AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE DE-AC07-05ID14517	PAGE 1 OF 2 PAGES

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
M053	See Block 16c	NOPR	

6. ISSUED BY CODE	7. ADMINISTERED BY *(If other than Item 6)* CODE
US. Department of Energy Idaho Operations Office (DOE-ID) Site Services Division 1955 Fremont Avenue, MS 1240 Idaho Falls, ID 83415	Diane Long, Contract Specialist (208) 526-0949

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and Zip Code)*		9A. AMENDMENT OF SOLICITATION NO.
Battelle Energy Alliance, LLC P.O. Box 1625 Idaho Falls, ID 83415		9B. DATED *(SEE ITEM 11)*
	X	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC07-05ID14517
CODE FACILITY CODE		10B. DATED *(SEE ITEM 13)* November 9, 2004

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation as amended, by one of the following methods:

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

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

N/A

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

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO *(Specify authority)*: THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE-NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(Such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: **DEAR 970.5215-1, Total Available Fee: Base Fee Amount And Performance Fee Amount**
	D. OTHER *(Specify type of modification and authority)*:

E. IMPORTANT: Contractor [ ] is not, [X] is required to sign this document and return [3] copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible)*

The purpose of this modification is to incorporate the FY 2007 Performance Evaluation Measurement Plan (PEMP).

(See Continuation)

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

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
Art Clark Deputy for Operations Idaho National Laboratory	Wendy L. Bauer Contracting Officer

15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
BY Art Clark *(Signature of person authorized to sign)*	9/19/06	BY Wendy Bauer *(Signature of Contracting Officer)*	9/19/06

Continuation page

The FY 2007, PEMP is incorporated into Part III Section J Attach K, effective date: October 1, 2006 (Attached 42 pages)

The FY 2006 PEMP remains in effect through September 30, 2006.

Section A

I. Introduction

This Contract attachment sets forth the Performance Evaluation Measurement Plan (PEMP) that will be used by DOE to evaluate the overall performance of Battelle Energy Alliance, LLC (BEA) for the management and operation of the Idaho National Laboratory (INL) in Fiscal Year (FY) 2007.

There are six Critical Outcomes that support DOE missions and priorities in the INL FY 2007 PEMP. These are: Advanced Nuclear Energy, National and Homeland Security, Science and Technology, Infrastructure, Leadership and Stewardship of the Laboratory, and Excellence in Operations and ES&H.

- **Advanced Nuclear Energy**: Support new nuclear generation capacity that produces carbon-free electricity in the near term and develops next generation nuclear reactor and fuel cycle technologies for deployment in the longer term for both electricity and hydrogen production.
- **National and Homeland Security**: Take decisive actions to counter nuclear proliferation and prevent the acquisition of nuclear and radiological materials for use in weapons of mass destruction and in other acts of terrorism. Develop laboratory capabilities and infrastructure required to support U.S. efforts to enhance the security of the nation's critical infrastructure with emphasis in the areas of energy distribution, process control and communications.
- **Science and Technology**: Produce scientific discoveries that drive U.S. competitiveness and revolutionize the approach to the nation's energy, national security and environmental quality challenges. Integrate basic and applied research to accelerate innovation and create transformational solutions for energy and other U.S. needs.
- **Infrastructure**: Deliver the scientific facilities and provide the laboratory capabilities and infrastructure required for U.S. scientific and technical primacy. Implement the INL's ten-year site plan. Ensure decisions to change land-use and legacy clean-up are based on the department's mission requirements, protecting human health and the environment, and input from regulators and the community.
- **Leadership and Stewardship of the Laboratory**: Institute an integrated risk-based resource management approach that addresses customer expectations, safety, security, human capital needs, and project management of the Department's evolving mission requirements.
- **Excellence in Operations and ES&H**: Create a safety and security program that ensures the well being of employees while at work.

The INL PEMP is aligned to the DOE and INL strategic plans. It is composed of a three-tiered structure used to measure BEA's performance. The top tier, Mission Critical Outcomes and Operations Critical Outcomes, focus on mission achievement and operational performance. Each critical outcome is composed of a number of objectives (the second tier)

which are key to achieving the outcome. The third tier, performance measures (hereinafter referred to as measures), are developed in partnership with NE, the Idaho Operations Office (DOE-ID) and BEA and are designed to demonstrate how achievement of each objective is measured.

The NE appraisal process has been designed to:

- Advance BEA's ability to accomplish its scientific and technological missions and contribute to the Nation.
- Encourage BEA to improve and maintain the vitality of the Laboratory.
- Assure that DOE is providing proper stewardship of a public asset and public funds.
- Assess the performance of BEA in managing the Laboratory to obtain the information necessary to support contract extend/compete decisions.

II. Background

The INL PEMP process is governed by principles of performance-based management. This approach to DOE oversight emphasizes the customer-supplier partnership between DOE and laboratory contractors and focuses on the mission performance, best business practices, cost management, and improving contractor accountability. The DOE policy for implementing performance-based management includes the following guiding principles:

- Performance objectives are established in partnership with affected organizations
- Performance objectives are directly aligned to the DOE and INL strategic goals;
- Resource decisions and budget requests are tied to results; and
- Results are used for management information, establishing accountability, and driving long-term improvements.

Under the performance-based management system, DOE develops strategic objectives to support critical outcomes against the INL Strategic Plan, and then uses those objectives to assess the contractor's performance in accordance with contract requirements. The success of each objective within each critical outcome will be measured based on a set of key performance measures, both objective and subjective, which focus primarily on end-results.

III. Critical Outcomes, Objectives, and Measures

The INL PEMP defines a set of critical outcomes. Each critical outcome is weighted as determined and agreed upon jointly by DOE and BEA. Both parties then agree on the objectives under each outcome.

Measures are then developed for each objective by DOE and BEA. Measures identify significant activities, requirements, and/or milestones important to the success of the corresponding objective and critical outcome and are utilized as the primary means of determining the Contractor's success in meeting the desired performance result. Measures are developed to indicate that, if fully met, the performance level is equivalent to a "B+" grade. In order to achieve a grade, all of the requirements of the lower grades must have been met.

Definitions:

Challenge Measure: Workscope that is unfunded or under-funded with the expectation that the contractor will perform the work through efficiencies or savings gained from performance of funded work, no additional costs will be charged to DOE. Completion of the challenge measures can result in the potential to earn up to 10% of available fee (not to exceed $1.87M) of otherwise unearned fee. In no case will achievement of challenge measures result in total fee payment in excess of the total available fee pool ($18.7M for FY 2007). Development of measures for each objective follows the model provided by the grading and numerical score definitions found in Figure I.1.

Critical Outcome: An overarching statement of the desired outcome for each major performance area that is scored and reported annually under the appraisal process. The INL critical outcomes are based on the DOE and INL strategic plans.

Customer Satisfaction/Feedback: Customer satisfaction/feedback will be determined by a formal, DOE-approved standard customer feedback survey. This survey will set definitions for poor, good, outstanding and other customer performance ratings.

Objectives: Desired accomplishment or results that contribute substantially to a critical outcome.

Peer Review: Independent scrutiny/evaluation of a project or program by qualified internal/external scientific experts (peers). Common criteria for peer review encompass questions like:

- Validity – are the research results credible; are the design and methodology appropriate?
- Significance - is it an important finding?
- Originality - are the results new?
- Is the work aware of and does it refer properly to work done by others?

An outstanding rating by a peer panel would be when all the (peer) reviewers agree that the answers to all of the above and similar questions are unambiguously yes.

Performance Measure: A quantitative or qualitative method for characterizing performance to assist the reviewer in assessing achievement of the corresponding performance objective (i.e., what you would measure). It may include a description of the desired condition, milestone, or target level of achievement. Absence of a performance measure does not diminish the requirement for contractor compliance with specified contractual requirements. Failure to meet a significant contractual requirement may result in the Contracting Officer overriding the performance measures.

Letter Grade	Numeric Grade	Definition
A+	4.3 – 4.1	Significantly exceeds expectations of performance as set within performance measures identified for each objective or within other areas within the purview of the objective. Areas of notable performance have or have the potential to significantly improve the overall mission of the Laboratory. No specific deficiency noted within the purview of the overall objective being evaluated.
A	4.0 – 3.8	Notably exceeds expectations of performance as set within performance measures identified for each objective or within other areas within the purview of the objective. Areas of notable performance either have or have the potential to improve the overall mission of the Laboratory. Minor deficiencies noted are more than offset by the positive performance within the purview of the overall objective being evaluated and have no potential to adversely impact the mission of the Laboratory.
A-	3.7 – 3.5	Meets expectations of performance as set within performance measures identified for each objective with some notable areas of increased performance identified. Deficiencies noted are offset by the positive performance within the purview of the overall objective being evaluated with little or no potential to adversely impact the mission of the Laboratory.
B+	3.4 – 3.1	Meets expectations of performance as set by the performance measures identified for each objective with no notable areas of increased or diminished performance identified. Minor deficiencies identified are offset by other exceptional performance and have little to no potential to adversely impact the mission of the Laboratory.
B	3.0 – 2.8	Most expectations of performance as set by the performance measures identified for each objective are met. Performance that does not meet expectations are identified but are offset by positive performance within the purview of the objective and have little to no potential to adversely impact the mission of the Laboratory.
B-	2.7 – 2.5	One or two expectations of performance set by the performance measures are not met and/or other deficiencies are identified and although they may be offset by other positive performance, they may have the potential to negatively impact the objective or overall Laboratory mission accomplishment.
C+	2.4 – 2.1	Some expectations of performance set by the performance measures are not met and/or other minor deficiencies are identified and although they may be offset by other positive performance, they may have the potential to negatively impact the objective or overall Laboratory mission accomplishment.
C	2.0 – 1.8	A number of expectations as set by the performance measures are not met and/or a number of other deficiencies are identified and although they may be somewhat offset by other positive performance, they have the potential to negatively impact the objective or overall Laboratory mission accomplishment.
C-	1.7 – 1.1	Most expectations as set by the performance measures are not met and/or other major deficiencies are identified which have or will negatively impact the objective or overall Laboratory mission accomplishment if not immediately corrected.
D	1.0 – 0.8	Most or all expectations as set by the performance measures are not met and/or other significant deficiencies are identified which have negatively impacted the objective and/or overall Laboratory mission accomplishment.
F	0.7 – 0	All expectations as set by the performance measures are not met and/or other significant deficiencies are identified which have significantly impacted both the objective and the accomplishment of the Laboratory mission.

Figure I-1. Letter Grade and Numerical Score Definitions

IV. Scoring

The scoring system arriving at the fee determination for INL performance has three components. Mission Critical Outcomes (Outcomes 1 through 3) Operations Critical Outcomes (Outcomes 4 through 6), and challenge measures are scored separately. Each critical outcome contains a number of objectives, which are weighted. Objectives are graded by the measures described for each, and the grades for each objective are rolled-up to arrive at a grade for each critical outcome (general grade definitions are described below.) Each of the measures identifies significant activities, requirements, and/or milestones important to the success of the corresponding critical outcome and shall be utilized as the primary means of determining the Contractor's success in meeting the desired result. Each measure identifies performance success at the B+ level.

Letter grades for each objective will be converted to numerical score by DOE as described in Table A. The weighted Mission Critical Outcome scores will be rolled-up to arrive at a total score for Mission. The weighted Operations Critical Outcomes will be rolled-up to arrive at a total score for Operations. Challenge measures are evaluated in accordance with the associated grading scale and will result in a weighted score. Based on Table A below, the Mission score will translate to a percentage, and the Operations score will translate to a percentage. Fee is additive for Mission Critical Outcomes. Operations Outcomes can only reduce otherwise earned fee. The Mission percentage is then multiplied by the Operations percentage to arrive at the total earned fee percentage. That percentage is then multiplied by the total available fee ($18,700,000) to arrive at BEA's earned fee.

Challenge fee available for each challenge measure is determined by multiplying the measure weight by the total available challenge fee (up to 10% of available fee in FY 2007). The amount of fee earned for each measure is determined by the grade achieved. The grade percent times the challenge fee for the measure equals the challenge fee earned. The Operations fee multiplier does not apply for challenge fee calculations. If the contractor achieves a grade of less than "B" on any Mission Critical or Operations Outcome, no challenge fee can be earned.

Final Grade	Overall Weighted Score from Table A	Percent Mission/Challenge Fee Earned	Operations Fee Multiplier
A+	4.3 – 4.1	100%	100%
A	4.0 – 3.8	97%	100%
A-	3.7 – 3.5	94%	100%
B+	3.4 – 3.1	91%	100%
B	3.0 – 2.8	88%	95%
B-	2.7 – 2.5	85%	90%
C+	2.4 – 2.1	75%	85%
C	2.0 – 1.8	50%	75%
C-	1.7 – 1.1	0%	60%
D	1.0 – 0.8	0%	0%
F	0.7 – 0.0	0%	0%

Table A. Performance-Based Fee Earned Scale

Although the measures are the primary means for determining performance, other performance information from other sources including, but not limited to, BEA's self evaluation report, operational awareness (daily oversight) activities, "For Cause" reviews (if any) and other outside agency reviews (OIG, GAO etc.) may be utilized in determining BEA's overall success in meeting an objective.

Calculating Individual Objective Scores and Letter Grade:

Utilizing Table B, below, the scores for each of the Mission Critical Outcomes and Operations Critical Outcomes are multiplied by the weight assigned and these are added to provide an overall score for each. The raw score (rounded to the nearest hundredth) from each calculation shall he carried through to the next stage of the calculation process. The raw score for Mission and Operations will be rounded to the nearest tenth of a point. A standard rounding convention of x.44 and less rounds down to the nearest tenth (here, x.4), while x.45 and greater rounds up to the nearest tenth (here, x.5).

Some of the measures are designated as Excellent Pass/Pass/Fail or Pass/Fail. Scoring equivalencies are included in the individual measure tables.

Mission Critical Outcomes	**Letter Grade**	**Numeric Score**	**Weight**	**Weighted Score**	**Total Score**
1.0 Advanced Nuclear Energy			50%		
2.0 National and Homeland Security			25%		
3.0 Science and Technology			25%		
			Mission Total Score		
Operations Critical Outcomes	**Letter Grade**	**Numeric Score**	**Weight**	**Weighted Score**	**Total Score**
4.0 Infrastructure			20%		
5.0 Leadership & Stewardship of the Laboratory			35%		
6.0 Excellence in Operations and ES&H			45%		
			Operations Total Score		

Table B. FY 2007 Contractor Evaluation Score Evaluation

Final fee earned is calculated using Table B below:

Overall Fee Determination		
Percent Mission Fee earned per Table A	**%**	
Operations Multiplier per Table A	**x %**	
Total Mission & Operations Fee Earned	**= %**	**= $**
Challenge Measure fee earned per Table A	**%**	+
Available challenge fee	**x ***	
Total Challenge Fee earned		=$
Total fee earned (not to exceed $18.7M)		

Table C. FY 2007 Final Fee Determination Calculation
***$18.7M minus the Total Mission & Operations Fee Earned (not to exceed $1.87M).**

V. Performance Status Reporting and Evaluation Process

PEMP administration is a formal process which includes requirements for monthly status reports, change control, quarterly status reviews and final fee determination.

Monthly status of performance to expectations will be provided by both DOE and BEA. Areas of disagreement will be highlighted and addressed. Performance Status Reviews will be conducted quarterly. BEA is responsible to define and coordinate the process for conducting the reviews and to ensure the involvement of appropriate DOE and BEA counterparts. Quarterly reviews will focus on PEMP objectives and measures as well as other significant issues.

On an annual basis, BEA will conduct a formal Self-Evaluation of its performance relative to each critical outcome, objectives, and measures. A written report documenting the self evaluation will also address other significant issues and will be provided to DOE within 10 calendar days after the end of the performance period. The report will be limited to 50 pages.

In addition to monthly reporting, the DOE will perform and document a final evaluation of BEA's performance relative to each critical outcome, objectives and measures and will provide a final fee determination. The absence of specific PEMP measures in this plan does not diminish the need to comply with minimum contractual requirements. The Fee Determination Official (FDO) may unilaterally adjust the fee earned based on the Contractor's performance against all contract requirements. Data to support fee adjustments may be derived from other sources to include, but not limited to, operational awareness (daily oversight) activities; "For Cause" reviews (if any); other outside agency reviews (OIG, GAO, DCAA, etc.), significant events or incidents within the control of the Contractor, or other reviews as appropriate.

Section B - Critical Outcomes, Objectives, and Measures

Mission Outcomes/Objectives				
1.0	**Advanced Nuclear Energy**			**50%**
	1.1	**Overall Integration and Management of GNEP Program Activities**	**15%**	
	1.2	**GNEP CFTC, ABR, AFCF and AFC Technology Progress**	**40%**	
	1.3	**NGNP Fuel Irradiation, Graphite Capsule Fabrication, and Industry Participation**	**25%**	
	1.4	**Hydrogen Technology Development and Demonstration**	**10%**	
	1.5	**Radioisotope Power System Production**	**10%**	
2.0	**National and Homeland Security**			**25%**
	2.1	**Reduced Enrichment for Research & Test Reactors (RERTR) Program**	**10%**	
	2.2	**Information Operations (IO)**	**20%**	
	2.3	**INL Secure Facility**	**40%**	
	2.4	**Critical Infrastructure Protection**	**10%**	
	2.5	**INL Nuclear Nonproliferation Initiative (NNI)**	**20%**	
3.0	**Science and Technology**			**25%**
	3.1	**Research and Development Supporting U.S. Energy Security**	**20%**	
	3.2	**Joint Research Programs in Science & Engineering with NE & SC**	**25%**	
	3.3	**INL's Scientific and Technical Reputation**	**20%**	
	3.4	**Environmental Impacts of Water and Waste Management Research**	**15%**	
	3.5	**Science & Engineering Education**	**20%**	
Operations Outcomes/Objectives				
4.0	**Infrastructure**			**20%**
	4.1	**Advanced Test Reactor Life Extension Program**	**35%**	
	4.2	**Campus Development**	**45%**	
	4.3	**Design Basis Threat Implementation**	**10%**	
	4.4	**Infrastructure Support**	**10%**	
5.0	**Leadership and Stewardship of the Laboratory**			**35%**
	5.1	**Vision and Planning for the Laboratory**	**40%**	
	5.2	**Leadership of the Laboratory**	**60%**	
6.0	**Excellence in Site Operations and ES&H**			**45%**
	6.1	**Environment, Safety, Health, and Quality**	**50%**	
	6.2	**SMC A/B Production**	**15%**	
	6.3	**SMC SA Production**	**15%**	
	6.4	**ATR Planned Outage Maintenance Work Packages**	**7%**	
	6.5	**ATR Maintenance Work Package Completion**	**7%**	
	6.6	**ATR Unplanned Outage Maintenance Work Packages**	**6%**	

Critical Outcome

1.0 Advanced Nuclear Energy

Support new nuclear generation capacity that produces carbon-free electricity in the near term and develop next generation nuclear reactor and fuel cycle technologies for deployment in the longer term for both electricity and hydrogen production.

The weight of this Mission Critical Outcome is 50%.

1.0 Advanced Nuclear Energy Objectives	Letter Grade	Numeric Score	Weight	Weighted Score	Total Score
1.1 Overall Integration and Management of GNEP Program Activities			15%		
1.2 GNEP CFTC, ABR, AFCF and AFC Technology Progress			40%		
1.3 NGNP Fuel Irradiation, Graphite Capsule Fabrication, and Industry Participation			25%		
1.4 Hydrogen Technology Development and Demonstration			10%		
1.5 Radioisotope Power System Production			10%		
Advanced Nuclear Energy Critical Outcome Total Score					

1.1 Overall Integration and Management of GNEP Program Activities

Develop the Global Nuclear Energy Partnership (GNEP) to address spent nuclear fuel, reduce proliferation risks, and expand the promise of clean, reliable, and affordable nuclear energy. Take measurable actions to lead the GNEP effort for DOE and ensure GNEP goals are clear to stakeholders and other national laboratories. Develop and apply state-of-the-art modeling and simulation methods and systems analysis to advance the objectives of GNEP. In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, Program Office reviews/oversight, deliveries against milestone dates, etc.:

- Timely and effective leadership, development and execution of the GNEP Management strategy.
- Establish an effective, functioning GNEP Program Office to lead critical GNEP activities.
- The level of strategic partnerships established with academic institutions and other laboratory partners.
- Willingness to pursue novel approaches and/or demonstration of innovative solutions to the GNEP program challenges.

- Critical hires necessary to accomplish GNEP goals and objectives.
- Establishment of INL Modeling and Simulation capability in support of GNEP objectives and the quality of modeling and simulation support to the GNEP technology development strategy.

Grade	Performance
A- to A+	INL is highly effective in executing the leadership, integration, and management role in GNEP by accomplishing 90% or more of the key 2007 activities defined in the GNEP Program Management Plan. Completion of level 1 and 2 work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 100% to 97% completion equals an A+, 96% to 93% completion equals an A, and 92% to 90% equals an A-. Deliverables are evaluated as exceptional by peer review.
B- to B+	INL is effective in executing the leadership, integration, and management role in GNEP by accomplishing 80% or more of the key 2007 activities defined in the GNEP Program Management Plan. Completion of level 1 and 2 work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 89% to 87% completion equals a B+, 86% to 83% completion equals a B, and 82% to 80% equals a B-. Deliverables meet standards of adequacy in peer review.
C- to C+	INL is partly effective in executing the leadership, integration, and management role in GNEP by accomplishing 70% or more of the key 2007 activities defined in the GNEP Program Management Plan. Completion of level 1 and 2 work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 79% to 77% completion equals a C+, 76% to 73% completion equals a C, and 72% to 70% equals a C-. Deliverables meet standards of adequacy in peer review.
D	Less than 70% of the level 1 and 2 work package milestones are met or a level 1 milestone is missed. Not able to meet most customer expectations.
F	Effective leadership and execution are not achieved.

1.2 Global Nuclear Energy Partnership Consolidated Fuel Technology Center (CFTR), Advanced Burner Reactor (ABR), Advanced Fuel Cycle Facility (AFCF) and Advanced Fuel Cycle (AFC) Technology Progress

Execute major GNEP project responsibilities and conduct effective fuels and separations R&D in support of the objectives of the Global Nuclear Energy Partnership (GNEP). The measures for this objective include consideration of the critical milestones in fuels development and irradiation testing. In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, Program Office reviews/oversight, deliveries against milestone dates, etc.:

- Successfully execute the AFCF project.
- Support the CFTC project as described in approved work packages.
- Support the ABR project as described in approved work packages.
- Execute AFCI R&D projects and mission including the following:
    - Complete fabrication of metal fuel (the AFC-2 fuel rodlets) as identified in the GNEP work package.
    - Complete Safety Analysis documentation for the AFC-2 irradiation experiment for ATR insertion.
    - Delivery and execution of a document that defines the scope and strategy to fully develop the necessary Advanced Fuel Cycle capability at INL that focuses on evaluation of existing technical capability and necessary infrastructure to support future needs.

Grade	Performance
A- to A+	The AFCF 30% design package is submitted for review in January of 2007 and is judged by DOE to fully meet or exceed the requirements described in the approved work packages and Conceptual Design Plan. Completion of level 1 and 2 work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 100% to 97% completion equals an A+, 96% to 93% completion equals an A, and 92% to 90% equals an A-. By the scheduled GNEP work package milestone date, INL will fabricate all (100%) of the metal fuel identified in the GNEP metal fuel work packages. The Safety Analysis documentation for the AFC-2 irradiation experiment will be approved and the AFC-2 irradiation experiment will be ready for ATR insertion on the schedule in the approved GNEP work package. An Advanced Fuel Cycle capability document is delivered that includes a well-defined strategy, an executable path forward, and the beginning of project execution in FY 2007.
B- to B+	The AFCF project is executed on or ahead of schedule and on or under budget. The AFCF 30% design package is submitted for review in January of 2007 and is judged by DOE to meet the minimum acceptable requirements described in the approved work packages and Conceptual Design Plan. Completion of level 1 and 2 work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 89% to 87% completion equals a B+, 86% to 83% completion equals a B, and 82% to 80% equals a B-. By the scheduled GNEP work package milestone date, INL will fabricate 75% of the metal fuel identified. The Safety Analysis documentation for the AFC-2 irradiation experiment will be approved and the AFC-2 irradiation experiment will be ready for ATR insertion no later than two weeks beyond the schedule in the approved GNEP work package. An Advanced Fuel Cycle capability document is delivered that includes a well-defined strategy and an executable path forward.
C- to C+	The AFCF project is executed behind schedule or over budget. The AFCF 30% design package is submitted for review in January of 2007 and is considered by DOE to have some deficiencies in quality that may impact the project. Completion of level 1 and 2 work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 79% to 77% completion equals a C+, 76% to 73% completion equals a C, and 72% to 70% equals a C-. By the scheduled GNEP work package milestone date, INL will fabricate 50% of the metal fuel identified. The Safety Analysis documentation for the AFC-2 irradiation

	experiment will be approved and the AFC-2 irradiation experiment will be ready for ATR insertion no later than one month beyond the schedule in the approved GNEP work package. An Advanced Fuel Cycle capability document is delivered that includes a well-defined strategy.
D	The AFCF project is executed behind schedule or over budget. The AFCF 30% design package is submitted for review after January of 2007 or is considered by DOE to have significant deficiencies in quality that will impact the project. Less than 70% of the level 1 and 2 work package milestones are met or a level 1 milestone is missed. By the scheduled GNEP work package milestone date, INL will fabricate 25% of the metal fuel identified. The Safety Analysis documentation for the AFC-2 irradiation experiment will be approved and the AFC-2 irradiation experiment will be ready for ATR insertion no later than 6 weeks beyond the schedule in the approved GNEP work package. An Advanced Fuel Cycle capability document is delivered.
F	By the scheduled GNEP work package milestone date, INL fabricates less than 25% of the metal fuel identified. The Safety Analysis documentation for the AFC-2 irradiation experiment is not approved or approved later than 6 weeks beyond the schedule in the approved GNEP work package, or the AFC-2 irradiation experiment is not ready for ATR insertion.

1.3 Next Generation Nuclear Plant (NGNP) Fuel Irradiation, Graphite Capsule Fabrication, and Industry Participation

INL leads the development of the NGNP, with a planned demonstration by 2021 (per the Energy Policy Act of 2005). This includes development and qualification of fuels, materials, and computer codes that support the NGNP and fostering a close relationship with industrial partners through preconceptual design activities that will support the R&D. The measure of this objective includes consideration of the critical milestones in experiment irradiation testing. In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, customer feedback, Program Office reviews/oversight, deliveries against milestone dates, etc.:

- Complete industrial preconceptual design studies by June 30, 2007.
- Begin AGR-1 irradiations by March 31, 2007.
- Complete fabrication of AGC-1 (graphite) experiment by September 30, 2007.
- Prepare an acquisition strategy for fuel and materials development, qualification and procurement that considers the full range of schedule options for developing and demonstrating NGNP by March 31, 2007.
- Successfully pass a DOE audit of INL-NGNP quality assurance practices by September 30, 2007.

Grade	Performance
A- to A+	Completion of level 1 and 2 NGNP work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 100% to 97% completion equals an A+, 96% to 93% completion equals an A, and 92% to 90% equals an grade of A-. INL completes the industrial preconceptual design studies and issues a final report by June 30, 2007. INL gains required approvals and begins irradiations of the AGR-1 test assembly before March 31, 2007. INL completes the AGC-1 experiment fabrication by September 30, 2007 including facility tie-ins, operating and insertion procedures. INL passes a DOE quality assurance audit of all NGNP activities by September 30, 2007 with no significant findings. INL prepares an acquisition strategy for fuel and materials required for the NGNP under all likely deployment scenarios by March 31, 2007.
B- to B+	Completion of level 1 and 2 NGNP work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 89% to 87% completion equals a B+, 86% to 83% completion equals a B, and 82% to 80% equals a B-. INL completes the industrial preconceptual design studies and issues a final report by June 30, 2007. INL gains required approvals and begins irradiations of the AGR-1 test assembly by March 31, 2007. INL completes the AGC-1 experiment fabrication by September 30, 2007 including facility tie-ins. INL passes a DOE quality assurance audit of all NGNP activities by September 30, 2007 with fewer than three significant findings. INL prepares an acquisition strategy for fuel and materials required for the NGNP under all likely deployment scenarios by March 31, 2007.
C- to C+	Completion of level 1 and 2 NGNP work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 79% to 77% completion equals a C+, 76% to 73% completion equals a C, and 72% to 70% equals a C-.INL completes the industrial preconceptual design studies and issues a final report by July 31, 2007. INL gains required approvals and begins irradiations of the AGR-1 test assembly by June 30, 2007. INL completes the AGC-1 capsule and pneumatic load system fabrication by September 30, 2007. INL passes a DOE quality assurance audit of all NGNP activities by September 30, 2007 with fewer than four significant findings. INL prepares an acquisition strategy for fuel and materials required for the NGNP under all likely deployment scenarios by September 30, 2007.
D	Less than 70% of the level 1 and 2 NGNP work package milestones are met or a level 1 milestone is missed. INL completes the industrial preconceptual design studies and issues a final report by September 30, 2007. INL does not complete the AGC-1 capsule fabrication by September 30, 2007. INL fails a DOE quality assurance audit for NGNP activities.
F	INL fails to meet any of the expectations identified for the NGNP program.

1.4 Hydrogen Technology Development and Demonstration

This measure will assess INL's contributions to the Nuclear Hydrogen Initiative (NHI). In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, customer feedback, Program Office reviews/oversight, deliveries against milestone dates, etc.:

- Timely and effective execution of the NHI work at INL.
- INL construction of the High-Temperature Electrolysis Integrated Laboratory-Scale (ILS) Experiment, and beginning ILS experimental operations with a single four-stack module.
- Development of plant models for hydrogen production to predict hydrogen production efficiencies for commercial-scale HTE plant.
- Identification and testing of catalysts for both H_2SO_4 and HI decomposition leading to the selection of catalysts for the sulfur-iodine ILS experiment.
- Level of integration in the hydrogen research arena established within INL and with other laboratory partners.

Grade	Performance
A- to A+	Completion of level 1 and 2 NHI work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 100% to 97% completion equals an A+, 96% to 93% completion equals an A, and 92% to 90% equals an A-.
B- to B+	Completion of level 1 and 2 NHI work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 89% to 87% completion equals a B+, 86% to 83% completion equals a B, and 82% to 80% equals a B-.
C- to C+	Completion of level 1 and 2 NHI work package milestones on or under budget and on or ahead of schedule shall be graded according to the following: 79% to 77% completion equals a C+, 76% to 73% completion equals a C, and 72% to 70% equals a C-.
D	Less than 70% of the level 1 and 2 NHI work package milestones are met or a level 1 milestone is missed.
F	The INL is not executing the NHI research program as NHI milestones are not being completed.

1.5 Radioisotope Power System Production

This measure will assess INL's readiness to assemble and test three (3) systems. In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, customer feedback, etc.:

- Readiness for fueling and testing of a qualification unit for NASA's Multi-Mission RTG being considered as the power source for the Mars Science Laboratory mission planned for 2009. The fueling of the qualification unit will be completed in FY 2007 with testing completed no later than December 2007.

- Readiness for fueling and testing, and delivery of two national security RPS units. Accomplished within the fiscal year (August 2007) providing LANL delivers the fuel capsule assemblies no later than February 27, 2007 for the first unit and March 31, 2007 for the second unit.

Readiness shall be defined as: all necessary equipment installed and operational, procedures written and approved, and operators/technicians trained. These actions should be in accordance with current laboratory standards and procedures.

Grade	Performance
Excellent Pass (4.3)	Readiness for three (3) systems to be fueled on-time or early, on or under budget. National Security units completed and delivered in FY 2007. MMRTG fueled in FY 2007 with testing satisfactorily completed by December 2007. The payment of fee on this item is provisional, and is made upon completion of the FY 2007 milestones, with the final fee determination made upon satisfactory completion of MMRTG testing by December 31, 2007.
Pass (4.0)	Readiness for three (3) systems to be fueled—but minor deficiencies in program schedule or budget performance. National Security units completed and delivered in FY 2007. MMRTG fueled in FY 2007 with testing satisfactorily completed by December 2007. The payment of fee on this item is provisional, and is made upon completion of the FY 2007 milestones, with the final fee determination made upon satisfactory completion of MMRTG testing by December 31, 2007.
Fail (0.7)	Fails to meet any of the deliveries of fueled systems or major deficiencies in the program having negative cost or schedule variances outside the 10% threshold. Not ready for testing and delivery schedules not met.

Critical Outcome

2.0 National and Homeland Security

Take decisive actions to counter nuclear proliferation and prevent the acquisition of nuclear and radiological materials for use in weapons of mass destruction and in other acts of terrorism. Develop laboratory capabilities and infrastructure required to support U.S. efforts to enhance the security of the nation's critical infrastructure with emphasis in the areas of energy distribution, process control and communications.

The weight of this Mission Critical Outcome is 25%.

2.0 National and Homeland Security Objectives	Letter Grade	Numeric Score	Weight	Weighted Score	Total Score
2.1 Reduced Enrichment for Research & Test Reactors (RERTR) Program			10%		
2.2 Information Operations (IO)			20%		
2.3 INL Secure Facility			40%		
2.4 Critical Infrastructure Protection			10%		
2.5 INL Nuclear Nonproliferation Initiative (NNI)			20%		
National and Homeland Security Critical Outcome Total Score					

2.1 Reduced Enrichment for Research & Test Reactors (RERTR) Program

In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, Program Office reviews/oversight, etc.:

- Complete Post Irradiation examination (PIE) of experiment 7.
- Complete ATR irradiation of experiment 8 fuel plate.
- Insert AFIP-1 experiment into ATR.
- Convert Purdue University Research Reactor to LEU fuel.

Grade	Performance
Excellent Pass (4.3)	Meets the critical milestones in the RERTR program ahead of schedule and within budget. Utilizes innovative solutions to resolve critical questions and thus moves the research forward. Innovative solutions may include new research techniques and approaches, new research partnerships, etc.
Pass (4.0)	Achieves all of the scheduled milestones in the RERTR program as scheduled and within budget.
Fail (0.7)	Fails to meet all scheduled milestones for the RERTR program.

2.2 Information Operations (IO)

In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, customer feedback, node utilization levels, Program Office reviews/oversight, etc.:

- Establish compliant communications and network connectivity with the National Testing Network (Network).
- Formal recognition of the INL node as a component of the Network through a Memorandum of Agreement.
- Level of utilization of the INL node in overall Network activity.
- Level of customer satisfaction with support delivered as measured by customer feedback surveys, progress reports, and node utilization.

Grade	Performance
A- to A+	Achieves connectivity and formal recognition as a node on the Network as demonstrated by an official written statement from DOD acknowledging INL as a node. Garners strong support and advocacy from Network user community as demonstrated by positive progress reports, positive customer feedback, and increased node utilization. Recognized in the Network community as one of the leaders in the requisite IO capability area. Offers innovative solutions to the Network user community and is recognized as a value-added performer.
B+	Achieves connectivity and formal recognition as a node on the Network as demonstrated by an official written statement from DOD acknowledging INL as a node. Garners support and advocacy from the Network user community as demonstrated by positive progress reports, positive customer feedback, and increased node utilization. Recognized as a valuable asset on the Network by the user community. Consistently meets customer expectations.
B- to B	Achieves connectivity to the Network. Gains moderate support and advocacy from IO Range user community as demonstrated by neutral progress reports and customer feedback and marginal or no increase in node utilization. Meets customer expectations.
C	Achieves connectivity to the Network. Does not gain support and advocacy from the Network user community. Meets customer expectations.
D	Does not establish connectivity to the Network. Not able to meet most customer expectations.
F	Not able to establish connectivity to the Network or meet any customer expectations.

2.3 INL Secure Facility

This is a provisional fee measure for progress towards having an INL secure facility ready for full occupancy by December 31, 2010 (occupancy occurs in FY 2011). $1,600,000 in earned fee will be returned to the DOE if the INL secure facility is not ready for full occupancy by December 31, 2010. If approval to proceed with acquisition has not been provided by December 30, 2008, this item will be renegotiated.

In determining the performance of this objective the DOE evaluators(s) shall consider the following as measured by progress reports, Program Office reviews/oversight, etc.:

- Effectiveness and timeliness in getting the package through the required process to obtain business case approval.
- Effectiveness and timeliness of completing supporting documents and plans.
- Quality and effectiveness of key staff managing the project.

Grade	Performance
Excellent Pass (4.3)	Complete development of a high quality programming package that requires minimal adjustments and re-work by December 15, 2006. Complete development of a high quality business case that requires minimal adjustments and re-work by January 30, 2007. Subject to the Contracting Officer approval, complete schematic design by June 15, 2007. Resolve all comments on the business case by June 8, 2007 to support business case approval.
Pass (4.0)	Complete development of a high quality programming package that requires minimal adjustments and re-work by February 1, 2007. Complete development of a high quality business case that requires minimal adjustments and re-work by January 30, 2007. Subject to the Contracting Officer approval, complete schematic design by September 30, 2007. Resolve all comments on the business case by June 8, 2007 to support business case approval.
Fail (0.7)	Fails to complete development of a high quality programming package that requires minimal adjustments and re-work by February 1, 2007, complete development of a high quality business case that requires minimal adjustments and re-work by January 30, 2007, complete schematic design by September 30, 2007, or resolve all comments by June 8, 2007 to support business case approval.

2.4 Critical Infrastructure Protection

In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, customer feedback (all Range customers conducting in excess of $500K worth of work in FY 2007 will be surveyed by DOE-ID), Program Office reviews/oversight (DOE-ID will perform a formal assessment of range systems in the 4th quarter of FY 2007), etc.:

- Level of customer satisfaction with support delivered.
- Development of core competencies, ideas for new facilities and research programs synergistic with other areas of research.
- Efficiency and effectiveness of the systems addressing safety, security, accessing, scheduling, maintaining, pricing, and staffing of the INL Range.

Grade	Performance
A- to A+	By June 30, 2007, the INL will have optimized the INL Range in support of National & Homeland Security customers. For purposes of this measure, the INL Range is defined as the SCADA Test Bed, Cyber Test Bed, Wireless Test Bed, Critical Infrastructure Test Range Complex, Security Systems Test Bed, INL Firing Range(s), Transient Reactor Test (TREAT), and associated components, facilities, management systems and processes. Optimization will be defined as having innovative, efficient and effective systems in place for addressing safety, security, accessing, scheduling, maintaining, pricing, and staffing. Support provided to customers always meets customer expectations as determined by customer feedback.
B+	By September 30, 2007, the INL will have optimized the INL Range. >90% of customer expectations as determined by customer feedback are met.
B- to B	INL Range optimization is underway with more than 80% of the necessary systems in place. >80% customer expectations as determined by customer feedback are met.
C	INL range optimization is underway with more than 50% of the necessary systems in place.
D	INL Range optimization is underway with more than 30% of the necessary systems in place.
F	Less than 30% of the necessary systems are in place for INL Range optimization.

2.5 INL Nuclear Nonproliferation Initiative (NNI)

In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, Steering Committee reviews, customer feedback, Program Office reviews/oversight, etc.:

- Timely and effective execution of the INL NNI as documented by the NNI Goals, NNI Business Plan and NNI LDRD Plan.
- Ability to integrate nonproliferation requirements defined by NE and NNSA into key NE programs.
- Level of strategic partnerships established with academic institutions and other laboratory partners.
- Willingness to pursue novel approaches and/or demonstration of innovative solutions to the nuclear nonproliferation challenges (e.g., advanced safeguard regimens and technologies, advanced signatures and detection techniques, advanced materials and process security).
- Effectiveness in leveraging (synergy with) other areas of research.

Grade	Performance
A- to A+	The INL is effectively executing the NNI per implementation plans, has adopted the recommendations from the Steering Committee letter report dated May 31, 2006, and has fully integrated the NNI with GNEP, and with the modeling and simulation, separations and actinide sciences, material sciences, and instrumentation and controls sciences capabilities at the INL. The INL is beginning to gain recognition as able to provide leadership in the Nonproliferation arena. This will be demonstrated by agencies such as DOE, the Department of State, the IAEA, the Intelligence Community, and DOD engaging the INL to address non-proliferation

	issues.
B+	The INL is executing the NNI per implementation plans, has adopted the recommendations of the Steering Committee letter report dated May 31, 2006, and has fully integrated the NNI with GNEP, and with the modeling and simulation, separations and actinide sciences, material sciences, and instrumentation and controls sciences capabilities at the INL.
B- to B	The INL is executing the NNI per implementation plans, has adopted the recommendations of the Steering Committee letter report dated May 31, 2006, and has fully integrated the NNI with GNEP, or with the modeling and simulation, separations and actinide sciences, material sciences, and instrumentation and controls sciences capabilities at the INL, but not both.
C	The INL is executing the NNI per implementation plans, but has not adopted the recommendations of the Steering Committee letter report dated May 31, 2006, and has fully integrated NNI with GNEP, or with the modeling and simulation, separations and actinide sciences, material sciences, and instrumentation and controls sciences capabilities at the INL, but not both.
D	The INL is executing the NNI per implementation plans, but has not adopted the recommendations of the Steering Committee letter report dated May 31, 2006, nor has fully integrated with GNEP, and with the modeling and simulation, separations and actinide sciences, material sciences, and instrumentation and controls sciences capabilities at the INL.
F	Implementation strategy is not executed.

Critical Outcome

3.0 Science and Technology

Produce scientific discoveries that drive U.S. competitiveness and revolutionize the approach to the nation's energy, national security, and environmental quality challenges. Integrate basic and applied research to accelerate innovation and create transformational solutions for energy and other U.S. needs.

The weight of this Mission Critical Outcome is 25%.

3.0 Science and Technology Objectives	Letter Grade	Numeric Score	Weight	Weighted Score	Total Score
3.1 Research and Development Supporting U.S. Energy Security			20%		
3.2 Joint Research Programs in Science and Engineering with NE & SC			25%		
3.3 INL's Scientific and Technical Reputation			20%		
3.4 Environmental Impacts of Water and Waste Management Research			15 %		
3.5 Science and Engineering Education			20%		
Science and Technology Critical Outcome Total Score					

3.1 Research and Development Supporting U.S. Energy Security.

INL will increase the nation's energy security by improving the production, distribution and use, environmental impact, and protection of energy supplies and energy recovery. In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, customer feedback, university and national laboratory interactions, Program Office reviews/oversight, etc.:

- Acquire significant new programmatic work (at least 5% increase in funding) supporting Energy Security.
- The determined level of customer satisfaction on energy security programs.
- Demonstrated leadership in bio and alternate fuels, renewable energy and transportation based energy systems..
    - Establish and execute an innovative initiative in alternate fuels.
    - Along with collaborating partners. perform significant work to improve the performance of energy storage systems.
    - Position INL in a lead role in the area of feedstock assembly program for DOE-EE Office of the Biomass Program.

Grade	Performance
A- to A+	All of the goals set above are exceeded. INL succeeds in bringing in new research programs (A+ =10%, A= 8%, A- = 6% overall programmatic growth) in all of the key areas. Customer satisfaction is uniformly very high as demonstrated through customer feedback. Leadership in all three performance areas given above.
B+	All of the goals set above are well achieved. INL succeeds in bringing in new research programs (5% overall programmatic growth) in all of the key areas. Customer satisfaction is uniformly high as demonstrated through customer feedback. Leadership in two of the three performance areas given above.
B- to B	All of the goals set above are met. INL succeeds in bringing in new research programs (5% overall programmatic growth) in all of the key areas. Customer satisfaction is uniformly high as demonstrated through customer feedback. Leadership in one of the performance areas given above.
C	Most of the goals set above are met. INL succeeds in bringing in new research programs (5% overall programmatic growth) in some of the key areas. Customer satisfaction is acceptable. Acceptable program performance in bio and alternate fuels, and renewable energy and transportation is demonstrated.
D	A few of the goals are met, < 5% growth in most of the key areas. Customer satisfaction is not consistently achieved. Performance in Energy Security programs is inconsistent.
F	None of the goals are achieved and growth is flat.

3.2 Joint Research Programs in Science & Engineering with NE and SC.

The Advanced Energy Initiative seeks to develop consensus on expanding use of economical, carbon-free nuclear energy to meet growing electricity demand. This will use a nuclear fuel cycle that enhances energy security, while promoting non-proliferation. Partnerships between SC and NE programs are needed to address science and technology to realize this vision. "Use inspired basic research" will overcome short-term showstoppers and real-world problems for the NE and other energy technology programs.

In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, customer feedback, node utilization levels, Program Office reviews/oversight, etc.:

- Successful execution of joint research programs in science and engineering with NE and SC in support of the nuclear mission. This is measured by programmatic growth in dollars.
- Customer satisfaction, as determined by customer feedback, and maturation of INL's targeted basic research programs (increased acquisition of new research projects, positive peer review and execution of implementation plans).
- Advanced modeling and simulation program is fully operational and contributing to INL mission areas. Modeling and simulation staff members are becoming integral contributors to key INL programs.
- Achievement of at least 5 net critical and/or strategic hires in science and technology areas.

Grade	Performance
A- to A+	An NE & SC program has been implemented. INL is fully positioned to be awarded significant funding (greater than $10M) for scientific work in support of nuclear energy. INL executes all assigned NE & SC implementation plans in an exceptional manner. All targeted basic research programs are validated by external peer reviews which confirm outstanding performance. S&T programs achieve at least 5 net critical and/or strategic hires. Advanced modeling and simulation program staff have at least two direct funded projects.
B+	An NE & SC program has been developed. INL executes all assigned NE & SC implementation plans in a satisfactory manner. All targeted basic research programs are validated by external peer reviews which confirm generally good performance. S&T programs achieve at least 4 net critical and/or strategic hires. Advanced modeling and simulation program staff have acquired one direct funded project.
B- To B	A NE & SC program has been developed. INL executes all assigned NE & SC implementation plans. At least four targeted basic research programs are validated by external peer reviews which confirm adequate performance. S&T programs achieve at least 3 net critical and/or strategic hires. Advanced modeling and simulation program staff have submitted proposals for direct funded research. B- = all of the above except the advanced modeling requirement.
C	A vision for NE & SC programs has been drafted. INL executes at least 50% of the assigned NE & SC implementation plans. At least three targeted basic research programs are validated by external peer reviews, which confirm adequate performance. S&T programs achieve at least 2 net critical and/or strategic hires.

D	INL executes at least 50% of the assigned NE & SC implementation plans. Peer review of targeted basic research programs finds problems and some need for redirection. S&T programs achieve 1 net critical and/or strategic hire.
F	Failure to meet any of the goals.

3.3 INL's Scientific and Technical Reputation

This objective encompasses those measures that are used in the scientific community to evaluate contributions to the scientific and engineering knowledge base and leadership in the scientific community. More broadly, a strong science base and a culture that fosters scientific inquiry are essential foundations for a world-class laboratory. In determining the performance of the objective the DOE evaluators(s) shall consider the following as measured by external peer review, progress reports, Program Office reviews/oversight, etc.:

- Sustain significant growth in scientific eminence measures across the laboratory. (The Scientific Eminence Index encompasses those measures used in the scientific community to evaluate contributions to the scientific and engineering knowledge base as exemplified by publications, patents and scientific and technical awards).

Grade	Performance
A- to A+	A+ = greater than 15% growth from the DOE agreed-upon FY 2006 baseline in INL's research reputation as measured by the Scientific Eminence Index. A = greater than 12% but less than 15% growth. A- = greater than 10% but less than 12 % growth
B – to B+	B+ = greater than 9% growth from the DOE agreed-upon FY 2006 baseline in INL's research reputation as measured by the Scientific Eminence Index. B = greater than 8% growth but less than 9% growth. B- = greater than 5% but less than 8% growth.
C	Demonstrate less than 5% growth.
D	Less than 3 % growth.
F	No measurable growth.

3.4 Environmental Impacts of Water and Waste Management Research

New approaches to nuclear waste and spent fuel management are vital to INL's nuclear energy mission. INL also supports the Department of Energy's mission to meet growing need for clean energy with innovative research on the interdependence of environmental impacts, waste management and water. This measure focuses on INL's leadership of these emerging areas. In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, and partner or collaborator feedback, Program Office reviews/oversight, etc.:

- Sustain and grow Yucca Mountain Project (YMP) and Spent Nuclear Fuel support.
- Develop new strategies for advanced, integrated waste management for processes needed for proliferation resistant, high-energy recovery nuclear fuel recycling technologies.

- Along with collaborating national laboratories and other partners, develop the research portfolios and programs needed to examine the intersection between energy production and water issues.
- The determined level of customer satisfaction on engineering and environmental programs as demonstrated through customer feedback.
- Ensure INL sustains the science, engineering and technical capability to develop solutions for water and waste management.

Grade	Performance
A- to A+	Milestones for Yucca Mountain work are completed in an outstanding manner as measured by customer feedback and acquisition of additional work from the YMP. Waste management for proliferation resistant, high-energy recovery nuclear fuel recycling technologies are well developed and have received excellent ratings as determined by peer reviews. INL and its partners begin research projects on energy and water issues; peer reviews and customer feedback for engineering and environmental programs are outstanding. INL has more than two new engineering programs in relevant areas and has significantly increased staff skill sets (3 or more) in applicable disciplines.
B+	Milestones for Yucca Mountain work are completed in an excellent manner as measured by customer feedback and acquisition of additional work from the YMP. Waste management for proliferation resistant, high-energy recovery nuclear fuel recycling technologies are well developed and have received good peer ratings as determined by reviews. INL and its partners have developed research proposals on energy and water issues. Peer review and customer feedback for engineering and environmental programs are very good. INL has begun two new engineering programs in a relevant area and has increased staff skill sets (2 or more) in applicable disciplines.
B- to B	Milestones for Yucca Mountain work are completed in a high quality manner as measured by customer feedback. Waste management for proliferation resistant, high-energy recovery nuclear fuel recycling technologies are developed. INL achieves good customer feedback in these programs. INL and its partners are working to develop the research for energy and water issues. INL acquires one new engineering demonstration project and has made progress (1 or more) in increasing relevant staff skills. (For a B-, all the above except no new engineering demonstration project.)
C	INL completes all planned milestones for Yucca Mountain work, increases the work on on-going engineering demonstration projects and waste management for proliferation resistant, high-energy recovery nuclear fuel recycling technologies are being developed. INL achieves partial customer satisfaction as determined by customer feedback. INL has made some progress in increasing relevant staff skill sets.
D	INL completes the majority of planned milestones for Yucca Mountain work, maintains the FY 2006 level of engineering demonstration projects, and fails to achieve customer satisfaction in some INL engineering programs.
F	Fails to complete planned milestones for Yucca Mountain work, loses project work on engineering demonstration projects, and fails to make progress in increasing staff skill sets.

3.5 Science and Engineering Education

In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, customer feedback, and Program Office reviews/oversight:

- Increase the University Engagement Index (UEI) over the FY 2006 baseline. (The UEI includes metrics such as the number and value of research contracts with universities, the number of student and faculty fellowships or internships, joint appointments and the number of joint peer-reviewed publications).
- Growth in graduate students with involvement in all key INL programs.
- Growth in post-doctoral fellows participating in all key INL programs. Increase academic partnerships in key INL programs.
- Major progress in ensuring that university researchers from the six Academic Centers of Excellence (ACE) and CAES are truly partners in the research programs of the Laboratory.
- INL along with university partners will develop the unique research programs that go into CAES, including ideas and plans for where to get funding for CAES research.

Grade	Performance
A- to A+	Outstanding progress is made as measured by the UEI; INL has made significant (A- = greater than 12%, A = greater than 14%, A+ = greater than 15% increase in collaborations) progress in involving university researchers in all aspects of its programmatic work; demonstrate greater that 10% growth in each in internships and post-doctoral fellows.
B+	Good progress is made as measured by the UEI; INL has made better than expected (10% increase in collaborations) progress in involving University researchers in its key programs; and demonstrates at least 10% growth in each in internships and post-doctoral fellows. A revised business plan incorporating research programs is approved by the three Idaho universities.
B- to B	The minimum level of progress as measured by the UEI; INL has made adequate progress (B = 9%, B- = 8% increase) in involving University researchers in INL programs; demonstrate growth in internships and post-doctoral fellows (B = 9%, B- = 8%).
C	Some progress has been made as measured by the UEI; INL has made some progress (5% increases) in collaborations, internships and post-doctoral fellows involving university researchers in programmatic research.
D	UEI measures and University researcher involvement in INL program research is flat.
F	All measures as described have decreased; the State of Idaho has not approved construction of the building for CAES.

Critical Outcome

4.0 Infrastructure

Deliver the Scientific facilities and provide the laboratory capabilities and infrastructure required for U.S. scientific and technical primacy. Implement the INL's Ten-Year Site Plan. Ensure decisions to change land-use and legacy clean-up are based on the department's mission requirements, protecting human health and the environment, and input from regulators and the community.

The weight of this Operations Critical Outcome is 20%.

4.0 Infrastructure Objectives	Letter Grade	Numeric Score	Weight	Weighted Score	Total Score
4.1 Advanced Test Reactor Life Extension Program			35%		
4.2 Campus Development			45%		
4.3 Design Basis Threat Implementation			10%		
4.4 Infrastructure Support			10%		
Infrastructure Critical Outcome Total Score					

4.1 Advanced Test Reactor Life Extension Program

In determining the performance of the objective the DOE evaluator(s) shall consider the following deliverables against the criteria provided below:

- Deliver revision 3 of the LEP project plan by October 1, 2006, which will contain FY 2007 project milestones and reference the FY 2007 BEA Detailed Work Plan, which will set cost and schedule baselines for the project.

Grade	Performance
A+	All milestones are exceeded by one month. Earned Value Cost Performance Indicator (CPI) and Schedule Performance Indicator (SPI) for the overall ATR Life Extension Program (LEP) is ≥ 0.95 of the established baseline. No CPI or SPI for a single ATR LEP subproject or capital improvement project is < 0.95 from the established baseline. Cost savings and schedule improvement changes are provided to improve performance >10% from the established baseline.
A	All milestones are exceeded by one month. Earned Value CPI and SPI for the overall ATR LEP is ≥ 0.95 of the established baseline. No CPI or SPI for a single ATR LEP sub project or capitol improvement project is < 0.90 from the established baseline. Cost savings and schedule improvement changes are provided to improve performance >5% from the established baseline.
A-	All milestones are met. Earned Value CPIand SPI for the overall ATR LEP is ≥ 0.95 of the established baseline. No CPI or SPI for a single ATR LEP sub project or capitol improvement project is < 0.90 from the established baseline. Cost savings and schedule improvement changes are provided to improve performance within 5% from the established baseline.

B+	All milestones are met. Earned Value CPI and SPI for the overall ATR LEP is ≥ 0.90 of the established baseline. No CPI or SPI for a single ATR LEP subproject or capital improvement project is < 0.85 from the established baseline. No penalty for any approved cost savings or approved schedule savings.
B	All milestones are met for funded projects. Earned Value CPI and SPI for the overall ATR LEP is ≥ 0.90 from the established baseline. No CPI or SPI for no more than two ATR LEP subprojects or capital improvement projects is < 0.85 from the established baseline. No penalty for any approved cost savings or approved schedule savings.
B-	All milestones are met. Earned Value CPI and SPI for the overall ATR LEP is ≥ 0.90 of the established baseline. No CPI or SPI for no more than three ATR LEP sub projects or capitol improvement projects is < 0.85 from the established baseline. No penalty for any approved cost savings or approved schedule savings.
C+	>85% of milestones are met. Earned Value CPI and SPI for the overall ATR LEP is ≥ 0.90 of the established baseline. No CPI or SPI for more than three ATR LEP sub projects or capitol improvement projects is < 0.85 from the established baseline. No penalty for any approved cost savings or approved schedule savings.
C	>75% of milestones are met. Earned Value CPI and SPI for the overall ATR LEP is ≥ 0.90 from the established baseline. No CPI or SPI for more than three ATR LEP subprojects or capital improvement projects is < 0.85 from the established baseline. No penalty for any approved cost savings or approved schedule savings.
C-	<65% of milestones are met. Earned Value CPI and SPI for the overall ATR LEP is ≥ 0.90 from the established baseline. No CPI or SPI for more than three ATR LEP sub projects or capital improvement projects is < 0.85 from the established baseline. No penalty for any approved cost savings or approved schedule savings.
D	>50% of milestones are met for funded projects.
F	<50% of milestones are met for funded projects.

4.2 Campus Development

The INL can accomplish its assigned mission only by transforming the existing infrastructure to modern, high-performing science and technology facilities. Consolidating from eight to three primary campuses, including the Reactor Technology Campus (RTC), the Materials and Fuels Complex (MFC) and the Science and Technology Campus (STC) will enable the INL to efficiently support work on the expanding nuclear and national security missions without expending resources on maintaining older facilities in multiple locations. New facilities have been identified for construction in each of the three campus areas and are in various stages of project planning.

In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, Program Office reviews/oversight, completion of projects, etc.:

- Complete construction of the RTC Utility Corridor Project by August 31, 2007.
- Assure DOE and BEA requirements are met for design and construction of the CAES facility during FY 2007 (building to be completed in FY 2008).

- Issue a Request for Proposal (RFP) to acquire the Science and Technology Laboratory (dependent on DOE approval of the STL Business Case).
- Complete construction of the STC Utility Corridor to a state ready for connection to the CAES facility.

Grade	Performance
A- to A+	A+ = Complete all 4 projects one month ahead of schedule and within budget. A = Complete all 4 projects 2 weeks ahead of schedule and within budget. A-= Complete all 4 projects 1 week ahead of schedule and within budget.
B+	Completes all 4 projects on schedule and within budget.
B to B-	For a B, completes 3 projects one month ahead of schedule and within budget. For a B-, completes 3 projects one week ahead of schedule and within budget.
C	Completes 2 projects on schedule and within budget.
D	Completes 1 project on schedule and within budget.
F	Complete none of the projects on schedule and within budget.

4.3 Design Basis Threat (DBT) Implementation

This activity is designed to increase security in response to national directives and adversary threats.

BEA should complete FY 2007 activities pending receipt of adequate funding.

Grade	Performance
Pass (4.3)	Complete FY 2007 Design Basis Threat activities.
Fail (0.7)	Did not complete FY 2007 Design Basis Threat activities.

4.4 Infrastructure Support

The INL will provide DOE effective integrated site wide infrastructure planning that provides for focused modernization and facility optimization.

In determining the performance of the objective the DOE evaluator(s) shall consider the following deliverables against the criteria provided below:

- Assist in the development and implementation of the INL Energy Management Performance Agreements for FY 2007.
- Achieve a Facilities Information Management System (FIMS) formal validation score of Green by August 31, 2007.
- Issue a revised INL Ten Year Site Plan (TYSP) that identifies the Site's strategic program requirements and links these to real property asset requirements. Additionally, an interim TYSP update will be issued that incorporates the actual Idaho Facilities Management FY 07 budget, the President's budget for FY 08 and is consistent with the FY 2009 Budget submission.

- Manage the Idaho Facilities Management (IFM) program within +/-10% for cumulative year to date cost and schedule variance.

Grade	Performance
A- to A+	A + = Complete all 4 projects milestones ahead of schedule and within budget. No deficiencies in the technical documentation for each measure are noted by either the contractor or DOE. A = Complete all 4 projects milestones ahead of schedule and within budget. No deficiencies in the technical documentation for each measure are noted by DOE. A-= Complete all 4 projects milestones ahead of schedule and within budget. Minor deficiencies noted in the documentation are more than offset by the positive performance of the measures.
B+	Completes all 4 projects milestones on schedule and within budget.
B- to B	For a B, Completes 3 projects on schedule and within budget. No deficiencies in the technical documentation for each measure are noted by DOE. For a B-, Completes 3 projects on schedule and within budget.
C	Completes 2 projects on schedule and within budget.
D	Completes 1 project on schedule and within budget.
F	Completes none of the projects on schedule and within budget.

Critical Outcome

5.0 Leadership and Stewardship of the Laboratory

Institute an integrated risk-based resource management approach that addresses customer expectations, safety, security, human capital needs, and project management of the Department's evolving mission.

BEA will enable INL's success, and strengthen and aid in the accomplishment of the Laboratory's vision. To accomplish this outcome processes, practices, and systems will be improved so INL is capable of executing the following strategies:

- Establish collaborations with universities, industry partners, and national laboratories to advance research and program development.
- Lead programs of national importance (not specifically addressed elsewhere in this PEMP).
- Implement effective business planning, human resource practices, and integrated performance management and assurance.
- Effectively execute a cultural transformation.

The weight of this Operations Outcome is 35%.

5.0 Leadership and Stewardship of the Laboratory Objectives	Letter Grade	Numeric Score	Weight	Weighted Score	Total Score
5.1 Vision and Planning for the Laboratory			40%		
5.2 Leadership of the Laboratory			60%		
Leadership and Stewardship of the Laboratory Critical Outcome Total Score					

5.1 Vision and Planning for the Laboratory

The following measures will be used to assess vision and planning:

- Laboratory vision and strategy is established, communicated, recognized and clearly conveys the Laboratory's role in the future of Nuclear Energy.
- Demonstrated development and execution of a comprehensive business approach that aligns and integrates all resource elements (workforce, funds, infrastructure, etc.) with the priorities of the laboratories missions and objectives.
- Industry and international partnerships/formal relationships (that are not specifically addressed elsewhere in this PEMP) are advanced.
- Demonstrated ability to develop and leverage appropriate relationships with private industry, national laboratories and government agencies to benefit the Laboratory and the taxpayer.
- Support DOE oversight activities and provide timely response to findings and recommendations.

Grade	Performance
A- to A+	Significant progress across all measures identified for section 5.1.
B- to B+	Significant progress across most areas identified above (vision, leadership, cultural transformation, integrated business approach, collaboration and communications) while operational commitments are met with few exceptions).
C- to C+	Progress across a few improvement areas (vision, leadership, cultural transformation, integrated business approach, collaboration and communications).
D	Fails to make progress on improvement areas (vision, leadership, cultural transformation, integrated business approach, collaboration and communications).
F	Fails to implement change in improvement areas or occurrence of a high profile incident that demonstrates gross incompetence in program execution.

5.2 Leadership of the Laboratory

The following measures will be used to assess Leadership:

- There is clear evidence of leadership translating vision and strategies into explicit performance expectations for individuals and demanding individual performance and accountability throughout the organization.
- Quality and responsiveness of communications between the Laboratory and NE-HQ and DOE-ID office so that DOE can deal effectively with both internal and external constituencies.
- The contractor can demonstrate new/re-engineered processes and tools that enabled research focused on mission critical challenges.
- INL collaborates with other site contractors: resolving differences, and mutually supporting each other's mission through agreements and discussion while assuring mission objectives are not compromised.
- Demonstrated leadership alignment and integration in successfully branding the INL's nuclear mission with industry, government, and employees.
- Demonstrated leadership in improving employee understanding, acceptance and advocacy for the laboratory's mission and objectives.
- Establish a defined "lead" laboratory role for the INL for nuclear energy that is endorsed and promoted by NE and through integration, collaboration, and initiative is broadly accepted by the national laboratory system.
- Execute effective communications and obtain positive visibility and acceptance with public stakeholders on a state and national basis for the laboratory's missions and objectives as indicated by communications deliverables agreed upon by DOE-Idaho and BEA.
- INL managers, acting as a team, engage in specific observable assurance and quality improvement activities which support greater mission effectiveness, efficiency and risk management.
- Demonstrated effective corporate support to develop programs, build scientific capability, and improve operational efficiencies and contractor assurance.

Grade	Performance
A- to A+	Significant progress across all measures identified for section 5.2.
B- to B+	Significant progress across most areas identified above (vision, leadership, cultural transformation, integrated business approach, collaboration and communications) while operational commitments are met with few exceptions).
C- to C+	Progress across a few improvement areas (vision, leadership, cultural transformation, integrated business approach, collaboration and communications).
D	Fails to make progress on improvement areas (vision, leadership, cultural transformation. integrated business approach, collaboration and communications).
F	Fails to implement change in improvement areas or occurrence of a high profile incident that demonstrates gross incompetence in program execution.

Critical Outcome

6.0 Excellence in Site Operations and Environment, Safety and Health

Create programs that ensure the well being of employees, protection of the environment and excellence in operations.

The weight of this Operations Outcome is 45%.

6.0 Excellence in Operations and ES&H Objectives	Letter Grade	Numeric Score	Weight	Weighted Score	Total Score
6.1 Environment, Safety, Health and Quality			50%		
6.2. SMC A/B Production			15%		
6.3 SMC SA Production			15%		
6.4 ATR Planned Outage Maintenance Work Packages			7%		
6.5 ATR Maintenance Work Package Completion			7%		
6.6 ATR Unplanned Outage Maintenance Work Packages			6%		
Excellence in Operations and ES&H Critical Outcome Total Score					

6.1 Environment, Safety, Health and Quality

Evaluation of the performance in this objective is based upon achievement of the selected items (approved by DOE) in the annual submittal (December 15, 2006) of the INL Safety Performance Objectives, Measures and Commitments (SPOMC)

Grade	Performance
A+	Achieve all of the high priority commitments and 100% of the other selected commitments in the SPOMC.
A	Achieve all of the high priority commitments and at least 75% of the other selected commitments in the SPOMC.
A-	Achieve all of the high priority commitments and at least 50% of the other selected commitments in the SPOMC.
B+	Achieve at least 80% of the high priority commitments and at least 75% of the other selected commitments in the SPOMC.
B	Achieve at least 80% of the high priority commitments and at least 50% of the other selected commitments in the SPOMC.
B-	Achieve at least 80% of the high priority commitments and at least 25% of the other selected commitments in the SPOMC.
C	Achieve at least 60% of the high priority commitments and at least 50%of the other selected commitments in the SPOMC.

D	Achieve at least 40% of the high priority commitments and at least 75% of the other selected commitments in the SPOMC.
F	Achieve < 40% of the high priority commitments or achieve 40% of high priority commitments and <75% of the other selected commitments in the SPOMC.

6.2 Specific Manufacturing Capability (SMC) A/B Production

The Specific Manufacturing Capability (SMC) is a Work For Others (WFO) program that produces tank armor for the U.S. Army. The SMC program is the single largest WFO program at the INL, funded at roughly $100M per year and generating roughly $10M in indirect funding. Without the indirect funds generated by this program, the INL would not be able to sustain critical infrastructure and services maintained with indirect funds.

In determining the performance of the objective the DOE evaluator(s) shall consider the quantity of frontal armor produced. SMC shall produce 153 A/B units with 100% quality acceptance according to the agreed-upon specification and in accordance with the SMC annual budget.

Grade	Performance
Pass Excellent (4.3)	Produce 153 units of A/B armor.
Pass (4.0)	Produce a minimum of 138 units of A/B armor.
Fail (0.7)	Produce less than 138 units of A/B armor.

6.3 Specific Manufacturing Capability (SMC) SA Production

In determining the performance of the objective the DOE evaluator(s) shall consider the quantity of side armor produced. SMC shall produce 200 side armor units according to the agreed-upon specification, and in accordance with the SMC annual budget.

Grade	Performance
Excellent Pass (4.3)	Produce 200 units of Side Armor.
Pass (4.0)	Produce a minimum of 180 units of side armor.
Fail (0.7)	Produce less than 180 units of side armor.

6.4 Advanced Test Reactor Planned Outage Maintenance Work Packages

Continued safe and efficient operation of the ATR is critical to programs in the Office of Nuclear Energy and Naval Reactors.

The goal is to ensure that maintenance work packages for planned outages are completed and ready to work in advance of the outage with the ultimate goal of having planned outage maintenance work packages planned in advance by one outage. Evaluation will consider effectiveness of:

- Advanced work package planning to include all tools, equipment, spares, consumables, and material on hand or with delivery schedules that do not impact outage progress; personnel resources required for the maintenance work packages have been planned, and are either on board, awaiting a subcontract start date, or are planned for rotation to RTC to meet the outage schedule.
- Approval process for planned outage work packages complete.
- Prioritization by risk and categorized by type (for example, authorization basis equipment, critical equipment, mission critical equipment, mission essential assets, and manufacturer recommendation - warranty).
- Management of corrective maintenance, expedited maintenance, minor maintenance and emergent work through the normal Plan of the Day and Plan of the Week process.
- Reporting of all completed preventive maintenance, predictive maintenance and repetitive maintenance work orders from the plan and schedule for the outage including a listing of all preventive maintenance work orders with grace periods.
- Outage work package will be defined to 80% resource man-hour loading.
- Effective period for this measure is January 1, 2007 – September 30, 2007, days referenced are calendar days.

Grade	Performance
Pass Excellent (4.3)	Advanced Planned Outage Maintenance Work Packages – The next planned outage has a developed outage work package as defined above by including the proper resources, configuration-controlled approval process, the proper prioritization, the management of corrective maintenance work, and the proper maintenance reporting prior to the completion of the current outage.
Pass (4.0)	Advanced Planned Outage Maintenance Work Packages – The next planned outage has developed outage work packages 15 days prior to commencement of the outage. The outage work packages must meet the standards as defined above by including the proper resources, configuration-controlled approval process, the proper prioritization, the management of corrective maintenance work, and the proper maintenance reporting.
Fail (0.7)	Advanced Planned Outage Maintenance Work Packages – The next planned outage has developed outage work packages less than 15 days prior to the scheduled outage start date, or work packages do not meet the standards as defined above by including the proper resources, configuration-controlled approval process, the proper prioritization, the management of corrective maintenance work, and the proper maintenance reporting.

6.5 Advanced Test Reactor (ATR) Maintenance Work Package Completion

Grade	Performance
Excellent Pass (4.3)	95% of all scheduled maintenance work packages are accomplished between July 1, 2007, and September 30, 2007, and are complete within 25% of the original estimated scheduled time duration.
Pass (4.0)	80% of all scheduled maintenance work packages are accomplished between July 1, 2007, and September 30, 2007, and are complete within 25% of the original estimated scheduled time duration.
Fail (0.7)	Less than 80% of all scheduled maintenance work packages are accomplished between July 1, 2007, and September 30, 2007, or package completion is greater than 25% of the original estimated scheduled time duration.

6.6 Advanced Test Reactor (ATR) Unplanned Outage Maintenance Work Packages

The goal is to ensure that in the event of an unplanned outage, advance preparation of maintenance work packages with all tools, equipment, spares, consumables, and material on hand has occurred. All personnel resources required for the maintenance work packages have been planned and personnel are either on board or may be rotated to RTC to work the unplanned outage

Grade	Performance
Excellent Pass (4.3)	Unplanned Outage Maintenance Work Packages – there are 15 work days worth of work packages and all resources required for unplanned outages are properly staged.
Pass (4.0)	Unplanned Outage Maintenance Work Packages – there are 7 work days worth of work packages and all resources required for unplanned outages are properly staged.
Fail (0.7)	Unplanned Outage Maintenance Work Packages – there are less than 7 work days worth of work packages, or resources required for unplanned outages are not properly staged.

Section C – Challenge Measures

Challenge Objectives	Letter Grade	Numeric Score	Weight	Weighted Score	Total Score
C1 ATR User Facility Business Plan			25%		
C2 Management System for the DOE Medical Isotope Program			10%		
C3 Improved techniques for processing and encapsulation of Pu-238			15%		
C4 Low Level Waste Management			10%		
C5 Complex –wide Nuclear Infrastructure review			10%		
C6 Consolidation of INL Special Nuclear Materials			15%		
C7 Disposition of EBR-II Fuels			15%		
		Challenge Objectives Total Score			

C1 ATR User Facility Business Plan

Deliver a business plan that documents national and international interests in utilizing the capabilities and services available at the Advanced Test Reactor (ATR) as a User Facility. The business plan should address continued support of existing federal sponsors while supporting the broader needs of the national and international research community, trade associations, industry and utilities.

Grade	Performance
Excellent Pass (4.3)	The ATR User Facility business plan has been completed and submitted to DOE by January 31, 2007 to support FY 2009 Budget Submittal. A pricing model to support the business plan is submitted to DOE by August 15, 2007. A plan for integration of the ATR User Facility with other laboratory strategies is submitted and approved by DOE by September 30, 2007.
Pass (4.0)	The ATR User Facility business plan has been completed and submitted to DOE by January 31, 2007 to support FY 2009 Budget Submittal. A plan for integration of the ATR User Facility with other laboratory strategies is submitted and approved by DOE by September 30, 2007.
Fail (0.7)	The ATR User Facility business plan was not delivered to DOE by January 31, 2007 to support FY 2009 Budget Submittal.

C2 Management System for the DOE Medical Isotope Program

DOE desires to improve the supply of medical isotopes and administration of the DOE Medical Isotope Program.

The INL will propose a new management system for the DOE Medical Isotope Program that will significantly reduce the day-to-day federal involvement in the program while improving the supply of isotopes to the research community and enhancing the National Isotope Program. In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, customer feedback etc.:

- Quality and timeliness of the proposal for a new management system for the DOE Medical Isotope Program.
- How effectively INL works with Pacific Northwest National Laboratory, Oakridge National Laboratory, Los Alamos National Laboratory and Brookhaven National Laboratory in arriving at a mutually agreeable approach.

Grade	Performance
Excellent Pass (4.3)	Implements a management system for the DOE Medical Isotope Program using new solutions to resolve critical management system issues. The management system will significantly reduce the day-to-day federal involvement in the program, improve the supply of isotopes to the research community and enhance the National Isotope Program.
Pass (4.0)	Proposes a management system for the DOE Medical Isotope Program using new solutions to resolve critical management system issues. The management system will significantly reduce the day-to-day federal involvement in the program, improve the supply of isotopes to the research community and enhance the National Isotope Program.
Fail (0.7)	Does not take on the challenge or fails to formulate and propose a high quality, well-supported new management system for the DOE Medical Isotope Program.

C3 Improved techniques for processing and encapsulation of Pu-238

This challenge measure focuses on collaborative laboratory efforts to establish a Pu-238 production capability and for a research and technology development project to determine the feasibility of deploying cost effective near-term Pu-238 production and improved techniques for Pu-238 oxide purification and encapsulation. In determining the performance of the objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, customer feedback etc.:

- Collaborate with ORNL and other DOE laboratories as appropriate to develop a near-term, low-cost option for Pu-238 production. The proposed approach should identify existing capabilities and facilities at each lab for use over the next 10 – 20 years for providing a reliable 5 kg per year Pu-238 production capability.
- Conduct a workshop involving INL, ORNL, and other appropriate DOE labs as necessary on how to change the processes of Pu-238 fuel purification and encapsulation to make it safer and more efficient.

- Recommendation on a demonstration project to be conducted to demonstrate the new process.

Grade	Performance
Pass (4.3)	Takes on the challenge to formulate collaborative proposals that make high quality, well-supported recommendations accepted by DOE. The proposals should include a conceptual design, implementation plan, and the associated cost and schedule.
Fail (0.7)	Does not take on the challenge to formulate a project or fails to formulate and propose a high quality, well-supported recommendation on a demonstration project. The project is not accepted by DOE.

C4 Low Level Waste Management

In determining the performance of the objective the DOE evaluator(s) shall consider the following deliverables against the criteria provided below:

Grade	Performance
Pass Excellent (4.3)	CD-0/1 packages submitted for DOE-ID review ahead of schedule (before December 15, 2006 for CD-0 and before August 15, 2007 for CD-1).
Pass (4.0)	CD-0 submitted by January 15, 2007, and the CD-1 package is submitted by the end of Fiscal Year 2007 (dependent on DOE approval of CD-0 by March 31, 2007).
Fail (0.7)	CD-1 not submitted by the end of Fiscal Year 2007.

Assumptions

- Alternative analysis is completed and evaluation considers various financing options and alternatives for transportation and disposal of all INL-generated wastes and DOE has selected an alternative by March 31, 2007.
- DOE approval of the CD-0 package by March 31, 2007.

C5 Complex–Wide Nuclear Infrastructure Review

The purpose of this challenge measure is to:

- Update data obtained during the 2006 Nuclear Infrastructure Data Call conducted in support of Section 955 of the 2005 Energy Policy Act to reflect changes in status and availability of nuclear facilities throughout the DOE complex.
- Compile a revised list of facilities and status for inclusion in the Fiscal Year 2007 INL Ten Year Site Plan

Grade	Performance
Pass (4.0)	DOE complex-wide nuclear infrastructure data call has been revised to reflect 2007 status and a revised list of facilities and status has been included in the FY 2007 INL Ten Year Site Plan.
Fail (0.7)	A revision of the 2005 DOE complex-wide nuclear infrastructure data call has not been completed or is not available in time to support issuance of the FY 2007 INL Ten Year Site Plan.

C6 Consolidation of INL Special Nuclear Materials

In determining the performance of this measure DOE shall evaluate the following deliverables against the established criteria:

- Complete screening of INL special nuclear material (SNM) to identify excess material that no longer needs to be retained for programmatic use.
- Identification of potential disposition (reuse or disposal) paths for excess special nuclear material.
- Completion of a life-cycle cost analysis on INL SNM disposition alternatives.
- Development of high level implementation strategy for INL SNM disposition.

Grade	Performance
A- to A+	Performs all of the listed actions above including the complete screening of INL SNM to identify excess material that no longer needs to be retained for programmatic use, identification of potential disposition paths for excess SNM, completion of a life-cycle cost analysis on INL SNM disposition alternatives, and the development of a high-quality strategy implementation strategy for INL SNM disposition. Demonstrates commitment to sustained INL SNM consolidation efforts by taking steps toward implementing consolidated SNM storage at a given location or facility. Demonstrates commitment to excess SNM disposition by making more than one off-site shipment of excess SNM.
B+	Performs all of the listed actions and demonstrates continued general progress toward sustained INL SNM consolidation and disposition. The actions include the complete screening of INL SNM to identify excess material that no longer needs to be retained for programmatic use, identification of potential disposition paths for excess SNM, completion of a life-cycle cost analysis on INL SNM disposition alternatives, and the development of a high-quality strategy implementation strategy for INL SNM disposition. Makes at least one off-site shipment of SNM.
B- to B	Performs all of the listed actions above including the complete screening of INL SNM to identify excess material that no longer needs to be retained for programmatic use, identification of potential disposition paths for excess SNM, completion of a life-cycle cost analysis on INL SNM disposition alternatives, and the development of a high-quality strategy implementation strategy for INL SNM disposition.
C	Performs 3 out of the 4 actions above including the complete screening of INL SNM to identify excess material that no longer need to be retained for programmatic use, identification of potential disposition paths for excess SNM, completion of a life-cycle cost analysis on INL SNM disposition alternatives, and the development of a high-quality strategy implementation strategy for INL SNM disposition.

D	Performs 1 or less of the listed actions above including the complete screening of INL SNM to identify excess material that no longer needs to be retained for programmatic use, identification of potential disposition paths for excess SNM, completion of a life-cycle cost analysis on INL SNM disposition alternatives, and the development of a high-quality strategy implementation strategy for INL SNM disposition.
F	Fails to perform any of the listed actions above including the complete screening of INL SNM to identify excess material that no longer needs to be retained for programmatic use, identification of potential disposition paths for excess SNM, completion of a life-cycle cost analysis on INL SNM disposition alternatives, and the development of a high-quality strategy implementation strategy for INL SNM disposition.

C7 Disposition of EBR-II Fuels

More cost effective alternatives to current treatment methods of EBR-II and other sodium bearing fuel prior to ultimate disposal should be investigated. DOE shall evaluate the following deliverables against the established criteria:

- Prepare a recommendation for alternative methods for treatment and disposal of EBR-II sodium bonded fuels by January 31, 2007.
- The recommended alternative should include consideration of cost and schedule improvements, improvements in the end product and potential uses and or disposal alternatives.

Grade	Performance
Pass (4.3)	A strategy has been proposed and accepted by DOE for the treatment and disposal of EBR-II sodium bonded fuels.
Fail (0.7)	No strategy was proposed or accepted by DOE for the treatment and disposal of EBR-II sodium bonded fuels.