treatment (PEMP 2.1.6.1) or disposal (2.1.2.1).
- ~~MLLW treatment and disposal volumes assume a baseline of the WERF incinerator operating until 3/31/01.~~

- Funds are made available through task prioritization within the project for completion of MLLW disposal. **(01CC14, 2/26/01)**

BASELINE:

The funding for this activity is part of BBWI's FY 2001 Waste Management budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

The fee amount for FY 2001 performance objective is $800,000. The fee will be paid for each performance measure as follows:

- Dispose of 800 m^3 MLLW by 9/30/01 = $600,000 (maximum achievable)
- Dispose of 400 m^3 MLLW by 9/30/01 = $200,000 ~~(maximum achievable)~~
- Dispose of ~~75~~ 500 m^3 MLLW by 9/30/01 = $~~100,000~~ 300,000
- Dispose of ~~150~~ 600 m^3 MLLW by 9/30/01 = $~~125,000~~ 400,000
- Dispose of ~~250~~ 700 m^3 MLLW by 9/30/01 = $~~150,000~~ 500,000
- Dispose of ~~350~~ 800 m^3 MLLW by 9/30/01 = $~~175,000~~ 600,000
- ~~Dispose of 400 m^3 MLLW by 9/30/01 = $200,000~~
- Treat 1200 m^3 LLW by 9/30/01 = $100,000
- Dispose 3186 m^3 LLW by 9/30/01 = $100,000
- ~~Treat 100 m^3 of MLLW by 9/30/01 = $400,000 (maximum achievable)~~
- ~~Treat 30 m^3 MLLW by 9/30/01 = $200,000~~
- ~~Treat 65 m^3 MLLW by 9/30/01 = $300,000~~

~~Treat 100 m^3 MLLW by 9/30/01 = $400,000~~ **(01CC14, 2/26/01)**

BASIS FOR VALIDATION:

Performance will be verified by documented Idaho Waste Tracking System reporting of waste treatment and disposal and confirmation of reduction in waste containers on the original container list. For MLLW, this validation process is indicated in PEG EM-D-16. **(01CC14, 2/26/01)**

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information
Maximum Available Incentive Fee: **$2,100,000**

Section II – Critical Outcome, Objective and related information

Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.1**	**2.1.3**	**2.1.3.1**

Section III – Performance Measure

Title

TMI-2 Transfers to Dry Storage

Section IV - Accountability

DOE-ID	INEEL
P. Dirkmaat	**L. Ferrell**

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

Continue dewatering, drying, interim storage and shipping operations at TAN and transfer all remaining TMI-2 spent nuclear fuel to dry storage by 6/01/01.

Complete the remaining transfers of TMI-2 spent nuclear fuel to dry storage by 6/1/01.

JUSTIFICATION:

The June 1, 2001 criteria is of critical importance to the INEEL because it meets a Federal District Consent Order Milestone Settlement Agreement.

ASSUMPTIONS:

DOE will conduct and complete readiness activities (in accordance with DOE orders) within 3 weeks of BBWI declaring readiness.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 Spent Nuclear Fuel budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

The PBI fee amount for completing all transfers by 6/01/01 is $2,100,000.

If transfers are not completed by 6/01/01, the following deductions (penalties) to the $2,100,000 will apply

20% penalty when all shipments completed 1-7 days after the date in the Settlement Agreement.

40% penalty when all shipments completed 8-14 days after the date in the Settlement Agreement.

60% penalty when all shipments completed 15-30 days after the date in the Settlement Agreement.

100% penalty if shipments completed later than 30 days beyond the date in the Settlement Agreement.

BASIS FOR VALIDATION:

Performance verification will be by DOE verification of receipt of shipments at INTEC and placement in dry storage. Also, moving epoxy-coated TMI-2 fuel from the TAN fuel pool to dry storage must be completed by 6/01/01.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information			
Maximum Available Incentive Fee: **$1,100,000**			
Section II – Critical Outcome, Objective and related information			
Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.1**	**2.1.7**	**2.1.7.2**
Section III – Performance Measure			
Title WM-184 and WM-186 Tanks			
Section IV – Accountability			
DOE-ID		**INEEL**	
J. Case		**J. Valentine**	

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

Empty tanks WM-184 and WM-186 to the heel and place out of service; and reduce volume in WM-181 through blending.

JUSTIFICATION:

The criterion is important to the INEEL because all work is targeted to reduce tank farm inventory to support cease use of pillar and panel tanks by 2003 and cease use of the entire tank farm by 2012, and make all HLW "road-ready" by 2035. Cease use is defined in NON/CO Modification 2, Section 6.20.G as emptying the tanks to their heels, "i.e., the liquid level in each tank will be lowered to the greatest extent possible by the use of existing transfer equipment.

ASSUMPTIONS:

- Resolution of the 2000 RCRA NOV will not impact the operation of the evaporators nor transfer equipment and related facilities.
- No new regulatory requirements will be imposed on this activity.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 High-Level Waste budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

Of the total PBI fee pool available for this item in FY 2001, the contractor will be paid $650,000 for emptying one tank, WM-184 or WM-186, to heel level via evaporation through the HLLWE and placing it out of service by September 30, 2001. The contractor will be paid an additional $450,000 for emptying a second tank, WM-184 or WM-186, to heel level via evaporation and placing it out of service by January 31, 2002. The $450,000 for the second tank will come from the FY 2001 PBI fee pool and will be paid at the completion of placing the second tank out of service, whether it be in FY 2001 or FY 2002. The higher value is being paid for the first tank due to the difficulty in overcoming process start up issues.

BASIS FOR VALIDATION:

BBWI will notify the government by letter when each tank (WM-184 and 186) is emptied to heel and placed out of service. DOE-ID Idaho Nuclear Technology and Engineering Center (INTEC) Waste Program staff will review tank level data using operating logs and installed instrumentation to verify the tank is emptied to a reasonable heel level. DOE-ID will respond to BBWI by letter, acknowledging the accomplishment and requiring BBWI to get explicit DOE-ID approval before reintroducing any new liquids to the tank.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information
Maximum Available Incentive Fee: **$660,000**

Section II – Critical Outcome, Objective and related information			
Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.1**	**2.1.9**	**2.1.9.1**

Section III – Performance Measure

Title

ICDF Complex Design and Construction

Section IV – Accountability

DOE-ID	INEEL
K. Hain	L. Smith

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

Begin ICDF Operations, including SSSTF components, and place first shipment of CERCLA material into the ICDF cell) by December 3, 2003 (FINAL MEASURE)

FY01 Measures for ICDF (The ICDF is a multi-year criterion):

- Issue draft SSSTF Title I Preliminary Design to DOE-ID (ready for Agency review) by November 01, 2000
- Issue draft ICDF Title I Preliminary Design to DOE-ID (ready for Agency review) by April 26, 2001
- Issue draft SSSTF Title II (90%) Design/Remedial Action Work Plan to DOE-ID (ready for agency review) by September 25, 2001

Out-year ICDF Measure: (FY 2002 and beyond)

- Issue draft ICDF Title II (90%) Design/Remedial Action Work Plan to DOE-ID (ready for agency review) by January 3, 2002
- Issue Notice to Proceed for ICDF construction by May 28, 2002
- Complete ICDF construction (complete final inspection) by February 19, 2003
- Begin ICDF Operations, including SSSTF components, and place first shipment of CERCLA material into the ICDF cell) by December 3, 2003 (FINAL MEASURE)
- Complete Phase I SSTF facilities by February 19, 2003.

JUSTIFICATION:

The criterion is important to the INEEL because the INEEL CERCLA Disposal Facility Complex is critical for the timely disposal of INEEL CERCLA waste.

ASSUMPTIONS:

Any regulator-accepted or -generated milestone slip will be accommodated with a month for month slip without the need for specific Change Control Board action. BBWI will accommodate a cumulative, regulatory-driven, total milestone slip of less than thirty days with the exception of the ICDF Conceptual Design Report. Any regulatory-caused delay will result in a day-for-day slip in schedule for this project. Any change in regulations will be considered "good cause" for a change to this criterion. An ORR will not be required as part of the start-up authorization. A Readiness Assessment will meet all requirements and will not exceed 1-month in duration. Neither DOE nor regulator review or approval is required to award the ICDF subcontract. Outyear milestones may be subject to change pending outcome of negotiations with regulators and award of design/build contract for ICDF. Phase I SSSTF facilities consist of administrative, utilities, and staging/storage facilities necessary to support ICDF disposal operations. Remaining Phases (treatment and packaging) of SSSTF construction will be scheduled in subsequent years.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 Environmental Restoration budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

The ICDF fee for FY 2001 is $660,000. BBWI will earn $220,000 for each FY 2001 measure completed on schedule.

ICDF fee available in FY 2002 is $TBD. BBWI will earn fee for each FY 2002 measure completed on schedule.

Fee available in FY 2003 is $TBD. BBWI will place the first shipment of CERCLA material into the ICDF cell by July 15, 2003 to earn full fee in FY03. BBWI will lose 5% of the fee available in FY 2003 for each 30-day slip in the schedule beyond July 15, 2003.

No additional fee is available in FY 2004.

BASIS FOR VALIDATION:

DOE delivery of the design report to the regulations defines acceptance of the report. Signature of the contract by the subcontractor who wins the bid will constitute award.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information			
Maximum Available Incentive Fee: **$550,000**			
Section II – Critical Outcome, Objective and related information			
Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.1**	**2.1.10**	**2.1.10.1**
Section III – Performance Measure			
Title			
Appendices A and B Milestones of the Consent Order Action Plan			
Section IV – Accountability			
DOE-ID		**INEEL**	
J. Snook		**M. Magleby**	

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

Meet all milestones delineated in Appendices A and B of the Consent Order Action Plan within the overall budget. This annual measure is for all five years of the contract.

JUSTIFICATION:

The criterion is important to the INEEL because it meets a Consent Order requirement and avoids significant fines and penalties.

ASSUMPTIONS:

Due to the limited available options, the Phase I and II cost estimates do not include costs for treatment and disposal of remote-handled wastes.
Work scope may change based on characterization of tank contents.
The work packages and cost estimates assume off-site laboratories will be used. On-site laboratories may be used if capacity is available.
Environmental Management will fund this program at $10M per year. NE will provide additional funding for specific VCO actions at TRA.
Any milestone changed in accordance with provisions of the VCO and approved by Idaho DEQ will constitute an automatic change to this PEMP measure.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 other EM budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

The fee for this measure is $550,000. This payment is considered final and no payment will be authorized if any of the milestones in FY 2001 are missed. (Pass/Fail)

BASIS FOR VALIDATION:

Letters to the Idaho Department of Health and Welfare, Division of Environmental Quality, delivering the documentation for each milestone validated by the ID program manager.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information

Maximum Available Incentive Fee:

$80,000

Section II – Critical Outcome, Objective and related information

Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.2**	**2.2.1**	**2.2.1.1**

Section III – Performance Measure

Title

Install the secondary ion mass spectrometry (Hot SIMS) system

Section IV – Accountability

DOE-ID	INEEL
George Schneider	**Dave Miller**

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

Complete the design and fabrication of an ion trap, secondary ion mass spectrometer (IT-SIMS) and install the prototype instrument into a laboratory at INTEC or TRA. Demonstrate operation within 60 days of installation by making measurements to determine the chemical speciation of radioactive and toxic metals at the top monolayer of particles of INEEL soils.

JUSTIFICATION:

Information on the distribution and interaction of radionuclides on the surfaces of environmental materials representative of INEEL disposal sites is necessary to provide information to the programs to ensure the effective design of new INEEL disposal facilities and the remediation of contamination around existing facilities.

BASELINE:

The funding for this activity is part of BBWI's budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

Documented installation of the instrument will obtain 50% of the available fee. Late delivery (beyond 1/2001) will carry a 3% per day penalty. Initiation of experimental activities within 60 days of installation will obtain the remaining 50% of available fee.

BASIS FOR VALIDATION:

Installation and operation of Hot SIMS systems is completed by the end of January 2001.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information
Maximum Available Incentive Fee: **$159,000**

Section II – Critical Outcome, Objective and related information			
Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.2**	**2.2.2**	**2.2.2.1**

Section III – Performance Measure

Title

Field-test nonintrusive surface and probe-hole-deployed characterization and imaging technology

Section IV – Accountability

DOE-ID	INEEL
George Schneider	**Dave Miller**

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

The deployment of two new probe-hole-deployed characterization instruments, a PFN probe and a PCNAA probe, from probeholes into the pits and trenches at the INEEL Radioactive Waste Management Complex (RWMC), including pit 9, to verify and map the inventory of waste disposed and into monitoring wells in the INEEL vadose zone and aquifer to map the distribution of mobile contaminants by insitu measurements to facilitate the development of cost effective remedial solutions to the remediation of the INEEL site.

JUSTIFICATION:

The development and delivery of the new technologies are required to support programmatic milestones and enable key cleanup objectives to be met in the remediation of the INEEL site.

ASSUMPTIONS:

Deployment into the Snake River aquifer will be via an existing well.

BASELINE:

The funding for this activity is part of BBWI's FY2001 Validation and Verification budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

Deployment of the two probes into the waste zone by June 30, 2001 will earn $100K of fee and into the Snake River Plain Aquifer by September 30, 2001 will earn $59K of fee.

BASIS FOR VALIDATION:

Field test the two probes, developed under the verification and validation program, within the pits and trenches of the Radioactive Waste Management Complex Subsurface Disposal Area, including pit 9, and the underlying Snake River Plain Aquifer, to quantify their measurement performance. Deploy the probes into the waste zone by ~~June 30, 2001~~ July 31, 2001, and into the Snake River Plain Aquifer by September 30, 2001. **(01CC09, 2/26/01)**

Section VII - Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information

Maximum Available Incentive Fee:

$183,000

Section II – Critical Outcome, Objective and related information

Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.2**	**2.2.2**	**2.2.2.2**

Section III – Performance Measure

Title

Install and operate instrumented boreholes and wells adjacent to INTEC percolation ponds

Section IV – Accountability

DOE-ID	INEEL
George Schneider	**Leah Street/Paul Kearns (01CC10,2/26/01)**

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

Develop a vadose zone test bed at the planned location of the new percolation ponds at the Idaho Nuclear Technology and Engineering Center (INTEC) to investigate the subsurface interaction of pond operation and the Big Lost River. During the first phase of the project, a series of instrumented boreholes and wells adjacent to the ponds and in the vicinity of the Big Lost River will be installed by July 1, 2001 and will be operational by August 31, 2001.

JUSTIFICATION:

Required to support programmatic milestones and enable key cleanup objectives.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 Environmental Restoration budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

Fee for this measure is $183K.

BASIS FOR VALIDATION:

The vadose zone test bed is operational by a demonstration of installed in-situ measurement and access capabilities at the site by 8/31/01.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information

Maximum Available Incentive Fee:

$1,672,000

Section II – Critical Outcome, Objective and related information

Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.3**	**2.3.1**	**2.3.1.1**

Section III – Performance Measure

Title

SMC Production Requirements

Section IV – Accountability

DOE-ID	INEEL
R. Furstenau	**D. Kudsin**

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

PERFORMANCE CRITERION:

The following tasks will be measured by clearly defined completion criteria, with fee paid for meeting production quantities or meeting or exceeding milestone completion dates, depending on the task. For classification reasons, the task descriptions and completion criteria will be more clearly defined in a separate document.

ASSUMPTIONS:

The Specific Manufacturing Capability (SMC) Change Control Board will review all events seen as significant and make recommendations to the contracting officer for contract, budget, and work scope changes.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 DoD and other Federal Agency budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

Task	Measure	% of Total Fee assigned to this Task	Milestone Date	Additional Information
1. AB	Produce 96 units	20%	9/30/01	Up to 10 units from FY 00 production can be carried over and credited to the FY 01 production requirement. A $50K reduction in earned fee will be applied for each unit under 96.

2. Complete PU-2	Complete by: Milestone date – ~~30%~~ 100% ~~One month early – 80%~~ ~~Two months early – 100%~~ (01CC08, 2/26/01)	20%	9/28/01	Example: Completing by the milestone date for this task would earn (30% times 20%), or 6% of the total fee available for the SMC incentive.
3. Start A1	Start by: Milestone date – 50% One month early – 75% Two months early – 100%	30%	5/1/01	Example from Task #2 applies to this task.
4. Fee for progress towards "Start P1"	Satisfactory progress as measured by meeting the milestone date for "Start A1"	10%	5/1/01	This fee is for progress toward "Start P1," which has a milestone date of 9/30/03. This fee payment will be returned to DOE if the "Start P1" date is not met.
5. SA	Produce 103 units	10%	9/30/01	A $10K reduction in earned fee will be applied for each unit under 103.
6. SA First Delivery	18 units by milestone date – 100% 14-17 units by milestone date – 50% 13 or less units by milestone date – 0%	10%	Date 2/23/01	

Other Factors in Fee Determination:

Cost targets and inventories of finished products, product materials, fuel oil, spare parts, etc. will be ~~established at the beginning of each fiscal year and will be submitted to DOE-ID for approval~~ $34.8M for A/B and $3.44M for Side Armor for fiscal year 2001. If agreed upon workscope is accomplished for less, unearned fee from the tasks above can be earned at the rate of 20 cents for each dollar saved. Fee earned cannot exceed the total fee available for this incentive. Cost savings may be applied to additional workscope, if agreed to in advance by DOE-ID (through Change Control Board action). If agreed upon workscope exceeds target costs, earned fee resulting from this measure may be deducted at the rate of 20 cents for each dollar that target costs are exceeded. All changes to milestones above must be approved by DOE-ID (through Change Control Board Action). A reduction of $5,000 in earned fee will be assessed for each Security Infraction~~s~~. (01CC08, 2/26/01)

BASIS FOR VALIDATION:

The contractor is required to provide documentation to DOE-ID at the end of each fiscal year to verify any fee determination. The DOE-ID Chief Financial Office and the SMC DOE-ID Program Office will validate through an audit that the documentation and request for fee payment is correct. A validation audit report with a recommendation to the amount of fee to be paid will be provided to the DOE-ID Contracting Officer. The Contracting Office has the final determination on all fee payments.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information

Maximum Available Incentive Fee:

$1,858,800

Section II – Critical Outcome, Objective and related information

Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.3**	**2.3.2**	**2.3.2.1**

Section III – Performance Measure

Title

ATR Operating performance

Section IV – Accountability

DOE-ID	INEEL
Ray Furstenau	**Dave Lucoff**

Section V – Performance Requirements

Define Completion: Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.

Safely and effectively operate the ATR at the least possible cost, while maximizing workscope within available funds.

DEFINITIONS:

Advanced Test Reactor Operating Efficiency
Operating efficiency is defined as the ratio of actual hours at full power plus scheduled outage hours to the total number of hours available in the reporting period (beginning October 1 each fiscal year.) The calculated efficiency is rounded to the next lowest two decimal places.

Actual Hours at full power is defined as the number of hours the Advanced Test Reactor is operating at full power, as specified in the ATR Test Plan for each operating cycle.

Scheduled outage hours will be the outage hours published in the ATR Planned Outage, DOE Incentive Schedule in effect at the start of each outage. Scheduled outage hours are defined as the hours the Advanced Test Reactor is in outage mode.

Unplanned outages are defined as any outage not specified in the approved ATR Test Plan. Unplanned outages that are beyond the control of BBWI (i.e., commercial power outages, acts of nature, or negotiated customer requests approved by DOE) are excluded.

Unplanned entry into an ATR TSR action statement is defined as (a) decisions or actions that cause unintended or improper entry into an action statement, or (b) entry into an action statement that is not recognized. Equipment failure that places the plant into an action statement is excluded, unless such a condition is not recognized.

JUSTIFICATION:

Workscope supports appropriation funded work for Naval Reactors and Nuclear Energy

ASSUMPTIONS:

Operating efficiency loses that are beyond the control of BBWI (i.e. shutdowns due to commercial power outages, acts of nature, or negotiated customer requests approved by DOE) are excluded.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 NE/NR budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

Earned fee is determined based on the following:

ATR Efficiency Range	Fee
<95 %	$ 0
95% to 100 %	(max fee $) (ATR Operating Efficiency % - 95%)/5%
>100 %	(max fee $1,858,800)

Part A: Unplanned Outage Deductions
(0.08 max fee $) for the first unplanned outage
(0.10 max fee $) for the second unplanned outage
(0.14 max fee $) for the third unplanned outage
(0.20 max fee $) for the fourth unplanned outage
After four unplanned outages, another unplanned outage cancels all earned performance-based initiative fee for Advanced Test Reactor Operating Performance.

Penalties for successive unplanned outages are cumulative.

An incentive of 25% of the value of the deduction will be paid for each outage resulting from conservative actions taken by BBWI to mitigate potential degradation of plant safety.

Part B: Safety Basis Event Deductions
(0.20 max fee $) for each ATR safety limit violation
(0.10 max fee $) for each ATR limiting-condition-for-operation violation
(0.05 max fee $) for each failure to perform a surveillance required by the ATR Technical Safety Requirements (TSR) or for each unplanned entry into an ATR TSR action statement

Maximum Fee: $TBD*
Minimum Fee: $ 0

*Note the Maximum fee represents the fee earned under ATR Operating Efficiency minus and fee deductions under ATR Performance, parts A and B. No mid-fiscal year interim payments will be made under this incentive.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information
Maximum Available Incentive Fee: **$300,000**

Section II – Critical Outcome, Objective and related information			
Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.3**	**2.3.2**	**2.3.2.2**

Section III – Performance Measure

Title

TRA/ATR Cost Efficiency

Section IV – Accountability

DOE-ID	INEEL
R. Furstenau	**D. Lucoff**

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

Safely and effectively operate the TRA at the least possible cost while maximizing work scope within available funds. (A balance between operating costs and operating efficiency is the goal. Lower operating costs make the TRA more attractive to new users and lessens the burden on current test sponsors.)

JUSTIFICATION:

Workscope supports appropriation funded work for Naval Reactors and Nuclear Energy.

ASSUMPTIONS:

Any new work scope funded by cost savings generated under this incentive must be approved in advance by DOE. Incentives will not apply to new work scope funded by cost savings.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 NE/NR budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

The initial scope of work and total target cost FY 2001 will be established by the contracting officer based on Change Control Board action for both Naval Reactors and Nuclear Energy-Landlord operating and maintenance budgets (excluding construction operating support). In the event the board fails to establish the work scope and costs, the Government may unilaterally establish the baseline.

If the identified work scope is accomplished for less than the total target cost, BBWI will receive an incentive fee of 20 cents for every dollar of total cost savings. The value of identified work scope not performed due to budget limitations will be considered a cost overrun unless approved by a baseline change proposal.

BBWI will share in all overruns in the same manner.

Fee Payment Schedule:
Target Cost: Determined by Change Control Board action
Minimum Fee: $ TBD each fiscal year
Maximum Fee: $ 300,000 ($250,000 Naval Reactors /$50,000 Nuclear Energy-Landlord)
Government/Contractor Cost Share Ratio-Underruns: 80/20
Government/Contractor Cost Share Ratio-Overruns: 80/20

No mid-fiscal year interim payments will be made under this incentive.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information
Maximum Available Incentive Fee: **$600,000**

Section II – Critical Outcome, Objective and related information			
Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.3**	**2.3.2**	**2.3.2.3**

Section III – Performance Measure

Title

Advanced Test Reactor (ATR) Utilization

Section IV – Accountability

DOE-ID	INEEL
R. Furstenau	**D. Lucoff**

Section V – Performance Requirements

Define Completion: ***Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.***

Obtain new users to occupy unused/underutilized irradiation space in the ATR during FY 2001 and future years.

Revenue from irradiation charges indicates how much ATR space customers other than the Naval Reactor test sponsors are using. The method for calculating irradiation charges (for example, flux trap charges, irradiation unit charges) are described in the "Pricing Policy for the Advanced Test Reactor Materials and Services." A target goal for irradiation revenues will be established at the beginning of each fiscal year as agreed upon between BBWI and DOE-ID.

New engineering sales are a precursor to irradiation charges. In most cases, engineering must occur before irradiation charges and revenues can be realized in the reactor. A typical lead-time of 18 months is necessary from the start of design to the first generation of irradiation charges. Maintaining new users to share operating costs over the long term is reflected in funded design work for future reactor irradiations. The success of BBWI's marketing and sales program is first realized by engineering sales. A target goal for new engineering sales expected to lead to future irradiation revenues will be established at the beginning of each fiscal year as agreed upon between BBWI and DOE-ID.

JUSTIFICATION:

Workscope supports appropriation funded work for naval reactors and nuclear energy.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 NE/NR budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

A. During FY 2001, BBWI will receive the following incentive:

20 cents for every dollar of billable ATR irradiation charges (other than the prime test sponsors) up to the agreed upon target.

**Fee will be based on gross revenues and is considered earned when production is billable. Adjustments may be necessary if billed irradiation charges are different from actual irradiation charges (i.e. if calculated charges are different from measured charges).

B. During FY 2001, BBWI will receive the following incentive:

15 cents for every dollar of actual costs associated with engineering design and project management for a new product or experiment (other than the prime test sponsors) up to the agreed upon target.

**Fee is considered earned when engineering dollars are costed.

Minimum Fee: $0

Maximum Fee:
(a) As established at the beginning of the year ($300,000 for FY 2001)
(b) As established at the beginning of the year ($300,000 for FY 2001)

No mid-fiscal year interim payments will be made under this incentive.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

Section I – Fee Information

Maximum Available Incentive Fee:

$250,000

Section II – Critical Outcome, Objective and related information

Critical Outcome Section #	Objective #	Criterion #	Measure #
2.0 Mission Accomplishment	**2.3**	**2.3.4**	**2.3.4.2**

Section III – Performance Measure

Title

MTR fuel transfers to INTEC Dry Storage

Section IV – Accountability

DOE-ID	INEEL
Bill Leake	**Larry Ferrell**

Section V – Performance Requirements

Define Completion: Specify Performance elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.

By May 31, 2002, complete MTR fuel transfers to INTEC Dry Storage. Total shipments equal 40.

BASELINE:

The funding for this activity is part of BBWI's FY 2001 EM budget as documented in the approved FY 2001 Detailed Work Plan.

Section VI – Earnings Schedule

List percent of fee available for completion of each element, and the schedule by which the fee may be earned.

The FY 2001 incremental fee for this measure is $250,000

$70,000 of available fee earned if the first shipment is completed on or before April 30, 2001. $180,000 of the fee earned prorated on a "per shipment" basis for each of 12 additional shipments completed prior to September 30, 2001.

BASIS FOR VALIDATION:

For FY 2001, the validation is to be completing the first transfer from MTR to IFSF at INTEC by April 30, 2001. For FY 2002, validation is the completion of the final shipment from MTR to IFSF by May 31, 2002.

Section VII – Signatures

	Responsible DOE-ID AM	Signature of responsible DOE-ID AM	Date Signed
	Responsible INEEL Manager	Signature of responsible INEEL Manager	Date Signed

3.0 Critical Outcome—Integrate Research and Development and Operations

Fee: $5M (15%)

Lead: Walt Sato—DOE-ID Linda Trocki—INEEL

Demonstrate added value (mission enabling, cost reduction, risk reduction, accelerating path to closure) by integrating R&D activities to support INEEL programs and missions and subsequently translate these solutions to a national basis.

3.1 Critical Objective: Establish an integrated, stable baseline for the Environmental Programs that incorporates science and technology activities directed toward mission needs into the operating programs' performance, cost, and schedule plans.

3.1.1 Performance Criterion: Science and technology needs are consistently identified and timely prioritized to support INEEL EM mission accomplishment.

Accountability: Jerry Lyle—DOE-ID Susan Stiger—INEEL

Description: The Environmental Management (EM) operational programs are faced with problems that could be addressed by using advanced processes and technology. Identification and documentation of these problems (needs) will be performed with rigor and done consistently across the Site.

Justification: Identification and documentation of technology needs is the responsibility of end users and must be performed in concert with Research and Development (R&D) personnel. Historically, multiple data collection efforts were performed and there has not always been a strong link between end users and R&D personnel. A single, rigorous identification of needs has been implemented that allows R&D and technology advancement personnel to better focus their efforts on actual, documented end-user problems. Planning assumption processes and documents (Integrated Planning, Accountability, and Budgeting System (IPABS), Site Technology Coordination Group (STCG) needs, and disposition maps will be integrated into the Detailed Work Planning process.

A tactical plan for the integration of R&D and operations, including the use of R&D/Operations liaisons, has been developed to ensure effective needs identification and integration of the planning processes.

3.1.1.1 Measure: To ensure alignment of operational needs, risks, and barriers, with technical approaches, formally integrate the requirements for the IPABS and STCG data calls into the Detailed Work Plan process guidance document by ~~February 28, 2001~~ April 16, 2001, and implement them as part of the FY 2002 Detailed Work Plan. Completion of this measure shall be a precursor to achieving fee for measures 3.1.2.3 and 3.1.2.4. **[Fee: $250K]** (01CC18, 3/5/01)

Accountability: Lisa Green—DOE-ID Jim Herzog—INEEL

Basis of Validation: Verification that the STCG needs identification system and IPABS requirements have been formally incorporated into the Detailed Work Plan guidance document used for the FY 2002 Detailed Work Plan update. The intent is to ensure that the various EM planning requirements are folded under the Detailed Work Plan to ensure a single, consistent focus and approach to planning.

Fee Allocation: $250K

3.1.2 Performance Criterion: Alternatives to the EM baseline are investigated, evaluated, and implemented where appropriate to improve execution of the EM program.

Accountability: Jerry Lyle—DOE-ID Susan Stiger—INEEL

Description: Challenge baseline assumptions (technical approach, scope, cost, schedule, etc.) to enable program enhancements to reduce the EM program funding gap.

Justification: The current INEEL EM program's baseline exceeds the projected funding and significant improvements are required to close the funding gap and enable execution of the cleanup mission. Agreements on program needs and technology insertion research projects to meet those needs, as well as the technical, schedule, and cost performance criteria will improve overall cleanup mission execution.

3.1.2.1 Measure: Complete the following science and technology roadmaps: **[Fee: $250K]**

- Calcine Treatment Alternatives by June 29, 2001
- Draft RH-TRU by September 30, 2001
- INEEL Vadose Zone by August 15, 2001

Accountability: George Schneider—DOE-ID Steve Birrer—INEEL

Basis of Validation: Calcine Treatment Alternative : Submittal of an initial draft roadmap to DOE-ID to bound the Idaho High Level Waste and Facilities Disposition EIS by December 21, 2000. ~~; s~~Submittal of ~~the next~~ a second draft roadmap ~~as a result of the EIS ROD to DOE-ID by~~ containing more detailed information and which has been Peer reviewed by a Tanks Focus Area Panel by March 31, 2001. Submit ~~and the~~ Rev 0 of the roadmap to DOE-ID ~~by June 29, 2001~~ 60 days following the issuance of the EIS ROD. If issuance of the ROD is delayed beyond July 1, 2001, a roadmap revision will be delivered to DOE-ID by September 30, 2001, based upon the most current information.

RH-TRU: Submittal of the draft roadmap to DOE-ID by September 30, 2001.
INEEL Vadose Zone: Submittal of the Rev 0 roadmap to DOE-ID by August 15, 2001.

~~The roadmaps shall follow and include the applicable details outlined in the "Applying Science and Technology Roadmapping in Environmental Management" draft guidance document. The roadmaps will contain information through Phase III, Technical Response Development, Figure 1, of the guidance document.~~

~~**FOOTNOTE:** *Change Control Board action due to Carlsbad Office data with other workscope in FY 2000 and deferred this measure for completion in FY 2001.*~~

Fee Allocation: $250K. Calcine Treatment Alternative: Fee is $90K split equally between the three versions. Fee is reduced to 2% per calendar day up to 30 days, at which time the fee reduces to zero with each version treated independently.

RH-TRU and INEEL Vadose Zone roadmaps: Fee is $80K each reduced to 2% per calendar day up to 30 days, at which time the fee reduces to zero. **(01CC19, 3/5/01)**

3.1.2.2 Measure: Initiate a pilot technology insertion research project by September 30, 2001. The pilot project will be outlined and submitted to DOE-ID by August 15, 2001 and be based upon the information outlined in one of the key INEEL roadmaps. **[Fee: $150K]**

Accountability: George Schneider—DOE-ID Steve Birrer—INEEL

Basis of Validation: ~~The Technology Insertion Pilot Project submitted by EM Programs with concurrence by appropriate ALDs information and acceptance by DOE-ID by August 15, 2001. This measure is a one-year measure to pilot the technology insertion project, outyear PEMPs will be focused on success of technology insertions.~~ Submit an annotated outline for the technology insertion research project by August 15, 2001. The outline shall include a description of the identified need (from a key INEEL roadmap), the proposed project to fill the need, and brief scope, schedule, and rough-order-of-magnitude cost information. (Fee shall be $25K for delivery on time. No fee shall be earned for late delivery of the outline.)

The project shall be initiated by September 30, 2001, with delivery of a project plan to DOE-ID. The plan shall include details concerning: the operational need being resolved, the expected benefit to solving the need, the scope, schedule and cost estimate for the project, and identify the project lead and team. (Fee shall be $125K reduced 2% per calendar day up to 30 days, at which time the fee reduces to zero.) (01CC16, 3/5/01)

Fee Allocation: ~~$150K~~ The maximum available fee for this measure is $150K based upon the quality of the project documentation submitted to DOE-ID. Fee shall be reduced 2% per calendar day up to 30 days, at which time the fee is reduced to zero. **(01CC16, 3/5/01)**

3.1.2.3 Measure: Integrate the results of the following INEEL Roadmaps into the Detailed Work Plan (DWP) and/or life-cycle baselines, subject to budget and regulatory constraints, for the applicable FY 2001, FY 2002, and FY 2003 science and technology activities identified on the following INEEL roadmaps per the dates specified on the roadmaps: Sodium Bearing Waste, draft INEEL Vadose Zone, and draft Voluntary Consent Order Characterization. This integration activity shall extend the Roadmap products through completion of detailed R&D workplans in Phase IV, Roadmap Implementation, of the roadmapping guidance document. **[Fee: $850K]**

Accountability: Lisa Green—DOE-ID Randy Bargelt—INEEL

Basis of Validation: Submittal of appropriate change control actions, including the value added (mission enabling, cost reduction, risk reduction, accelerating path to closure) of the proposed change, to DOE-ID. Due dates shall be those committed to on the respective roadmaps. By the end of the third quarter FY 2001, specific criteria for allocation of fee will be incorporated by formal change control. The specific criteria will include consideration of payment of fee, partial fee payment and evaluation of value added impact. This measure is intended as a one-year incentive to reduce to common practice efforts on roadmapping and integration of roadmap results into the operation DWPs.

Fee Allocation: $850K

3.1.2.4 Measure: Develop technically sound alternatives to resolve the baseline barriers for the disposition of 10 INEEL waste/material streams (priority will be placed on meeting Settlement Agreement, Site Treatment Plan, and critical path milestones, where applicable). Document the proposed changes with a level of detail analogous to that at the completion of detailed R&D workplans in Phase IV, Roadmap Implementation, Figure 1 of the roadmapping guidance document, and submit to DOE-ID by August 14, 2001. **[Fee: $650K]**

Accountability: Lisa Green—DOE-ID Randy Bargelt—INEEL

Basis of Validation: Submittal of appropriate documentation addressing operational needs, i.e., alternative disposition maps, change control proposals, etc., including the value added (mission enabling, cost reduction, risk reduction, accelerating path to closure) of the proposed change, to DOE-ID by August

15, 2001. By the end of the second quarter FY 2001, specific criteria for allocation of fee will be incorporated by formal change control. The specific criteria will include consideration of payment of fee, partial fee payment, the degree of difficulty, and value added impact. This measure is intended as a one-year incentive to reduce to common practice efforts on roadmapping and integration of roadmap results into the operation DWPs.

Fee Allocation: $650K

3.2 Critical Objective: Execute INEEL programs through use of integrated internal and external scientific, technical, and operational resources to enable or improve mission performance.

3.2.1 Performance Criterion: Establish and implement INEEL processes to ensure that solutions are developed and applied to meet INEEL needs.

Accountability: Jerry Lyle/ George Schneider—DOE-ID; Susan Stiger/ Paul Kearns—INEEL

Description: The designation of the INEEL as the DOE's Environmental Management (EM) Lead Laboratory carries the implicit expectation that environmental operations and the R&D performed at the INEEL are mutually supportive and highly integrated. By improving the integration between Site Operations and the R&D efforts, the DOE cleanup mission can be accomplished more effectively, and the long-term value and mission of the INEEL can be improved. This approach can also be applied to other mission areas to enhance overall effectiveness of the INEEL.

Justification: Innovative solutions are required to effectively complete the INEEL missions.

3.2.1.1 Measure: Demonstrate value added to the INEEL-identified technology needs in IPABS, as approved by the PBS managers, by the first-time deployment[by project breakdown structure (PBS) for EM areas] of 17 new technologies and solutions by September 30, 2001. Targets are as follows: **[Fee: $2,000K]**

The goal is 17 deployments with a minimum of 1 deployment in each of the following areas: Environmental Restoration; Waste Management; High Level Waste; Infrastructure and Facilities/Landlord; and Voluntary Consent Order; and a minimum of one deployment of technologies originally developed for International Technologies and National Security into EM applications.

Summarize technology deployments made in FY 2001, and provide quarterly assessments of the deployments of technologies impacting the INEEL funding gap consistent with the four criteria stated in the critical outcome.

Accountability: George Schneider—DOE-ID; Susan Stiger—INEEL

Basis of Validation: First-time deployments are recorded in the applicable documentation (PBSs for EM) and quarterly deployment updates are submitted to DOE-ID. Note that for the performance metric reported to EM-50, the number of deployments reported must include the EM applicable deployments made under this section plus the specific deployments outlined in Critical Outcomes 2 and 4. The quarterly assessment will determine which will be reported to DOE-HQ as a part of the overall EM metric. Fee allocation will be based on satisfying the overall criterion of 17 deployments with one deployment in each of the target areas; and on each deployment satisfying a substantial program need which enables the program, reduces cost or risk, or improves schedule or performance; and on most of the deployments being applied to more complex or different types of problems than previously applied at the INEEL.

Fee Allocation: $2,000K

3.3 Critical Objective: Apply INEEL technology, experience, and capabilities to meet DOE, other National and International, and commercial sector needs to strengthen United States industry and competitiveness.

3.3.1 Performance Criterion: Use technical developments from both Operations and R&D to strengthen the local economy.

Accountability: Walt Sato—DOE-ID Lyman Frost—INEEL

Description: The INEEL is a major economic driver for the surrounding communities. The economies need diversification to ensure their long-term viability. Both Operations and R&D develop technology that can be applied in commercial markets. The commercialization of the laboratory technology can serve as a catalyst in economic development.

Justification: The DOE has an inherent interest in providing a stable economic environment in the vicinity of its laboratories. Congress has also assigned DOE the responsibility of using the technology developed at its laboratories to strengthen United States industry and local economies. INEEL has technology that has been developed by both the Operations and R&D portions of the laboratory that can be of assistance to the local communities.

3.3.1.1 Measure: Technology Transfer and Commercialization (TT&C) will be instrumental in the formation of one high-technology spinout from the laboratory during 2001. The spinout must be located in the local area and obtain sufficient financing to be a viable business entity. **[Fee: $200K]**

Accountability: Walt Sato—DOE-ID Lyman Frost—INEEL

Basis of Validation: An external entity is formed based on laboratory technology. A letter is provided by a principal of the company stating that TT&C provided significant assistance in formation of the spinout.

Fee Allocation: $200K

3.3.1.2 Measure: Technology Transfer and Commercialization will provide technical support through the Office of Research and Technology Applications (ORTA) program to local communities and small businesses. There will be ten documented instances of assistance during the FY 2001 time period. TT&C will use capabilities from both Operations and R&D in this process. Joint participation will be considered and utilized where appropriate. **[Fee: $150K]**

Accountability: Walt Sato—DOE-ID Lyman Frost—INEEL

Basis of Validation: Instances of assistance will be documented in Technology Transfer and Commercialization records, including written documentation of request for assistance and action taken.

Fee Allocation: $150K

3.3.2 Performance Criterion: Deploy INEEL technologies and solutions on a national and international basis.

Accountability: Walt Sato—DOE-ID Lyman Frost—INEEL

Description: INEEL develops technology that can make significant contributions to the effectiveness of the United States industrial base. Technology deployed by Operations provides proven approaches to critical environmental problems facing the nation and the world. New solutions provided by R&D to Operations can be applied to similar problems in other federal locations and commercially. It is necessary that this technology be made available in an expeditious manner. Deployments of a similar nature can be made internationally to enhance overall competitiveness of the INEEL.

Justification: Congress has passed a number of laws, including the National Competitiveness Technology Transfer Act of 1989 (PL 101-189), the National Technology Transfer and Advancement Act (PL 104-113), and the Stevenson Wydler Technology Innovation Act (15 USC 3701). These laws require DOE laboratories to support the competitiveness of United States industry by transferring technology. DOE has also issued DOE Order 481.1 relating to technology work done for outside entities.

3.3.2.1 Measure: INEEL will commercialize four INEEL-developed technologies through approved technology transfer mechanisms. **[Fee: $100K]**

Accountability: Walt Sato—DOE-ID Lyman Frost—INEEL

Basis of Validation: Validation will be through Technology Transfer and Commercialization and INEEL records.

Fee Allocation: $100K

3.3.2.2 Measure: Deploy four INEEL technologies, experiences, and capabilities to benefit the national EM program and other external customers by September 30,2001. **[Fee: $300K]**

Accountability: Walt Sato—DOE-ID Jim Herzog—INEEL

Basis of Validation: As formally documented (e.g., by the Technology Deployment Center technology catalog). At least one of the deployments must be a value-added (see critical outcome definition) EM program deployment.

Fee Allocation: $300K

3.3.2.3 Measure: Apply five technologies to physical and cyber protection of DOE assets by September 30, 2001. **[Fee: $100K]**

Accountability: Vic Pearson—DOE-ID Steve Fernandez—INEEL

Basis of Validation: As formally documented (e.g., by the Technology Deployment Center technology catalog).

Fee Allocation: $100K

4.0 Critical Outcome INEEL Revitalization

Fee: $3.4M (10%)

Lead: Clay Nichols—DOE-ID Billy Shipp—INEEL

Revitalize the INEEL's science and engineering capabilities, foundation, and facilities. Ensure INEEL's excellence in scientific and technical areas required by INEEL's DOE missions

4.1 Critical Objective: Revitalize INEEL infrastructure to better support DOE's mission and the initiatives of the INEEL Institutional Plan.

4.1.1 Performance Criterion: Provide the physical infrastructure and capital equipment needed to support the Subsurface Science Initiative.

Accountability: Clayton Nichols—DOE-ID Dick Jacobsen—INEEL

Description: New developments in subsurface science are necessary to meet DOE-EM needs in the short term (before 2006) and in the longer term (post 2006) clean-up operations. The INEEL requires appropriate laboratory space to perform critical research necessary to clean up the INEEL and meet other EM needs. The required laboratory must be able to support small to pilot-scale experimentation and house the assembly and test of prototype apparatus. A dedicated facility, with specific capabilities to support experimentation in contaminant transport through geologic media, will be required for developing complex data and new technologies (see Performance Criterion 2.3.4). Until this new facility is built, existing facilities will have to be used as described in the Subsurface Science Initiative Short Term Facility Plan (INEEL/EXT-2000-00948).

Justification: Technology needs, identified to meet cleanup objectives and to provide long-term environmental stewardship at the INEEL site and at other sites in the EM complex, require a detailed and thorough understanding of subsurface science and contaminant transport through geologic media.

4.1.1.1 Measure: Successfully execute the *Subsurface Geosciences Laboratory Project Conceptual Design Plan,* ~~receiving an unconditional project validation review~~ and provide for short term subsurface science facility needs by completing the actions scheduled in the Subsurface Science Initiative Short Term Facility Plan (INEEL/EXT-2000-00948). Delivery dates are according to the schedule in each Plan. **[Fee: $300K]** **(01CC03, 2/26/01)**

Accountability: Gordon McClellan—DOE-ID ~~David Miller~~ Mike Wright—INEEL **(01CC03, 2/26/01)**

Basis of Validation: Progress will be measured by

1) meeting the schedule and deliverables contained within the conceptual Design Plan, ~~and by obtaining an unconditional project validation review (as part of the regular budget validation process) and~~ **(01CC03, 2/26/01)**

2) Completing the short term facility requirements for the subsurface science mission within the budget and schedule recommendations as listed in the facility plan.

Fee Allocation: $300K. ~~One hundred percent of fee allocated based on completion and approval of the measure.~~ The available fee for each part shall be $225K and $75K, respectively. Partial fee may be awarded for task or subtask progress. **(01CC03, 2/26/01)**

4.2 Critical Objective: Enhance the INEEL's scientific capabilities and broaden its scientific expertise in DOE mission-critical areas as defined in the Institutional Plan.

4.2.1 Performance Criterion: Meet the goals for improvement described in the Scientific Excellence and Eminence Index.

Accountability: Linda McCoy—DOE-ID Richard Jacobsen—INEEL

Description: A benchmark tool for scientific excellence will be used to evaluate INEEL performance in improving the laboratory's eminence and standing in the scientific community.

Justification: The index will provide integrated evaluation of indicators of scientific excellence, and of INEEL's status in the scientific and academic community as measured by a weighted matrix.

4.2.1.1 Measure: The following provides a target increase for each indicator of the Index.
[Fee: $700K]

Indicator	Weighted Score
Ten percent increase in the number of peer-reviewed publications	*(10%)*
Three new projects funded through competitively awarded research, excluding universities	*(20%)*
Five percent increase in the citations of INEEL publications	*(5%)*
One new leadership position in national scientific and professional organizations	*(5%)*
Capture of at least 1 more than 1999 (combined) R&D 100, Federal Laboratory Consortium awards or other major national and international scientific awards	*(5%)*
Three new competitively awarded proposals in partnership with INRA and other university collaborators, with the exception of subsurface science	*(5%)*
Ten percent increase in INEEL postdoctoral fellows	*(10%)*
Twenty percent increase in university graduate students performing dissertation work in the laboratories at the INEEL	*(25%)*
Three INEEL scientists and researchers with new adjunct professor appointments	*(5%)*
Five new funded projects developed in collaborations with other national laboratories	*(5%)*
Two new funded projects developed in collaboration with other Federal agencies and agency-funded centers	*(5%)*

Fee Allocation: $700K. Fee allocated based on performance against index score.

4.2.2 Performance Criterion: Strengthen the INEEL's scientific computing and simulation capabilities.

Accountability: John Yankeelov—DOE-ID Ray Stults—INEEL

Description: The INEEL needs to enhance and strengthen its advanced scientific computing and modeling/simulation capabilities to fulfill its role as a national laboratory. These capabilities are required to support multiple DOE missions, including subsurface science.

Justification: The national laboratories were created to perform the extraordinary science needed to solve critical DOE mission challenges. The laboratories have a mandate to employ extraordinary tools to support and enable the performance of mission-critical science. It is essential that INEEL's advanced scientific computing and simulation/modeling capabilities be continually strengthened and enhanced in parallel with a revitalization of its scientific computing infrastructure.

4.2.2.1 Measure: Develop a roadmap to identify areas suitable for INEEL participation in DOE's Advanced Scientific Computing Research initiative, (e.g., subsurface science, complex systems, and intelligent systems) and achieve the award of one new project with advanced scientific computing emphasis from DOE or other government agency. **[Fee: $150K]**

Accountability: John Yankeelov—DOE-ID Bill Nelson—INEEL

Basis of Validation: Progress will be measured by

1) Receipt of roadmap and strategy for becoming fully integrated into DOE advanced scientific computing initiative, and

2) Receipt of an award letter and new Budget Authority (BA) for an advanced computing project. Eligible projects will include those where advanced scientific computing is the primary element required to achieve the science or engineering objectives.

Fee Allocation: ~~$150K. Fee allocated based on completion and approval of both measures.~~ The maximum available fee for this measure is $150K. The available fee for each part of the measure is $75K. Partial payment of fee may be awarded. **(01CC02, 3/5/01)**

4.3 Critical Objective: Enhance the scientific and technical capability of the INEEL to address DOE-Environmental Management (EM) needs for the complex.

4.3.1 Performance Criterion: Complete the Complex-wide Vadose Zone and Long-Term Stewardship Science and Technology roadmaps and deliver drafts to DOE. Roadmaps will be based on analysis of information derived from subject experts within DOE and outside DOE in FY 2000 and 2001.

Accountability: George Schneider—DOE-ID Paul Kearns—INEEL

Description: The Fiscal Year 2001 objective is to complete a long-range (20-year) research and development plan, which, when implemented, will result in the ability to more accurately predict fate and transport of contaminants in the vadose zone.

Justification: DOE will be responsible for cleanup of vadose zone and groundwater contamination at a number of sites, particularly in the arid west. Cleanup costs are expected to be substantial. New technologies will be required, but the specific needs, performance expectations, and delivery times that

the new technologies must address are not well-defined. The Vadose Zone Roadmap addresses this problem and will provide a schedule for technology development to resolve vadose zone problems over the next 20 years. This roadmap will be developed primarily for DOE, but it will also meet the needs of other agencies with analogous problems.

DOE will be responsible for stewardship of inactive sites in the former nuclear weapons complex for the foreseeable future. The cost and technical risk associated with long-term stewardship is large, and DOE requires a thorough evaluation of technology development needs for this mission. New science and technology are required to enable successful stewardship; reduce technical, environmental, and occupational risks; and to reduce the costs of stewardship to the taxpayer.

4.3.1.1 Measure: Complete the initial (Revision 0) National Vadose Zone roadmap and the Long Term Stewardship Science and Technology roadmap by September 1, 2001. These roadmaps must have sufficient backup information to select several alternatives for consideration as a baseline proposal at tone or more DOE sites. **[Fee: $500K]**

Accountability: George Schneider—DOE-ID Paul Kearns —INEEL

Basis of Validation: Delivery of final products by 9/1/2001

Fee Allocation: The maximum fee available is $500K and is based on the comprehensiveness and anticipated benefits of the roadmaps.

4.3.2 Performance Criterion: Develop preeminent subsurface science research capabilities at the INEEL consistent with the defined responsibilities of the INEEL to EM. Develop science to support remediation, long-term environmental stewardship of the complex, and other DOE missions. Establish peer relationships with the Inland Northwest Research Alliance (INRA), other noted universities, and National Science Foundation centers with recognized capabilities in subsurface science. Apply science developed to meet EM needs in the cleanup of the former weapon production complex to other areas consistent with the DOE mission.

Accountability: George Schneider—DOE-ID Ray Stults—INEEL

Description: Subsurface science is and will continue to be an area of great interest to DOE owing to its applicability to multiple mission areas within DOE. Recent review of the DOE-Environmental Quality research and development portfolio determined that there are significant gaps in DOE's current research and development program. Closing of these gaps is important for many reasons. One major reason is that DOE has entered into legally binding agreements through the CERCLA process with regulators to characterize and treat subsurface contamination at and around DOE facilities in order to protect the public. This commitment requires DOE to predict the success of these efforts into the future.

Justification: Major environmental challenges at the INEEL and through the DOE complex require development of new subsurface characterization technologies and the associated models that predict subsurface contaminant fate and transport. Such models will let DOE effectively estimate environmental risk; plan remediation; measure the effectiveness of remediation operations; and monitor the performance of remediation operations in the long term during stewardship. The formation of effective partnerships between the INEEL and outside centers of expertise is seen as key to (a) the INEEL serving as EM's center of expertise in subsurface science and its application to the cleanup of the DOE complex and (b) improving the INEEL's participation in peer-reviewed competitive research programs to support subsurface science research (such as the Environmental Management Science Program).

4.3.2.1 Measure: INEEL will form partnerships, as defined below, with principals at well-known academic research institutions outside the region, National Science Foundation Centers of expertise, and at the INRA Universities with capabilities in subsurface science to implement the Subsurface Science Initiative science plan. INEEL will begin to emphasize research in the following areas and is expected to submit joint proposals to competitive solicitations for subsurface science technology development with its partners in the following areas: **[Fee: $125K]**

- Improved understanding of physical flow and transport of fluids (water, gas, and nonaqueous liquids) in complex heterogeneous subsurface media,
- Coordinated efforts to understand biogeochemical transformations that occur in pristine (e.g. down gradient from contaminant plumes) and contaminated subsurface environments, and
- Integrated field characterization approaches that provide the data needed by the other two research areas listed above.

Basis of Validation: BBWI will track the partnerships, as defined below, established for this measure and present to DOE a quarterly status report indicating the technical basis of each the partnership. This report will include the type of partnership (MOU, MOA or other), the institutions and/or agencies involved, and any specific proposals generated in response to competitive solicitations. The INEEL will also provide to DOE-ID a detailed description of the individual research projects selected to support the three research areas specified in measure 4.3.2.1. Within each of the three research areas there are specific subtopics, which are listed below:

Area 1 (Fluid Flow Physics) a) Data Collection, b) Parameter Estimation, c) sparse Data Interpolation, d) uncertainty Analysis and Quantification.

Area 2 (Biogeochemical Transformations) a) Environmental transformation rates, b) Coupled biogeochemical/ transport modeling, c) Enhanced geomicrobiology characterizations, d) Subsurface colloid behavior, e) Co-contaminant interactions, and f) Evaluation and prediction of the long term performance of caps and barriers for the stabilization of waste.

Area 3 (Characterization) a) Non-invasive measurements, b) Point measurements, and c) measurement integration.

The measure will be fully achieved (100 % of available fee) if technical projects are initiated in all subtopical areas. Initiation of technical projects in less than all subtopical areas will result in fee awarded on a sliding scale (90% fee for 90% coverage of subtopical areas as an example). For projects to be utilized for this measure they must pass technical merit review. Individual multi-disciplinary projects may span more that a single subtopic area.

Fee Allocation: The maximum fee available is $125K.

4.3.2.2 Measure: In order to host on-site research, the INEEL will implement processes to enable visiting researchers to use INEEL test sites or facilities by March 2001. **[Fee: $125K]**

Accountability: George Schneider—DOE-ID Dave Miller—INEEL

Basis of Validation: A document ~~procedures outlining~~ describing the requirements for visiting researchers must meet under existing health, safety, security, and other procedures in effect at INEEL to conduct research on the site will be prepared by ~~3/01/01~~ 7/31/01 and made available via the Internet by ~~5/01~~ 9/15/01. INEEL will also establish that visiting researchers who are potential users of the INEEL sites and test facilities understand and can comply with these requirements. **(01CC04, 2/26/01)**

Fee Allocation: ~~The maximum fee available is $125K.~~ The available fee for each part shall be $100K for delivery of the document and $25K, for the implementation of the web page. Fee will be reduced by 25% per week after the deadline. **(01CC04, 2/26/01)**

4.3.2.3 Measure: The INEEL will develop a program at the INEEL to support regional subsurface-related natural resource (particularly groundwater resources) issues. The INEEL will recommend to DOE a course of implementation for such a program. Delivery of the described program to DOE will be by September 1. **[Fee: $125K]**

Accountability: George Schneider—DOE-ID Dave Miller—INEEL

Basis of Validation: ~~The degree of regional stakeholder involvement in the development of the evaluation and implementation of the plan will serve as the basis of validation. Seventy-five percent of fee will be awarded for delivery and implementation of the plan by the scheduled date. One hundred percent of fee will be awarded for delivery and implementation of a plan generated with stakeholder (e.g., state water resource research institutes) participation from Idaho, Utah, and Montana.~~ The basis of validation will be the extent to which stakeholders in the Intermountain West are involved in developing the cooperative regional program for environmental sciences (focusing on subsurface issues) and the level of commitment they make to its future implementation. Seventy-five percent of the fee will be awarded for on-time delivery of the proposed multi-year program and a detailed course of implementation for outyears. One hundred percent will be awarded for demonstrating the active participation of INEEL's regional partners from our neighboring states, as evidenced in their evaluation of and commitment to the proposed program. At a minimum, agencies responsible for water allocation and water quality protection will be involved from Idaho, Montana, Utah and Washington, those states with universities in the Inland Northwest Research Alliance. **(01CC11, 2/26/01)**

Fee Allocation: The maximum fee available is $125K. Fee will be reduced by 25% per week after the milestone date. **(01CC11, 2/26/01)**

4.3.2.4 Measure: ~~An external independent peer review panel and conduct one overall programmatic peer review for the subsurface program.~~ Conduct one overall programmatic peer review for the Subsurface Science Program using an external independent peer review panel, and receive a satisfactory rating or better for the subsurface science research capabilities. **[Fee: $125K]** **(01CC02, 3/5/01)**

Accountability: George Schneider—DOE-ID ~~Dave Miller~~ Mike Wright—INEEL **(01CC02, 3/5/01)**

Basis of Validation: The evaluation of the INEEL Subsurface Science Program by an external independent peer review panel at "satisfactory" or better for the subsurface science research capabilities.

Fee Allocation: The maximum fee available is $125K. The panel will rate the program using the following categories: superior, satisfactory, satisfactory with qualifications, unsatisfactory. Fee allocations will be (1) for "superior," maximum fee; (2) for "satisfactory," $100K; (3) for "satisfactory with qualifications," $50K; and (4) for "unsatisfactory," $0. **(01CC02, 3/5/01)**

4.4 Critical Objective: Develop and maintain capabilities in advanced nuclear applications that improve the economics, environmental acceptability, safety, and proliferation-resistance of nuclear energy.

4.4.1 Performance Criterion: Demonstrate the ability to produce results that promote development and advancement of DOE-NE-defined nuclear programs. Meet DOE's needs and offer a unique range of superior services.

Accountability: James Werner—DOE-ID James Lake—INEEL

Description: DOE has selected the INEEL and Argonne National Laboratories (ANL) to serve as lead laboratories for Nuclear Reactor Technology. The lead laboratories assist DOE-NE in maximizing the value of the various reactor technology research activities conducted by DOE.

Justification: The INEEL has the following strategic objectives in nuclear energy over the next five years:

- Complete a roadmap for Generation IV in FY 2001, with key involvement of U.S. national laboratories, academia, and industry, and also international stakeholders
- Renew key nuclear research infrastructure at the INEEL in FY 2001 through 2005
- Integrate the National Energy Research Institute (NERI) with the efforts to create a Generation IV program.
- Make a substantial contribution to the new Generation IV program.
- Establish new user facilities based on the Advanced Test Reactor.

Much of this will be accomplished in cooperation with ANL.

4.4.1.1 Measure: Partner with universities and industry to obtain funded joint projects in nuclear science and technology (e.g., reactor design, computer code development, radiation measurement, and nuclear medicine technology). Increase the number of funded joint projects by 5% each year above the DOE-approved FY 2000 baseline. **[Fee: $100K]**

Accountability: James Werner—DOE-ID Ralph Bennett—INEEL

Basis of Validation: A letter establishing the FY 2000 baseline (with a list of projects) will be submitted to DOE-ID by INEEL on November 1, 2000 for concurrence. A letter documenting FY 2001 projects will be submitted to DOE-ID on August 31, 2001, showing the increase in projects.

Fee Allocation: $100K. ~~Fee allocated based on completion as stated.~~ For 100% of fee, a cumulative increase of 5% (i.e. two or more projects) is needed. To obtain 50% of the available fee ($50K), BBWI must have shown an increase of one project. Fee will not be awarded for maintaining the FY2000 baseline level (40 total funded projects) or for a decreased number of funded joint projects (i.e. less than 40). **(01CC02, 3/5/01)**

4.4.1.2 Measure: Successfully execute the Nuclear Energy lead laboratory role. Achieve completion of any two of the following: **[Fee: $350K]**

- Successfully complete the Nuclear Energy Research Initiative (NERI) coordination with Gen IV by September 30, 2001.
- Organize and deliver products from the International Gen IV research alliance meetings held in FY-2001 by September 30, 2001

- Assist DOE to implement the recommendations from a Nuclear Energy Research Advisory Committee (NERAC) subcommittee (such as Isotopes or Long Range R&D Planning) by September 30, 2001.

Accountability: James Werner—DOE-ID Ralph Bennett—INEEL

Basis of Validation:

- The DOE-NE NERI project manager will confirm the completion of INEEL activities to coordinate NERI and Gen IV.
- The DOE-NE international group leader will confirm the product delivery for any Gen IV research alliance meetings held in FY 2001.
- The DOE-NE cognizant manager will confirm that the BBWI assisted with implementing NERAC recommendations.

Fee Allocation: $350K. Fee allocated based on completion as stated.

4.5 Critical Objective: Enhance the use of INEEL capabilities to support DOE's Energy Efficiency, Fossil Energy and Office of Science missions.

4.5.1 Performance Criterion: Develop unique INEEL leadership roles for performing the mission-related work of Energy Efficiency, Fossil Energy and Office of Science.

Accountability: James Werner—DOE-ID James Lake—INEEL

Description: Applying INEEL capabilities to the challenges of the Energy Resources and Science mission. Maintain, enhance, and strengthen the INEEL capabilities use to support the Environmental Quality mission.

Justification: Although the laboratory is organized around the four strategic business lines of the DOE, its solutions to national problems draw upon the capabilities found in each of its organizations regardless of programmatic funding source.

4.5.1.1 Measure: Enhance Environmental Quality support by application of at least five capabilities and five technologies across strategic business lines (EE/FE/NN or SC). **[Fee: $50K]**

Accountability: James Werner—DOE-ID Barry Short—INEEL

Basis of Validation: Progress will be measured by:

1) Demonstrating the application of capabilities mapping, developed in FY00, to challenges of INEEL missions by applying a minimum of five capabilities across strategic business lines during FY01. Show that this application enhances the capabilities used to support the Environmental Quality business line. Due by September 30, 2001.

2) Successful application of five technologies applied across strategic business lines/programmatic lines (i.e. a technology developed for EE or FE is successfully applied to an EM problem or a technology development for EM is successfully applied to an EE or FE problem).

Fee Allocation: $50K. Fee allocated based on completion as stated.

4.5.1.2 Measure: Apply INEEL capabilities to support FE and EE mission-relevant work. **[Fee: $150K]**

Accountability: James Werner—DOE-ID Barry Short—INEEL

Basis of Validation: Progress will be measured by:

1) Transmittal of four (4) published research papers on methane hydrates, copies of agenda's of national meetings identifying INEEL researchers presenting discussions of INEEL Methane hydrate research, and evidence of collaboration with NETL and FE, such as jointly proposed research and new programmatic funding. Due by September 30, 2001. **(01CC02, 3/5/01)**

2) Receipt of at least four new DOE-OIT funded projects by September 30, 2001.

3) Development and delivery of a strategy to become a significant contributor for the DOE Bioenergy Initiative by September 30, 2001.

Fee Allocation: $150K. The total ~~F~~fee will be allocated specifically as follows: $40K for successful completion of item 1; $80K for item 2; and $30K for delivery of item 3: ~~based on completion as stated.~~

1. 20% of the available fee is earned for submission of the four research papers to peer-reviewed journals ($2K for each paper) and 80% of the available fee is earned when the papers are accepted for publication by Sept. 30, 2001 ($8K for each paper).
2. $20K is earned for each new DOE-OIT funded project.
3. 50% of the available fee is earned upon delivery of the draft Bioenergy Initiative strategy to DOE-ID ($15K) and 50% of the available fee is earned upon appropriate consideration of DOE-ID comments in the final Bioenergy Initiative strategy ($15K) by the September 30, 2001 milestone. **(01CC02, 3/5/01)**

4.5.1.3 Measure: Maintain and enhance the INEEL's leadership role in the DOE Geothermal Program as evidenced by its participation in the development of the joint integrated program Annual Operating Plan and through actions designed to increase technical expertise, visibility, and recognition by September 30, 2001. These actions include: **[Fee: $50K]**

- ensure the geothermal research facilities are included in planning for the subsurface science research laboratory
- the subsurface science program leader participates in the planning of geothermal research and coordinates this research with the subsurface science program
- institute a contractor/industry program peer review
- establish and maintain a public relations strategy which assures complete and well coordinated communications about the DOEID/INEEL Geothermal Program to the public
- support the ID/INEEL team in the Geopowering the West Initiative (GPW) and maintain Geothermal Program visibility through active participation in industry conferences, seminars, and workshops.

Accountability: James Werner—DOE-ID Barry Short—INEEL

Basis of Validation:

- presence of comprehensive planning elements in both the subsurface and geothermal strategy and planning documents

- the conduct of at least one peer review of geothermal work with industry during FY2001
- submittal of a documented Geothermal Programs public relations plan to DOE-ID, coordinated through the INEEL Public Affairs Office by Nov. 1, 2000
- sponsorship/hosting of a minimum of one national workshop, seminar, or DOE-wide program meeting during FY2001 as well as the provision of papers and presentations at conferences, seminars, and workshops

Fee Allocation: $50K. Fee allocated based on completion as stated.

4.5.1.4 Measure: Enhance INEEL's mission critical skills base by increasing DOE mission relevant Work for Others by 7%. **[Fee: $100K]**

Accountability: Walt Sato—DOE-ID Lyman Frost INEEL

Basis of Validation: New BA in Work for Others (WFO) equal to 7% increase above FY 1999 levels. (Note: for this criterion, the FY 2000 WFO base will not include the funds for SMC)

Fee Allocation: $100K. ~~Fee allocated based on completion as stated.~~ The increase must be at least 3% before any fee is earned. Between 3% and 7% the fee is allocated on a percentage of achievement on a linear basis. Thus, a 4% increase would result in 4/7th of the fee being awarded, a 5% increase is 5/7th of the fee, etc. **(01CC02, 3/5/01)**

4.6 Critical Objective: Continue to develop and apply capabilities in National Security to identify and diminish risks associated with the proliferation of weapons of mass destruction and terrorism, and enhance environmental security.

4.6.1 Performance Criterion: Increase support to DOE in its international efforts to reduce the risks of proliferation and to enhance environmental security, over the next three years.

Accountability: Vic Pearson—DOE-ID Laurin Dodd—INEEL

Description: The INEEL has unique capabilities that can be applied to solve U.S. and DOE National Security challenges. Benefits from INEEL's involvement in National Security activities are: important National Security requirements are being addressed; core capabilities and infrastructure important to all INEEL missions are improved; and technology developed for National Security applications are being used to improve INEEL operations and to solve environmental issues.

Justification: Closer alignment of INEEL capabilities and efforts with DOE international efforts as pertain to nonproliferation, counterterrorism, and environmental security. Assure the effective application of resources to DOE National Security Missions for which the INEEL has unique capabilities to offer.

4.6.1.1 Measure: Develop ICES into an internationally recognized center addressing problems relevant to the INEEL site and to the DOE national security mission. **[Fee: $50K]**

Accountability: James Werner/
Vic Pearson—DOE-ID Laurin Dodd—INEEL

Basis of Validation: Delivery of an ICES Program Plan by November 1, 2000; conducting ICES Workshop by December 1, 2000; and work packages for 20 combined, new and current, projects under ICES; and further refinement of the bilateral agreement shown by the award of one project.

Fee Allocation: $50K. Fee allocated based on completion as stated.

4.6.1.2 Measure: Enhance INEEL contributions in the development of technologies in support of DOE's chemical, biological, and nuclear counterterrorism and nonproliferation missions, an enhance INEEL's materials programs to meet the DOE National Security mission by September 1, 2001. **[Fee: $100K]**

Accountability: Vic Pearson—DOE-ID Larry Freeman—INEEL

Basis of Validation: Success will be measured by new programs and projects initiated in support of DOE and its customers over an established baseline. Further INEEL will expand its involvement in Chemical weapons detection programs in one international market.

Fee Allocation: $100K. Fee allocated based on completion as stated.

4.6.2 Performance Criterion: Over the next three years, assure efficient use of existing INEEL capabilities and resources to meet the needs of DOE and other national security missions.

Accountability: Vic Pearson—DOE-ID Laurin Dodd—INEEL

Description: INEEL will be a recognized and valued laboratory for supporting US and DOE national security programs.

Justification: Maintain and enhance INEEL capability base that is aligned with and addresses DOE and other National Security mission needs.

4.6.2.1 Measure: Establish the INEEL as a key participant in the nation's Critical Infrastructure Program. **[Fee: $50K]**

Accountability: Vic Pearson—DOE-ID William Motes—INEEL

Basis of Validation: Establish at least two projects within the DOE Critical Infrastructure Protection Program by September 1, 2001.

Fee Allocation: $50K. Fee allocated based on completion as stated.

4.6.2.2 Measure: Apply INEEL resources National Security challenges through the development of Integrated Defense Systems. **[Fee: $50K]**

Accountability: Vic Pearson—DOE-ID William Motes—INEEL

Basis of Validation: Identification of new customers and products and capture of one new major project addressing those identified challenges by September 1, 2001.

Fee Allocation: $50K. Fee allocated based on completion as stated.

4.7 Critical Objective: Implement the staffing plan for scientists and engineers, ensuring it reflects the assumptions to appropriately staff critical mission areas identified in the INEEL Institutional Plan.

4.7.1 Performance Criterion: Establish and maintain a workforce which is structured consistent with the INEEL institutional plan and specific program goals to effectively and efficiently achieve the critical mission areas.

Accountability: Bob Bardsley—DOE-ID Fred Gunnerson/ Connie Blackwood—INEEL

Description: The right human resources are needed to succeed in critical mission areas such as subsurface science, and nuclear engineering. Focus is on critical hiring that will change the skill mix to accomplish new mission needs. The assumptions to implement this staffing plan will be based on the laboratory's scientific and technical requirements.

Justification: It is imperative that the INEEL workforce be optimally structured in terms of skill mix, levels, and diversity to revitalize the laboratory.

4.7.1.1 Measure: Successfully execute the critical mission areas of the staffing plan. **[Fee: $200K]**

Accountability: Bob Bardsley—DOE-ID Fred Gunnerson—INEEL

Basis of Validation: Progress will be measured by implementation and completion of requirements within the staffing plan and transmittal of quarterly status reports to and accepted by DOE to confirm that lead laboratory and critical mission program managers have adequate staffing to meet FY2001 goals.

Fee Allocation: $200K. Fee allocated based on completion as stated.

Note: This performance measure will be reviewed upon receipt of the forthcoming Staffing Plan due the end of September 2000 and changed as needed by Change Control Procedures.

5.0 Critical Outcome Leadership

Fee: $1.95M (6%)

Lead: Paul Keele—DOE-ID Paul Rosenkoetter—INEEL

Provide systems, infrastructure, behavior, and vision resulting in mission accomplishment and preeminent national laboratory performance.

5.1 Critical Objective: INEEL employees demonstrate understanding of and perform in alignment with INEEL mission, vision, and values.

5.1.1 Performance Criterion: Establish and institutionalize the processes, planning systems, and management approaches to obtain support for and alignment to the INEEL's strategic goals and objectives.

Accountability: Donald Macdonald—DOE-ID Linda Trocki—INEEL

Description: This includes the development of mission, vision, values, and strategic objectives; and the deployment of these objectives to the INEEL workforce

Justification: Developing the strategic direction for the INEEL consistent with the contract request for proposal and award, while incorporating subsequent customer expectations/changes are essential to maximizing program and laboratory success. The integration of planning systems and alignment of the INEEL workforce to the strategic direction will ensure program results are achieved most effectively and efficiently, resulting in long-term mission success.

5.1.1.1 Measure: By March 31, 2001 and August 31, 2001, submit the draft and final Institutional Plan to DOE-ID respectively. Additionally, by November 15, 2000, submit a planning system description and by September 15, 2001 complete a self-assessment. **[Fee: $100K]**

Basis of Validation: Specific deliverables transmitted to and accepted by DOE by the specified date.

Fee Allocation: Maximum fee is $100K. All specific deliverables must be met to earn the available fee.

5.2 Critical Objective: Integrate and align management systems to institutionalize a consistent management approach.

5.2.1 Performance Criterion: Execute a business decision process that results in comprehensive management decisions regarding the financial, physical, technical, and functional direction of the INEEL over the next 5 to 10 years.

Accountability: Paul Keele—DOE-ID Paul Rosenkoetter —INEEL

Description: Given the complexity, size, and diversity of INEEL missions and operations, it is difficult to ensure that all organizations and functional entities are executing their responsibilities consistently and in the best interests of the total INEEL rather than individual perspectives/objectives. The Institutional Plan provides overall direction and strategy for the INEEL's future, but it does not and should not provide the practical application of these strategies to operational and functional entities and related decisions. Execution of consistent business decisions is required to maximize INEEL's results. The integration and

alignment of a common set of tactics and understandings throughout all management levels as work is planned and executed will provide more effective and efficient use of INEEL resources.

Justification: The application of a consistent and common set of tactics and decisions will result in optimizing the resources of the INEEL.

5.2.1.1 Measure: Evaluation of performance by DOE-ID senior management as evidenced by the identification, resolution, communication, and execution of a common set of management tactics/decisions applied by all BBWI managers as work is planned and executed. (Specific indicators will be developed to finalize the basis for validation by October 30, 2000 with approval by the Change Control Board). **[Fee: $150K]**

Basis of Validation: TBD by October 30, 2000.

Fee Allocation: The maximum fee available is $150K. Potential for partial fee TBD by October 30, 2000.

5.3 Critical Objective: Provide stewardship through effective, efficient, and comprehensive resource management to maximize mission results.

5.3.1 Performance Criterion: Develop and execute a comprehensive cost and budget formulation and execution management methodology that optimizes INEEL outputs.

Accountability: Paul Keele—DOE-ID Paul Rosenkoetter—INEEL

Description: The INEEL must establish and execute a cost and budget management model that recognizes that current financial demands exceed the availability of funds. Maximizing current operating results while ensuring that longer-term missions and objectives remain achievable will require challenging and difficult analysis, decisions, and tradeoffs. BBWI must develop a long-term comprehensive approach that recognizes this reality and provides a prioritized approach to impacts, implications, and resolutions.

Justification: Without developing and implementing such an approach, INEEL missions and programmatic deliverables will face increasing financial risk to successful completion.

5.3.1.1 Measure: Evaluation of performance by DOE-ID management, as evidenced by a comprehensive financial approach that establishes priorities, tradeoffs, impacts, and implications that drive all BBWI cost and budget decisions. (Specific indicators will be developed to finalize the basis for validation by October 30, 2000 with approval by the Change Control Board). **[Fee: $150K]**

Basis of Validation: TBD by October 30, 2000.

Fee Allocation: The maximum fee available is $150K. Potential for partial fee TBD by October 30, 2000.

5.4 Critical Objective: Provide stewardship through comprehensive capital investment and infrastructure management that is aligned and integrated with INEEL missions

5.4.1 Performance Criterion: Continue to implement improvements into the INEEL Infrastructure Long-Range Plan and planning process that better optimizes the existing infrastructure, provides better visibility to future requirements/needs through in-depth integration of missions/programs across the

INEEL, and improves operational use of INEEL assets consistent with and supportive of the INEEL Institutional Plan. **[Fee: $300K]**

Accountability: Bill Leake—DOE-ID Jerry Ethridge—INEEL

Description: The INEEL Infrastructure Long-Range Plan encompasses all those functions and facilities (e.g., buildings, structures, property, systems, utilities, fleet, telecommunications, inventory, warehousing property pools, networks, etc.) necessary to accomplish assigned missions. The Long-Range Plan is based on a comprehensive life-cycle analysis that addresses all aspects of the infrastructure at the INEEL. The plan is a living document that establishes the current infrastructure condition and projects future needs and dispositions in an efficient and supportable manner. The Long-Range Plan is consistent with and supports the Institutional Plan and individual program plans and requirements. It is revised annually to reflect changes in mission accomplishments and strategic planning, on an integrated site-wide basis. It is also the basis upon which the INEEL Infrastructure budget is formulated.

Justification: The Infrastructure Long-Range Plan is the mechanism by which the DOE Strategic and INEEL Institutional Plans are implemented from an infrastructure-needs perspective. The plan itself will identify the specific objectives to be achieved, why those objectives are necessary, and the date by which the objectives are to be completed. The plan defines what specific objectives must be achieved to effectively support and ensure the INEEL-assigned missions are achieved successfully.

5.4.1.1 Measure: By October 10, 2000, provide a revision to the INEEL Infrastructure Long Range Plan that provides DOE-HQ (EM-40) the specific information in the specified format requested for the INEEL Infrastructure Restoration Plan.

Basis of Validation: Deliverable transmitted to and accepted by DOE on the date identified above.

5.4.1.2 Measure: By February 15, 2001, issue the annual update to the INEEL Infrastructure Long-Range Plan addressing DOE comments. This version should clearly demonstrate where better integration among the various site areas, missions/programs, external influences, and planning data analysis are factored into the path forward. Senior level management involvement in these decisions must be clearly evident. Updates to the INEEL Infrastructure Long-Range Plan should clearly reflect alternatives considered and why they were not recommended.

Basis of Validation: Deliverable transmitted to and accepted by DOE on the dates identified above. DOE-ID review of final Long-Range Plan will be performed to validate measure is met.

5.4.1.3 Measure: By February 15, 2001, identify, evaluate, and analyze alternatives and provide a recommended path forward for modernizing (e.g., upgrading existing and constructing new) the INEEL facilities, key equipment, and necessary infrastructure to achieve the vision set forth in the INEEL Institutional Plan as it exists on September 30, 2000. The analysis must factor in the various budget scenarios (ranges and constraints) that may be imposed and what BBWI considers to be the funding necessary assuming the DOE, the Office of Management and Budget, and Congress fully supports the INEEL Institutional Plan. This report must address the specific details (e.g., building by building, each major item of equipment, budget justifications, schedule of major milestones) necessary to attain the recommended actions. Additionally, the report must address science and technology projects to be displaced by any facility closures or lease expirations planned and factor in how these projects will be accommodated.

Basis of Validation: Deliverable transmitted to and accepted by DOE on the dates identified above.

5.4.1.4 Measure: By February 15, 2001, review all upcoming new construction projects and identify at least 10 specific projects in which BBWI Senior Management challenged the current path forward and present the results to DOE in a report. The expectation of this measure is to determine the optimum use of resources and reduce capital expenditures without impacting the mission.

Basis of Validation: Deliverable transmitted to and accepted by DOE on the dates identified above. The report must demonstrate evidence of a challenging review that results in cost savings for the INEEL.

5.4.1.5 Measure: By February 15, 2001, submit to DOE the range of options from complete shutdown to graded operation levels with a recommendation, including timelines for implementation, for cost effectively maintaining the Test Area North Hot Shop and the Test Area North site area based on anticipated future mission needs. Include a review of the options of potential needs for the TAN Hot Shop and ancillary systems with a recommended level of readiness for restart. We are looking for the optimum funding level of maintenance balanced with restart costs.

Basis of Validation: Deliverable transmitted to and accepted by DOE on the dates identified above.

Fee Allocation: Maximum fee is $300K. Because this objective is critical, all measures must be met to earn the available fee. No follow-on out-year fees will be available until these measurements are met; future fee may go unearned.

5.4.2 Performance Criterion: Develop and implement a long-term Information Technology strategy that includes business and scientific computing and is aligned with the INEEL Institutional Plan and the Infrastructure long-range plan. **[Fee: $150K]**

Accountability: Bill Jensen—DOE-ID Al Lewis—INEEL

Description: The Information Technology (IT) long-range plan encompasses all functions that relate to information management (e.g., networks, desktops, application development, records management, document controls, IT architecture, cyber security, etc.) necessary to accomplish assigned missions. The requirements and long-range objectives will be integrated with the Infrastructure long-range plan and INEEL Institutional Plan objectives.

Justification: The INEEL Information Technology long-range plan is the mechanism to align DOE and INEEL business and scientific objectives with specific projects, acquisitions, and funds to effectively provide the necessary IT infrastructure for mission accomplishment.

5.4.2.1 Measure: By February 15, 2001, finalize the INEEL Long-Term Information Technology Plan that integrates business and scientific computing needs of the INEEL. This will set the strategy for all INEEL IT-related acquisitions and resources (direct and indirect). Detailed work plans, baseline documents, etc., will need to identify IT-related scope in order to ensure that spending is aligned with the final strategic plan. The analysis of the total cost of ownership for sitewide IT operations and services will need to be a key factor in establishing the recommended strategies.

Basis of Validation: Deliverable transmitted to and accepted by DOE by the date identified above.

5.4.2.2 Measure: By December 15, 2000, prepare a business case for proceeding with the development of the business layer as defined by the IT architecture effort. This product must describe the benefits to be gained by proceeding with this effort and identification of any risks associated with initiatives currently underway, such as SBMS, the legacy business system replacement and the scientific computing enhancements planned for FY 2001.

Basis of Validation: Delivery of the business case for the business layer of IT architecture and interfaces with other key projects. Based on the recommendation, a path forward will need to be negotiated.

Fee Allocation: The maximum fee is $150K. Because this objective is critical and significant integration must occur with other initiatives, all measures must be achieved. No follow-on out-year fees will be available until these measures are met; future fee may go unearned

5.5 Critical Objective: Optimally structure and productively use the workforce to achieve INEEL missions.

5.5.1 Performance Criterion: Maintain a workforce that is consistently structured with the INEEL Institutional Plan and specific program goals to effectively and efficiently achieve the overall INEEL mission.

Accountability: Bob Bardsley—DOE-ID Jane Welch—INEEL

Description: Maintain a five-year Human Resource baseline of existing resources and projection of future needs, with action plans to resolve gaps between the baseline and needs assessment. This baseline must be aligned to and consistent with the INEEL Institutional Plan and represent BBWI's management position on future staffing needs.

Justification: It is imperative that the INEEL workforce be optimally structured in terms of skills mix, levels, and diversity.

5.5.1.1 Measure: By September 15, 2001, submit the annual five-year Human Resource Staffing Plan to DOE-ID. The plan will cover, by classification, optimum employment skill mix and levels, and specific action plans to correct identified variances and gaps. **[Fee: $100K]**

Basis of Validation: Deliverable transmitted to and accepted by DOE on the date identified above.

Fee Allocation: Maximum fee is $100K.

5.6 Critical Objective: Clearly demonstrate leadership in making informed decisions about the future success of the INEEL.

5.6.1 Performance Criterion: Sustain a leadership approach that considers the necessary information to provide well-informed, integrated solutions to solve INEEL challenges. **[Fee: $1,000K]**

Accountability: Paul Keele—DOE-ID Paul Rosenkoetter—INEEL

Description: The INEEL must embrace the best management practices to improve processes and customer satisfaction, and eliminate inefficiencies. It must strengthen management systems to be integrated, results-oriented, and cost-effective while ensuring they are fully protective of human health and the environment. We must maintain effective collaborations with other national laboratories while continuing to focus on community, employee, and stakeholder relations. It becomes very critical to emphasize vertical and horizontal communications that will strengthen our integration and ensure mission accomplishment during times of competing initiatives with a relatively flat budget.

Justification: This objective will be used to measure the overall performance of BBWI's leadership and management capabilities and results.

5.6.1.1 Measure: Evaluation of performance will be by DOE-ID management team.

5.6.1.2 Measure: Work performed is accomplished within (+) or (-) 10% of the approved Detailed Work Plan (DWP).

Basis of Validation: Evaluation of performance by DOE-ID Management as an overall rating of BBWI regarding their leadership and management qualities and results.

Fee Allocation: The maximum fee available is $1,000K.