PART III

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APPENDIX A

ADVANCE UNDERSTANDINGS ON HUMAN RESOURCES

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

Contract No. DE-AC02-07CH11358

Section J Appendix A

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AMES LABORATORY

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Section J Appendix A

SECTION I - INTRODUCTION

- (a) This Advance Understanding is intended to document the principles and measures for evaluation of the Contractor's Human Resource Management (CHRM) programs and other items of allowable personnel costs and related expenses not specifically addressed elsewhere under this contract. Any changes to the personnel policies or practices in place as of the effective date of this contract which would increase costs, is subject to approval in advance by the Contracting Officer.
- (b) AMES CHRM programs will comply with the Federal Acquisition Regulation (FAR) cost principles and FAR contract clauses, as supplemented by the Department of Energy Acquisition Regulation (DEAR), for all HR programs, including but not limited to Compensation, Health and Welfare Benefits, Pension Plans, Training and Development, Employee Morale, Professional Society Memberships, Employee and Labor Relations, Diversity/Equal Employment Opportunity/Affirmative Action, Recruitment and Relocation. The Contractor shall use effective management review procedures and internal controls to assure compliance with the FAR and DEAR.
- (c) This Appendix A may be modified from time to time by agreement of the Parties. Either Party may, at any time request that this Appendix A be revised, and the Parties hereto agree to negotiate in good faith concerning any requested revision. Revisions to this Appendix A shall be accomplished by executing modification to the prime contract.
- (d) The Laboratory Director may make exceptions to the provisions of Appendix A when such exceptions are in the best interest of contract operations or will facilitate or enhance contract performance and are approved in advance by the Contracting Officer.
- (e) The Contractor, or designated representative, shall promptly furnish all reports and information required or otherwise indicated in this Advance Understanding to the Contracting Officer. The Contractor recognizes that the Contracting Officer or designated representative may make other data requests from time to time and the Contractor agrees to cooperate in meeting requests.
- (f) It is understood that no provision of this Appendix can affect any right guaranteed to a bargaining unit employee by the terms of a Collective Bargaining Agreement.

PERFORMANCE MANAGEMENT

The Institutional Plan highlights areas important to DOE and aligns with critical contract vision components. The HR Strategic Plan, which is subordinate to the Institutional Plan, will be reviewed with DOE representatives at least annually. Contract performance metrics and measures will be developed in partnership with DOE and are detailed in the Appendix B.

CHRM performance objectives and targets will align with, and facilitate the achievement of the Laboratory mission; be limited in number; focus on strategic results, systems-based measures, and assessment against industry best practices; be developed annually and mutually agreed upon by the Contractor and DOE in accordance with Appendix B; be reviewed periodically to target key strategic objectives and results; and include outcomes that result in cost effective management of laboratory human resources to support accomplishment of DOE and AMES mission, strategy and objectives.

SECTION III - COMPENSATION

- (a) <u>Compensation Standards</u>. The Contractor and DOE agree that the elements below will be included in Laboratory compensation systems and will be the basis upon which DOE will evaluate the Contractor's self-assessment required under Clause H.19 of this contract. The elements are:
 - (1) philosophy and strategy for all pay delivery programs;
 - (2) method for establishing the internal value of jobs;
 - (3) method for relating the internal value of jobs to the external market;
 - (4) system that links individual and/or group performance to compensation decisions;
 - (5) method for planning and monitoring the expenditure of funds;
 - (6) method for ensuring compliance with applicable laws and regulations;
 - (7) system for communicating the program to employees; and
 - (8) system for internal controls and self-assessment.
- (b) Salary increases.

- (1) Any combination of salary increases for an individual in a single fiscal year, including merit increases and those resulting from reclassification and promotion, which result in a salary that is 25% greater than the employee's salary prior to the increase shall require prior approval by the Laboratory Director. Salary increases that exceed 15% shall be reported annually to the Contracting Officer.
- (2) Annual funding for promotions shall be included in the Salary Increase Authorization (SIA) request as a discrete line item. The request for funding for promotions will be based upon actual use for the prior year and anticipated future use, such as classification restructuring.
- (3) An administrative stipend may be paid to an employee who is temporarily assigned responsibilities of a higher level position or other significant duties not part of the employee's regular position. The sum of stipend and base salary shall not exceed the maximum salary of the higher level position. The Laboratory Director may authorize an administrative stipend up to 15 % of the appointee's annual base salary for a period not to exceed one year.
- (4) Notwithstanding any other term or condition set forth in this Contract, the Contracting Officer's approval of compensation actions pursuant to H.19(b)(8) will consider:
 - A. relative alignment of proposed salaries with subordinate levels;
 - B. available market data, comparing total-cash compensation;
 - C. total compensation relative to the Executive Compensation Benchmark Amount established periodically by the Office of Federal Procurement Policy (OFPP).

(c) Salary Increase Authorization (SIA).

- (1) The Contractor shall submit the SIA proposal by August 1 of each year.
- (2) In order to pay "on-market-on-average," in the calculation of market position, Laboratory salary data shall be matched to survey data as of April 1, the midpoint of the fiscal year.
- (3) The SIA shall be expressed as a percentage of the projected September 30 base payroll.

- (4) Upon conclusion of the annual distribution of SIA merit funds, the Contractor shall provide a report to the Contracting Officer of individual compensation rates for employees with salaries of \$100,000 and above.
- (d) <u>Payment of Joint Appointees.</u> Joint Appointees shall be paid at the salary and fringe benefit rates established by the home institution, for the percentage of time worked at the host institution.

SECTION IV - ANCILLARY PAY COMPONENTS

- (a) Extended work week.

 When deemed essential to the performance of work under this contract, an extended work week may be established at the Laboratory or any portion thereof.
- (b) Medical evacuation services/insurance.

Employees required to perform official travel to foreign countries where local care is substandard (according to U.S. standards) may have coverage that pays for evacuation services to an acceptable medical facility in a proximal location on an urgent or emergency basis. The policy shall cover evacuation, expatriation of remains, and ancillary costs associated with the incident. Costs for such coverage for eligible employees are allowable.

SECTION V - PAYMENTS ON SEPARATION

- (a) Reduction in Force (RIF). When employees are terminated due to a RIF, the following costs are allowable:
 - (1) Pay in lieu of notice. Any employee who is laid off or terminated due to a RIF may be given pay in lieu of the required minimum written notice of termination. Accumulated vacation credit is also paid.
 - (2) <u>Severance pay benefit</u>. As approved by the Contracting Officer.
- (b) Payments upon termination other than RIF.
 - (1) <u>Sick leave.</u> Accumulated sick leave is not payable upon termination and may not be used beyond a predetermined date of termination.
 - (2) <u>Vacation.</u> Accumulated vacation is payable at termination at the rate in effect as of the date of termination, including any shift differential.

SECTION VI - LABOR RELATIONS

Collective bargaining.

Costs of fringe benefits and wages paid to employees under collective bargaining agreements are allowable. All other reasonable costs and expenses, such as expenses relating to the grievance process, arbitration and arbitration awards, and other costs and expenses incurred pursuant to applicable collective bargaining agreements and revisions thereto, are also allowable.

SECTION VII – PROGRAMS INVOLVING EMPLOYEE ABSENCE FROM THE WORKPLACE

(a) Paid Leave.

The Laboratory will provide a reasonable and cost effective paid leave program. Paid leave includes vacation, holiday, sick, jury, bereavement, military, voting and personal leave according to approved Laboratory schedules. Only leave accruals included in the annual benefit value study shall be allowable.

(b) <u>Temporary Assignments of Laboratory Employees to Other Institutions for</u> Teaching And Research.

The Contractor shall be reimbursed for expenditures consistent with Laboratory policy arising out of an employee assignment to another institution for teaching and/or research if the assignment does not exceed one year.

(c) Military Leave.

Military leave and associated pay is authorized in accordance with Contractor policies, and/or State or Federal law.

(d) Security Leave.

Wages or salaries paid to employees when access authorization is suspended by DOE will be allowable costs under the following conditions:

If a position which does not require access authorization is not available, the Laboratory Director or designee may place the employee on leave with pay at his or her base compensation until final disposition of the case. Leave with pay requires the Contracting Officer's concurrence that no position is available to which the employee might reasonably be transferred.

SECTION VIII - EMPLOYEE TRAINING, EDUCATION AND DEVELOPMENT

- (a) The Laboratory Director or designee shall send an annual report to the Contracting Officer providing the number of employees participating in training, and education and development programs and the dollars spent.
- (b) The Laboratory shall establish training, education and development programs that are consistent with DOE requirements and guidance, industry standards, and other Federal, State and local regulations. These programs shall ensure that employees are well-qualified and competent to manage facilities and meet mission requirements through administrative, professional and technical excellence.

SECTION IX - EMPLOYEE PROGRAMS

(a) <u>Service/Retirement/Non-Performance awards</u>.

The Contractor is authorized to provide monetary or non-monetary recognition for achievements not based on performance. Awards may include, for example, Length of Service/Retirement Recognition; Safety Awards; Suggestion Program.

(b) <u>Performance award programs</u>.

The Contractor may recognize employees or groups of employees who have distinguished themselves by their significant contributions and outstanding performance in the course of their work. Awards may be provided to employees or groups of employees in the form of cash. Additionally, noteworthy achievements and special efforts may be recognized by the presentation of plaques, certificates, and memorabilia.

Annually the Contractor shall provide the Contracting Officer with reports on the individual award program expenditures.

(d) Cost of Health Services.

The Contractor shall be reimbursed for the costs of operating a Health Unit for Laboratory employees, including but not limited to the following: Pre-employment physicals and other medical examinations required to meet Laboratory employment requirements, operation of a health unit which provides medical care for occupational injuries and to provide minor relief for minor physical complaints of employees while at the Laboratory and health examinations provided as a health service for employees.

(e) Other.

- (1) The Contractor may develop, administer and support a variety of employee programs. These programs may include athletic, cultural, and family activities. Participant fees may be collected to partially offset the cost of some or all of these activities. Appropriate facilities, utilities, and maintenance may be provided by the Laboratory. Entertainment costs, including costs of amusement, diversions, and social activities are unallowable, as well as directly related costs such as tickets, meals, lodging, rentals, transportation and gratuities.
- (2) Wellness program. Costs of a Wellness Program to promote employee health and fitness are allowable. This program shall be limited to activities related to stress management, smoking cessation, exercise, nutrition, and weight loss.
- (3) Employee Assistance Program. The Contractor shall (1) maintain a program of preventive services, education, short-term counseling, coordination with and referrals to outside agencies, and follow-up upon return to work that conforms to the requirements of 10 CFR 707.6, Employee Assistance, Education, and Training; (2) Submit for approval by the Contracting Officer any changes to the employee assistance program implementation plan; (3) Prepare and submit information to DOE concerning Employee Assistance Program services as requested by the Contracting Officer. Such reports shall not include individual identifiers.
- (4) Employee Communications. The costs incurred in the publication, printing and distribution of a house organ, handbooks and other employee communication media designed to effectuate better employee relations and understanding of Appendix A and current employment regulations shall be reimbursed and performed in a cost effective manner.

SECTION X - COSTS OF RECRUITING PERSONNEL

- (a) The Contractor may incur costs for the recruitment of personnel, as follows:
 - (1) Costs of advertising and agency and consultant fees.
 - (2) Recruiting Expenses The Laboratory may reimburse consistent with other provisions of this contract, employees traveling for recruiting purposes the actual cost incurred for the following expenses: transportation, lodging, and meals for prospective employees and, when

approved, for spouses or representatives of academic institutions, professional societies and other scientific organizations and incidental expenses incurred in recruiting.

- (3) New or prospective employees who have been offered and have accepted a position, and who are required to take a pre-placement physical examination, shall be reimbursed for costs of the physical examination.
- (4) Costs associated with pre-employment screening shall be allowable.

(b) Recruitment/Retention Tools.

- (1) The Contractor may pay a sign-on bonus to recruit employees with critical skills.
- (2) An annual retention bonus is authorized to retain employees with critical skills or whose expertise is critical to the completion of a specific project.
- (3) The Contractor is authorized to provide service credit to critical skill newhires for previous relevant experience at another DOE facility or external organization.

SECTION XI – REDUCTIONS IN CONTRACTOR EMPLOYMENT

Reductions in employment will be conducted in accordance with the contractor's personnel management policies and practices and in accordance with applicable Departmental guidance on work force restructuring, as revised from time to time.

(a) Work Force Analysis.

The Laboratory will annually analyze its work force requirements to retain employees with the skills, knowledge and abilities necessary to effectively and safely meet assigned and futures missions within budget constraints. The Laboratory will develop appropriate work force transition strategies consistent with restructuring objectives contained in the Departmental guidance on work force restructuring, as amended from time to time.

(b) Involuntary Separations

(1) The Contractor will advise the Contracting Officer of all Reductions-In-Force prior to their initiation. A reduction-in-force action is a separation of an employee (other than for cause) due to a planned action.

- (2) Any employee who volunteers for layoff or retirement during a time period in which the Contractor has an active reduction in force plan will be eligible for severance pay provided the termination is accepted by Laboratory management and results in the retention of an employee who otherwise would have been laid off.
- (3) The Contractor, to the extent practicable, shall provide outplacement services to those employees who are involuntarily separated due to a layoff.

(c) <u>Displaced Worker Medical Benefit</u>

Employees placed on layoff status who have completed the entry probation period are eligible for continued participation in the health benefits program with premiums supplemented by the Contractor based on the following schedule:

- (1) First Year: The Contractor's contribution for an active employee
- (2) Second Year: One half of the Contractor's Cobra premium
- (3) Third and subsequent years: Reasonable administrative costs that exceed the two percent administrative fee paid by the displaced worker.

(d) Transition costs.

The Contractor is authorized to provide involuntarily separated employees with outplacement assistance in the form of skills assessment and resume' preparation.

SECTION XII – EMPLOYEE BENEFITS

(a) <u>Energy Employees' Occupational Illness Compensation Program Act</u> (EEOICPA).

The Laboratory agrees to comply with requests for information, records, and other program requirements to ensure the orderly administration and adjudication of claims under the EEOICPA.

(b) <u>Dependent Care Facilities.</u>

The Laboratory is authorized to provide a dependent care benefit program consistent with the written directions of the Contracting Officer.

The Contractor shall sub-contract the operation of the dependent care center, unless otherwise approved by the Contracting Officer. Support costs for labor, materials, and supplies expended for the operation of a dependent care facility shall not be allowable under any circumstances unless the facility is for the exclusive use of Laboratory employees and except for any expense items such as utilities, maintenance, food, medical services, or supplies already used in support of site operations and readily available.

ATTACHMENT J.2

APPENDIX B

PERFORMANCE EVALUATION AND MEASUREMENT PLAN

Applicable to the Operation of Ames Laboratory

Contract No. DE-AC02-07CH11358

FY 2007

CONTRACTOR PERFORMANCE EVALUATION AND MEASUREMENT PLAN

FOR

MANAGEMENT AND OPERATIONS OF THE AMES LABORATORY



U.S. DEPARTMENT OF ENERGY AMES SITE OFFICE

U.S. DEPARTMENT OF ENERGY
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INTRODUCTION

This document, the Performance Evaluation and Measurement Plan (PEMP), primarily serves as DOE's Quality Assurance/Surveillance Plan (QASP) for the evaluation of Iowa State University (hereafter referred to as "the Contractor") performance regarding the management and operations of the Ames Laboratory (hereafter referred to as "the Laboratory") for the evaluation period from January 1, 2007, through September 30, 2007. The performance evaluation provides a standard by which to determine whether the Contractor is managerially and operationally in control of the Laboratory and is meeting the mission and requirement performance expectations/objectives of the Department as stipulated within this contract.

This document also describes the distribution of the total available performance-based fee and the methodology for determining the amount of fee earned by the Contractor as stipulated within the clauses entitled, "Determining Total Available Performance Fee and Fee Earned," "Conditional Payment of Fee, Profit, or Incentives," and "Total Available Fee: Base Fee Amount and Performance Fee Amount." In partnership with the Contractor and other key customers, the Department of Energy (DOE) Headquarters (HQ) and the Site Office have defined the measurement basis that serves as the Contractor's performance-based evaluation and fee determination. The total available performance fee for FY 2007 is \$83,750.

The Performance Goals (hereafter referred to as Goals), Performance Objectives (hereafter referred to as Objectives) and set of Performance Measures and Targets (hereafter referred to as Performance Measures/Targets) for each Objective discussed herein were developed in accordance with contract expectations set forth within the contract. The Performance Measures for meeting the Objectives set forth within this plan have been developed in coordination with HQ program offices as appropriate. Except as otherwise provided for within the contract, the evaluation and fee determination will rest solely on the Contractor's performance within the Performance Goals and Objectives set forth within this plan.

The overall performance against each Objective of this performance plan, to include the evaluation of Performance Measures identified for each Objective, shall be evaluated jointly by the appropriate HQ office or major customer and the Site Office. This cooperative review methodology will ensure that the overall evaluation of the Contractor results in a consolidated DOE position taking into account specific Performance Measures as well as all additional information not otherwise identified via specific Performance Measures. The Site Office shall work closely with each HQ program office or major customer throughout the year in evaluating the Contractor's performance and will provide observations regarding programs and projects as well as other management and operation activities conducted by the Contractor throughout the year.

<u>Section I</u> provides information on how the performance rating (grade) for the Contractor, as well as how the performance-based fee earned (if any) will be determined.

<u>Section II</u> provides the detailed information concerning each Goal, their corresponding Objectives, and Performance Measures of performance identified, along with the weightings assigned to each Goal and Objective and a table for calculating the final score for each Goal.

I. DETERMINING THE CONTRACTOR'S PERFORMANCE RATING AND PERFORMANCE-BASED FEE

The FY 2007 Contractor performance grades will be determined based on the weighted sum of the individual scores earned for each of the Goals described within this document for Science and Technology and for Management and Operations (see Table A below). No overall rollup grade will be provided. Performance evaluations shall be measured and graded at the Objective level, which rollup to provide the performance evaluation determination for each Goal. Performance evaluations will be rolled up for an overall grade for Science and Technology and for Management and Operations. The rollup of the performance of each Goal will then be utilized to determine the overall Contractor performance grade for Science and Technology and Management and Operations. The total overall points derived for Science and Technology will be utilized to determine the amount of available fee that may be earned (see Table B). The overall points derived for Management and Operations will be utilize to determine the multiplier to be applied (see Table C) to the Science and Technology fee earned to determine the final amount of fee earned for FY 2007. Each Goal is composed of two or more weighted Objectives and each Objective has a set of Performance Measures, which are identified to assist the reviewer in determining the Contractor's overall performance in meeting that Objective. Each of the Performance Measures identifies significant activities, requirements, and/or milestones important to the success of the corresponding Objective and shall be utilized as the primary means of determining the Contractor's success in meeting the Objective. Although the Performance Measures are the primary means for determining performance, other performance information available to the evaluating office from other sources to include, but not limited to, the Contractor's self-evaluation report, operational awareness (daily oversight) activities; "For Cause" reviews (if any); other outside agency reviews (OIG, GAO, DCAA, etc.), and the annual 2-week review (if needed), may be utilized in determining the Contractor's overall success in meeting an Objective. The following describes the methodology for determining the Contractor's grade for each Goal:

Performance Evaluation Methodology:

The purpose of this section is to establish a methodology to develop scoring at the Objective Level. Each Objective within a Goal shall be assigned a numerical score, per Figure I-1 below, by the evaluating office. Each evaluation will measure the degree of effectiveness and performance of the Contractor in meeting the Objective and shall be based on the Contractor's success in meeting the set of Performance Measures identified for each Objective as well as other performance information available to the evaluating office from other sources as identified above. The set of Performance Measures identified for each Objective represent the set of significant indicators that if fully met, collectively places performance for the Objective in the "B+" grade range. For some targets, it serves the evaluator to provide additional grading details (for example at the A, C+, and D levels) and in those cases details have been included in the PEMP. However, these should be considered as guidelines that do not restrict the evaluation from considering other factors that contribute to the evaluation.

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

Letter Grade	Numeric Grade	Definition	
O. Hut		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. Deficiencies identified are offset by positive performance and have little to no potential to adversely impact the mission of the Laboratory.	
В	3.0 – 2.8	Most expectations of performance as set by the performance measures identified for each Objective are met and/or other minor deficiencies are identified. Performance measures or other minor deficiencies identified 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.	
В-	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	

Letter Grade	Numeric Grade	Definition
		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

Calculating Individual Goal Scores and Letter Grade:

Each Objective is assigned the earned numerical score by the evaluating office as stated above. The Goal rating is then computed by multiplying the numerical score by the weight of each Objective within a Goal. These values are then added together to develop an overall score for each Goal. A set of tables is provided at the end of each Performance Goal section of this document to assist in the calculation of Objective scores to the Goal score. Utilizing Table A, below, the scores for each of the Science and Technology (S&T) Goals and Management and Operations (M&O) Goals are then multiplied by the weight assigned and these are summed to provide an overall score for each. The total score for Science and Technology and Management and Operations is compared to the letter grade scale found in Table B, below, to determine the overall S&T and M&O grades for FY 2007.

The raw score (rounded to the nearest hundredth) from each calculation shall be carried through to the next stage of the calculation process. The raw score for Science and Technology and Management and Operations will be rounded to the nearest tenth of a point for purposes of identifying the overall letter grade as indicated in Table B and for utilization in determining fee as indicated in Table C. A standard rounding convention of x.44 and less rounds down to the nearest tenth (here, x.4), while x.45 and greater rounds up to the nearest tenth (here, x.50).

S&T Performance Goal	Numerical Score	Letter Grade	Weight	Weighted Score	Total Score
1.0 Mission Accomplishment			TBD%		
2.0 Construction and Operations of User Research Facilities and Equipment			TBD%		
3.0 Science and Technology Research Project/Program Management			TBD%		
				Total Score	
M&O Performance Goal	Numerical Score	Letter Grade	Weight	Weighted Score	Total Score
4.0 Leadership and Stewardship of the Laboratory			20%		
5.0 Integrated Safety, Health, and Environmental Protection			30%		
6.0 Business Systems			20%		
7.0 Operating, Maintaining, and Renewing Facility and Infrastructure Portfolio			20%		
8.0 Integrated Safeguards and Security Management and Emergency Management Systems			10%		
				Total Score	

Table A. FY YEAR Contractor Evaluation Score Calculation

Final Grade	A+	A	A-	B+	В	B-	C+	C	C-	D	F
Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0

Table B. FY 2007 Contractor Letter Grade Scale

Determining the Amount of Performance-Based Fee Earned:

The percentage of the available performance-based fee that may be earned by the Contractor shall be determined based on the overall weighted score for the S&T Goals (see Table A. above) and then compared to Table C. below. The overall numerical score of the M&O Goals from Table A. above shall then be utilized to determine the final fee multiplier (see Table C.), which shall be utilized to determine the overall amount of performance-based fee earned for FY 2007 as calculated within Table D.

¹ Weights will be determined following the end of the evaluation period based on the sum of each Program Offices weighting for each Goal multiplied by the percentage of FY 2007 Budget Authority for each.

Award Term Incentive.

Ames Laboratory FY 2007 Request for Proposal offers Award Term Incentives to the successful contractor. The base term of the contract is five years. The proposed contract contains a non-monetary performance incentive which will allow the selected offeror to earn up to an additional fifteen years of contract term for exemplary performance. (Please refer to section F, Clause F.2 of Ames Contract/Solicitation)

Overall Weighted Score	Percent S&T	M&O Fee		
from Table A.	Fee Earned	Multiplier		
4.3		, , , , , , , , , , , , , , , , , , ,		
4.2	100%	100%		
4.1				
4.0				
3.9	97%	100%		
3.8				
3.7				
3.6	94%	100%		
3.5				
3.4				
3.3	0107	10027		
3.2	91%	100%		
3.1				
3.0				
2.9	88%	95%		
2.8				
2.7				
2.6	85%	90%		
2.5				
2.4				
2.3	75%	050/		
2.2	/5%	85%		
2.1				
2.0				
1.9	50%	75%		
1.8				
1.7				
1.6				
1.5				
1.4	0%	60%		
1.3				
1.2				
1.1				
1.0 to 0.8	0%	0%		
0.7 to 0.0	0%	0%		

Table C. - Performance-Based Fee Earned Scale

Overall Fee Determination			
Percent S&T Fee Earned from Table C.			

M&O Fee Multiplier from Table C.	X
Overall Earned Performance-Based Fee	

Table D. – Final Percentage of Performance-Based Fee Earned Determination

Adjustment to the Letter Grade and/or Performance-Based Fee Determination:

The lack of performance objectives and measures in this plan do not diminish the need to comply with minimum contractual requirements. Although the performance-based Goals and their corresponding Objectives shall be the primary means utilized in determining the Contractor's performance grade and/or amount of performance-based fee earned, the Contracting Officer may unilaterally adjust the rating and/or reduce the otherwise earned fee based on the Contractor's performance against all contract requirements as set forth in the Prime Contract. While reductions may be based on performance against any contract requirement, specific note should be made to contract clauses which address reduction of fee including, Standards of Contractor Performance Evaluation, DEAR 970.5215-1 – Total Available Fee: Base Fee Amount and Performance Fee Amount, and Conditional Payment of Fee, Profit, and Other Incentives – Facility Management Contracts. Data to support rating and/or fee adjustments may be derived from other sources to include, but not limited to, operational awareness (daily oversight) activities; "For Cause" reviews (if any); other outside agency reviews (OIG, GAO, DCAA, etc.), and the annual 2-week review (if needed).

The adjustment of a grade and/or reduction of otherwise earned fee will be determined by the severity of the performance failure and consideration of mitigating factors. DEAR 970.5215-3 Conditional Payment of Fee, Profit, and Other Incentives – Facility Management Contracts is the mechanism used for reduction of fee as it relates to performance failures related to safeguarding of classified information and to adequate protection of environment, health and safety. Its guidance can also serve as a example for reduction of fee in other areas.

The final Contractor performance-based rating and fee earned determination will be contained within a year-end report, documenting the results from the DOE review. The report will identify areas where performance improvement is necessary and, if required, provide the basis for any performance-based rating and/or fee adjustments made from the otherwise earned rating/fee based on Performance Goal achievements.

II. PERFORMANCE GOALS, OBJECTIVES & PERFORMANCE MEASURES

Background

The current performance-based management approach to oversight within DOE has established a new culture within the Department with emphasis on the customer-supplier partnership between DOE and the laboratory contractors. It has also placed a greater focus on mission performance, best business practices, cost management, and improved contractor accountability. Under the performance-based management system the DOE provides clear direction to the laboratories and develops annual performance plans (such as this one) to assess the contractors performance in meeting that direction in accordance with contract requirements. The DOE policy for implementing performance-based management includes the following guiding principles:

 Performance objectives are established in partnership with affected organizations and are directly aligned to the DOE strategic goals;

- Resource decisions and budget requests are tied to results; and
- Results are used for management information, establishing accountability, and driving long-term improvements.

The performance-based approach focuses the evaluation of the Contractor's performance against these Performance Goals. Progress against these Goals is measured through the use of a set of Objectives. The success of each Objective will be measured based on a set of Performance Measures, both objective and subjective, that are to focus primarily on end-results or impact and not on processes or activities. Measures provide specific evidence of performance, and collectively, they provide the body of evidence that indicates performance relative to the corresponding Objectives. On occasion however, it may be necessary to include a process/activity-oriented measure when there is a need for the Contractor to develop a system or process that does not currently exist but will be of significant importance to the DOE and the Laboratory when completed or that lead to the desired outcome/result.

Performance Goals, Objectives, and Performance Measures

The following sections describe the Performance Goals, their supporting Objectives, and associated performance measures for FY 2007.

1.0 Provide for Efficient and Effective Mission Accomplishment

The Contractor produces high-quality, original, and creative results that advance science and technology; demonstrates sustained scientific progress and impact; receives appropriate external recognition of accomplishments; and contributes to overall research and development goals of the Department and its customers.

The weight of this Goal is TBD%.

The Provide for Efficient and Effective Mission Accomplishment Goal measures the overall effectiveness and performance of the Contractor in delivering science and technology results which contribute to and enhance the DOE's mission of protecting our national and economic security by providing world-class scientific research capacity and advancing scientific knowledge by supporting world-class, peer-reviewed scientific results, which are recognized by others.

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science Program Office as identified below. The overall Goal score from each Program Office is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 1.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual Budget Authority for FY 2007.

- Office of Advanced Scientific Computing Research (ASCR) (TBD%)
- Office of Basic Energy Sciences (BES) (TBD%)
- Office of Biological and Environmental Research (BER) (TBD%)
- Office of Workforce Development for Teachers and Scientists (WDTS) (TBD%)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 1.2 below). The overall score earned is then compared to Table 1.3 to determine the overall letter grade for this Goal. Individual Program Office weightings for each of the Objectives identified below are provided within Table 1.1. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science Program Offices for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives, the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of BA for FY 2007 as compared to the total BA for those remaining HQ Program Offices.

Objectives:

1.1 Science and Technology Results Provide Meaningful Impact on the Field

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.:

- The impact of publications on the field;
- Publication in journals outside the field indicating broad impact;
- Impact on DOE or other customer mission(s);
- Successful stewardship of mission-relevant research areas;
- Significant awards (R&D 100, FLC, Nobel Prizes, etc.);
- Invited talks, citations, making high-quality data available to the scientific community; and
- Development of tools and techniques that become standards or widely-used in the scientific community.

A to A+	Changes the way the research community thinks about a particular field; resolves critical questions and thus moves research areas forward; results generate huge interest/enthusiasm in the field.			
B+	Impacts the community as expected. Strong peer review comments in all relevant areas.			
В	Not strong peer review comments in at least one significant research area.			
C	One research area just not working out. Peer review reveals that a program isn't going anywhere.			
D	Failure of multiple program elements.			
F	Gross scientific incompetence and/or scientific fraud.			

1.2 Provide Quality Leadership in Science and Technology

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

• Willingness to pursue novel approaches and/or demonstration of innovative solutions to problems;

- Willingness to take on high-risk/high payoff/long-term research problems, evidence that the Contractor "guessed right" in that previous risky decisions proved to be correct and are paying off;
- The uniqueness and challenge of science pursued, recognition for doing the best work in the field;
- Extent of collaborative efforts, quality of the scientists attracted and maintained at the Laboratory;
- Staff members visible in leadership position in the scientific community; and
- Effectiveness in driving the direction and setting the priorities of the community in a research field.

A to A+	Laboratory staff lead Academy or equivalent panels; laboratory's work changes the direction of research fields; world-class scientists are attracted to the laboratory, lab is trend-setter in a field.
B ⁺	Strong research performer in most areas; staff asked to speak to Academy or equivalent panels to discuss further research directions; lab is center for high-quality research and attracts full cadre of researchers; some aspects of programs are world-class.
В	Strong research performer in many areas; staff asked to speak to Academy or equivalent panels to discuss further research directions; few aspects of programs are world-class.
С	Working on problems no longer at the forefront of science; stale research; evolutionary, not revolutionary.
D	Failure of multiple program elements.
F	Gross scientific incompetence and/or scientific fraud.

1.3 Provide and Sustain Science and Technology Outputs that Advance Program Objectives and Goals

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.:

- The number of publications in peer-reviewed journals;
- The quantity of output from experimental and theoretical research; and
- Demonstrated progress against peer reviewed recommendations, headquarters guidance, etc.

Pass	Not failing; see below.
Fail	Peer reviewers not satisfied; output not meeting general scientific standards;
	minimal progress against FWPs.

Note: The numerical grade for "Pass" is 4.3 and for "Fail" it is 0.7

1.4 Provide for Effective Delivery of Science and Technology

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, Field Work Proposals (FWPs), Approved Financial Plans (AFPs), Program Office reviews/oversight, etc.:

- Efficiency and effectiveness in meeting goals and milestones;
- Efficiency and effectiveness in delivering on promises, and getting instruments to work as promised; and
- Efficiency and effectiveness in transmitting results to the community and responding to DOE or other customer guidance.

Pass	Not failing; (see numerical grades)
Fail	Peer reviewers not satisfied; significant number of milestones not met, results not
	delivered to community while it matters

Note: The numerical grade for "Pass" is 4.3 and for "Fail" it is 0.7

Science Program Office ²	Letter	Numerical	Weight	Weighted Score	Overall
Office of Advanced Scientific	Grade	Score		Score	Score
Computing Research					
•			50%		
1.1 Impact					
1.2 Leadership			20%		
1.3 Output			15%		
1.4 Delivery			15%	A COD TO A 1	
	1		Overall .	ASCR Total	
Office of Biological and					
Environmental Research					
1.1 Impact			30%		
1.2 Leadership			20%		
1.3 Output			20%		
1.4 Delivery			30%		
			Overal	l BER Total	
Office of Basic Energy Sciences					
1.1 Impact			40%		
1.2 Leadership			30%		
1.3 Output			15%		
1.4 Delivery			15%		
·			Overal	l HEP Total	
Office of Workforce Development for					
Teachers and Scientists					
1.1 Impact			25%		
1.2 Leadership			30%		
1.3 Output			30%		
1.4 Delivery			15%		
				WDTS Total	

Table 1.1 – 1.0 Program Office Performance Goal Score Development

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² A complete listing of the S&T Goals & Objectives weightings for the SC Programs is provided within Attachment I to this plan.

Science Program Office	Letter Grade	Numerical Score	Funding Weight	Weighted Score	Overall Weighted
			(BA)		Score
Office of Advanced Scientific			TBD%		
Computing Research			100%		
Office of Biological and			TBD%		
Environmental Research			10070		
Office of Basic Energy Sciences			TBD%		
Office of Workforce Development			TBD%		
for Teachers and Scientists			100%		
Performance Goal 1.0 Total					

Table 1.2 – Overall Performance Goal Score Development³

Total	4.3-	4.0-	3.7-	3.4-	3.0-	2.7-	2.4-	2.0-	1.7-	1.0-	0.7-0
Score	4.1	3.8	3.5	3.1	2.8	2.5	2.1	1.8	1.1	0.8	
Final Grade	A+	A	A-	B+	В	В-	C+	С	C-	D	F

Table 1.3 – 1.0 Goal Final Letter Grade

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³ The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual Budget Authority for FY 2007.

2.0 Provide for Efficient and Effective Design, Fabrication, Construction and Operations of Research Facilities

The Contractor provides effective and efficient strategic planning; fabrication, construction and/or operations of Laboratory research facilities; and is responsive to the user community.

The weight of this Goal is TBD%.

The Provide for Efficient and Effective Design, Fabrication, Construction and Operations of Research Facilities Goal shall measure the overall effectiveness and performance of the Contractor in planning for and delivering leading-edge specialty research and/or user facilities to ensure the required capabilities are present to meet today's and tomorrow's complex challenges. It also measures the Contractor's innovative operational and programmatic means for implementation of systems that ensures the availability, reliability, and efficiency of these facilities; and the appropriate balance between R&D and user support.

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science Program Office as identified below. The overall Goal score from each Program Office is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 2.1). Final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual Budget Authority (BA) for FY 2007.

- Office of Advanced Scientific Computing Research (ASCR) (TBD%)
- Office of Basic Energy Sciences (BES) (TBD%)
- Office of Biological and Environmental Research (BER) (TBD%)
- Office of Workforce Development for Teachers and Scientists (WDTS) (TBD%)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 2.2 below). The overall score earned is then compared to Table 2.3 to determine the overall letter grade for this Goal. Individual Program Office weightings for each of the Objectives identified below are provided within Table 2.1. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by DOE HQ Office of Science's (SC) Program Offices for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives, the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of BA for FY 2007 as compared to the total BA for those remaining HQ Program Offices.

Objectives:

2.1 Provide Effective Facility Design(s) as Required to Support Laboratory Programs (i.e., activities leading up to CD-2)

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by scientific/technical workshops developing pre-conceptual R&D, progress reports, Lehman reviews, Program/Staff Office reviews/oversight, etc.:

- Effectiveness of planning of preconceptual R&D and design for life-cycle efficiency;
- Leverage of existing facilities at the site;
- Delivery of accurate and timely information needed to carry out the critical decision and budget formulation process.; and
- Ability to meet the intent of DOE Order 413.3, Program and Project Management for the Acquisition of Capital Assets.

A to A+	In addition to meeting all measures under B ⁺ , the laboratory is recognized by the research community as the leader for making the science case for the acquisition; Takes the initiative to demonstrate the potential for revolutionary scientific advancement. Identifies, analyzes and champions novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing. Proposed approaches are widely regarded as innovative, novel, comprehensive, and potentially cost-effective. Reviews repeatedly confirm potential for scientific discovery in areas that support the Department's mission,
	and potential to change a discipline or research area's direction.
B+	Provides the overall vision for the acquisition. Displays leadership and commitment to achieving the vision within preliminary estimates that are defensible and credible in terms of cost, schedule and performance; develops quality analyses, preliminary designs, and related documentation to support the approval of the mission need (CD-0), the alternative selection and cost range (CD-1) and the performance baseline (CD-2). Solves problems and addresses issues. Keeps DOE appraised of the status, near-term plans and the resolution of problems on a regular basis. Anticipates emerging issues that could impact plans and takes the initiative to inform DOE of possible consequences.
В	Fails to meet expectations in one of the areas listed under B+.
С	The laboratory team develops the required analyses and documentation in a timely manner. However, inputs are mundane and lack innovation and commitment to the vision of the acquisition.
D	The potential exists for credible science and business cases to be made for the acquisition, but the laboratory fails to take advantage of the opportunity.
F	Proposed approaches are based on fraudulent assumptions; the science case is weak to non-existent, the business case is seriously flawed.

2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components (execution phase, Post CD-2 to CD-4)

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

- Adherence to DOE Order 413.3 Project Management for the Acquisition of Capital Assets;
- Successful fabrication of facility components
- Effectiveness in meeting construction schedule and budget; and

• Quality of key staff overseeing the project(s).

A to A+	Laboratory has identified and implemented practices that would allow the project scope to be increased if such were desirable, without impact on baseline cost or schedule; Laboratory always provides exemplary project status reports on time to DOE and takes the initiative to communicate emerging problems or issues. There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline; Reviews identify environment, safety and health practices to be exemplary.
B +	The project meets CD-2 performance measures; the laboratory provides sustained leadership and commitment to environment, safety and health; reviews regularly recognize the laboratory for being proactive in the management of the execution phase of the project; to a large extent, problems are identified and corrected by the laboratory with little, or no impact on scope, cost or schedule; DOE is kept informed of project status on a regular basis; reviews regularly indicate project is expected to meet its cost/schedule performance baseline.
В	The project fails to meet expectations in one of the areas listed under B+.
С	Reviews indicate project remains at risk of breaching its cost/schedule performance baseline; Laboratory commitment to environment, safety and health issues is adequate; Reports to DOE can vary in degree of completeness; Laboratory commitment to the project appears to be subsiding.
D	Reviews indicate project is likely to breach its cost/schedule performance baseline; and/or Laboratory commitment to environment, safety and health issues is inadequate; reports to DOE are largely incomplete; laboratory commitment to the project has subsided.
F	Laboratory falsifies data during project execution phase; shows disdain for executing the project within minimal standards for environment, safety or health, fails to keep DOE informed of project status; reviews regularly indicate that the project is expected to breach its cost/schedule performance baseline.

2.3 Provide Efficient and Effective Operation of Facilities

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by progress reports, peer reviews, Program/Staff Office reviews/oversight, performance against benchmarks, Approved Financial Plans (AFPs), etc.:

- Availability, reliability, and efficiency of facility(ies);
- Degree the facility is optimally arranged to support community;
- Whether R&D is conducted to develop/expand the capabilities of the facility(ies);
- Effectiveness in balancing resources between facility R&D and user support; and
- Quality of the process used to allocate facility time to users.

A to A+ Performance of the facility exceeds expectations as defined before the start of the year in any of these categories: cost of operations, users served, availability, beam delivery, or luminosity, and this performance can be directly attributed to the efforts of the laboratory; and /or: the schedule and the costs associated with the ramp-up to steady state operations are less than planned and are acknowledged to be 'leadership caliber' by reviews; Data on ES&H continues to be exemplary and widely regarded as among the 'best in class'.

B ⁺	Performance of the facility meets expectations as defined before the start of the year in all of these categories: cost of operations, users served, availability, beam delivery, or luminosity, and this performance can be directly attributed to the efforts of the laboratory; and /or: the schedule and the costs associated with the ramp-up to steady state operations occur as planned; Data on ES&H continues to be very good as compared with other projects in the DOE.
В	The project fails to meet expectations in one of the areas listed under B+.
С	Performance of the facility fails to meet expectations in several of the areas listed under B+; for example, the cost of operations is unexpectedly high and availability of the facility is unexpectedly low, the number of users is unexpectedly low beam delivery or luminosity is well below expectations. Acquisition operates at steady state, on cost and on schedule, but the reliability of performance is somewhat below planned values, <u>or</u> acquisition operates at steady state, but the associated schedule and costs exceed planned values. Commitment to ES&H is satisfactory.
D	Performance of the facility fails to meet expectations in many of the areas listed under B+; for example, the cost of operations is unexpectedly high and availability of the facility is unexpectedly low. Acquisition operates somewhat below steady state, on cost and on schedule, and the reliability performance is somewhat below planned values, <u>or</u> acquisition operates at steady state, but the schedule and costs associated exceed planned values. Commitment to ES&H is satisfactory.
F	The facility fails to operate; acquisition operates well below steady state and/or the reliability of the performance is well below planned values.

2.4 Effective Utilization of Facility(ies) to Grow and Support the Laboratory's Research Base

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by peer reviews, participation in international design teams, Program/Staff Office reviews/oversight, etc.:

- Contractor's efforts to take full advantage of the facility to strengthen the Laboratory's research base; and
- Conversely the facility is strengthened by a resident research community that pushes the envelope of what the facility can do and/or are among the scientific leaders using the facility.

A to A+	Reviews document how multiple disciplines are using the facility in new and novel ways and reviews document that full advantage has been taken of the facility to strengthen the laboratory's research base.
B ⁺	Reviews state strong and effective team approach exists toward establishing an internal user community; laboratory is capitalizing on existence of facility to grow internal capabilities.
В	Reviews state that lab is establishing an internal user community, but laboratory is still not capitalizing fully on existence of facility to grow internal capabilities.
C	Reviews state that the laboratory has made satisfactory use of the facility, but has not demonstrated much innovation.

D	Few indigenous staff use the facility, with none using it in novel ways; research base is very thin.
F	Laboratory does not know how to operate/use its own facility adequately.

Science Program Office ⁴	Letter Grade	Numerical Score	Weight	Weighted Score	Overall Score		
Office of Basic Energy Sciences							
2.1 Provide Effective Facility Design(s)			0%				
2.2 Provide for the Effective and Efficient							
Construction of Facilities and/or Fabrication			0%				
of Components							
2.3 Provide Efficient and Effective			70%				
Operation of Facilities			7070				
2.4 Effective Utilization of Facility to Grow							
and Support the Laboratory's Research			30%				
Base							
	Overall BES Total						
Office of Biological and Environmental							
Research							
2.1 Provide Effective Facility Design(s)			0%				
2.2 Provide for the Effective and Efficient							
Construction of Facilities and/or Fabrication			0%				
of Components							
2.3 Provide Efficient and Effective			0%				
Operation of Facilities			070				
2.4 Effective Utilization of Facility to Grow							
and Support the Laboratory's Research			0%				
Base							
Overall BER Total							
Office of Advanced Scientific Computing							
Research							
2.1 Provide Effective Facility Design(s)			0%				
2.2 Provide for the Effective and Efficient							
Construction of Facilities and/or Fabrication			0%				
of Components							
2.3 Provide Efficient and Effective			0%				
Operation of Facilities			0/0				
2.4 Effective Utilization of Facility to Grow							
and Support the Laboratory's Research			0%				
Base							
Overall ASCR Total							

Table 2.1 – 2.0 Program Office Performance Goal Score Development

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 $^{^4}$ A complete listing of S&T Goals & Objectives weightings for the SC Programs is provided within Attachment I to this plan.

Science Program Office	Letter Grade	Numerical Score	Funding Weight (BA)	Weighted Score	Overall Weighted Score	
Office of Basic Energy Sciences			TBD%	0		
Office of Biological and Environmental Research			TBD%	0		
Office of Advanced Scientific Computing Research			TBD%	0		
Overall Program Office Total						

Table 2.2 – Overall Performance Goal Score Development⁵

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Weightings for each Customer listed within Table 2.2 are preliminary, based upon FY 2005 Budget Authority figures, and are provided for informational purposes only. The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual Budget Authority for FY 2006.

3.0 Provide Effective and Efficient Science and Technology Program Management

The Contractor provides effective program vision and leadership; strategic planning and development of initiatives; recruits and retains a quality scientific workforce; and provides outstanding research processes, which improve research productivity.

The weight of this Goal is TBD%.

The Provide Effective and Efficient Science and Technology Program Management Goal shall measure the Contractor's overall management in executing S&T programs. Dimensions of program management covered include: 1) providing key competencies to support research programs to include key staffing requirements; 2) providing quality research plans that take into account technical risks, identify actions to mitigate risks; and 3) maintaining effective communications with customers to include providing quality responses to customer needs.

Each Objective within this Goal is to be assigned the appropriate numerical score by the Office of Science Program Office as identified below. The overall Goal score from each Program Office is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 3.1). The final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual Budget Authority for FY 2007.

- Office of Advanced Scientific Computing Research (ASCR) (TBD%)
- Office of Biological and Environmental Research (BER) (TBD%)
- Office of Basic Engineering Sciences (BES) (TBD %)
- Office of Workforce Development for Teachers and Scientists (WDTS) (TBD%)

The overall performance score and grade for this Goal will be determined by multiplying the overall score assigned by each of the offices identified above by the weightings identified for each and then summing them (see Table 3.2 below). The overall score earned is then compared to Table 3.3 to determine the overall letter grade for this Goal. Individual Program Office weightings for each of the Objectives identified below are provided within Table 3.1. The Contractor's success in meeting each Objective shall be determined based on the Contractor's performance as viewed by the Office of Science Program Offices for which the Laboratory conducts work. Should one or more of the HQ Program Offices choose not to provide an evaluation for this Goal and its corresponding Objectives, the weighting for the remaining HQ Program Offices shall be recalculated based on their percentage of BA for FY 2007 as compared to the total BA for those remaining HQ Program Offices.

Objectives:

3.1 Provide Effective and Efficient Stewardship of Scientific Capabilities and Program Vision

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by peer reviews, existence and quality of strategic plans as determined by SC and scientific community review, Program Office reviews/oversight, etc.:

• Efficiency and Effectiveness of joint planning (e.g., workshops) with outside community;

- Articulation of scientific vision;
- Development of core competencies, ideas for new facilities and research programs; and
- Ability to attract and retain highly qualified staff.

A to A+	Providing strong programmatic vision that extends past the laboratory and for which the lab is a recognized leader within SC and in the broader research communities; development and maintenance of outstanding core competencies, including achieving superior scientific excellence in both exploratory, high-risk research and research that is vital to the DOE/SC missions; attraction and retention of world-leading scientists; recognition within the community as a world leader in the field.
B+	Coherent programmatic vision within the laboratory with input from and output to external research communities; development and maintenance of strong core competencies that are cognizant of the need for both high-risk research and stewardship for mission-critical research; attracting and retaining scientific staff who are very talented in all programs.
В	Programmatic vision that is only partially coherent and not entirely well connected with external communities; development and maintenance of some, but not all core competencies with attention to, but not always the correct balance between, high-risk and mission-critical research; attraction and retention of scientific staff who talented in most programs.
С	Failure to achieve a coherent programmatic vision with little or no connection with external communities; partial development and maintenance of core competencies (i.e., some are neglected) with imbalance between high-risk and mission-critical research; attracting only mediocre scientists while losing the most talented ones.
D	Minimal attempt to achieve programmatic vision; little ability to develop any core competencies with a complete lack of high-risk research and ignorance of mission-critical areas; minimal success in attracting even reasonably talented scientists.
F	No attempt made to achieve programmatic vision; no demonstrated ability to develop any core competencies with a complete lack of high-risk research and ignorance of mission-critical areas; failure to attract even reasonably talented scientists.

3.2 Provide Effective and Efficient Science and Technology Project/Program Planning and Management

In determining the performance of the Objective the DOE evaluator(s) shall consider the following as measured by peer reviews, existence and quality of strategic plans as determined by SC and scientific community review, Program Office and scientific community review/oversight, etc.:

- Quality of R&D and/or user facility strategic plans
- Adequacy in considering technical risks;
- Success in identifying/avoiding technical problems;
- Effectiveness in leveraging (synergy with) other areas of research; and
- Demonstration of willingness to make tough decisions (i.e., cut programs with sub-critical mass of expertise, divert resources to more promising areas, etc.).

A to Research plans are proactive, not reactive, as evidenced by making hard decisions

A +	and taking strong actions; plans are robust against budget fluctuations – multiple contingencies planned for; new initiatives are proposed and funded through reallocation of resources from less effective programs; plans are updated regularly to reflect changing scientific and fiscal conditions; plans include ways to reduce risk, duration of programs.
B ⁺	Plans are reviewed by experts outside of lab management and/or include broadly-based input from within the laboratory; research plans exist for all program areas; plans are consistent with known budgets and well-aligned with DOE interests; work follows the plan.
В	Research plans exist for all program areas; work follows the plan.
C	Research plans exist for most program areas; work does not always follow the plan.
D	Plans do not exist for a significant fraction of the lab's program areas, or significant work is conducted outside those plans.
F	No planning is done.

3.3 Provide Efficient and Effective Communications and Responsiveness to Customer Needs

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

- The quality, accuracy and timeliness of response to customer requests for information;
- The extent to which the Contractor keeps the customer informed of both positive and negative events at the Laboratory so that the customer can deal effectively with both internal and external constituencies; and
- The ease of determining the appropriate contact (who is on-point for what).

A to A+	Communication channels are well-defined and information is effectively conveyed; important or critical information is delivered in real-time; responses to HQ requests for information from laboratory representatives are prompt, thorough, correct and succinct; laboratory representatives always initiate a communication with HQ on emerging issues there are no surprises.
B ⁺	Good communication is valued by all staff throughout the contractor organization; responses to requests for information are thorough and are provided in a timely manner; the integrity of the information provided is never in doubt
В	Evidence of good communications is noted throughout the contractor organization and responses to requests for information provide the minimum requirements to meet HQ needs; with the exception of a few minor instances HQ is alerted to emerging issues.
С	Laboratory representatives recognize the value of sound communication with HQ to the mission of the laboratory. However, laboratory management fails to demonstrate that its employees are held accountable for ensuring effective communication and responsiveness; laboratory representatives do not take the initiative to alert HQ to emerging issues.
D	Communications from the laboratory are well-intentioned but generally incompetent; the laboratory management does not understand the importance of effective communication and responsiveness to the mission

	of the laboratory.
F	Contractor representatives are openly hostile and/or non-responsive – emails and phone calls are consistently ignored; communications typically do not address the request; information provided can be incorrect, inaccurate or fraudulent – information is not organized, is incomplete, or is fabricated.

Science Program Office ⁶	Letter Grade	Numerical Score	Weight	Weighted Score	Overall Score
Office of Basic Energy Sciences	01000	50010		2010	50010
3.1 Effective and Efficient Stewardship			40%		
3.2 Project/Program Planning and			40%		
Management			40%		
3.3 Communications and Responsiveness			20%		
			Overa	ll BES Total	
Office of Advanced Scientific Computing					
Research					
3.1 Effective and Efficient Stewardship			35%		
3.2 Project/Program Planning and			35%		
Management					
3.3 Communications and Responsiveness			30%		
			Overall .	ASCR Total	
Office of Biological and Environmental					
Research					
3.1 Effective and Efficient Stewardship			20%		
3.2 Project/Program Planning and			30%		
Management			3070		
3.3 Communications and Responsiveness			50%		
			Overal	1 BER Total	
Office of Workforce Development for					
Teachers and Scientists					
3.1 Effective and Efficient Stewardship			20%		
3.2 Project/Program Planning and			40%		
Management					
3.3 Communications and Responsiveness			40%		
T 11 24 20 D 000		G 10	Overall V	WDTS Total	

Table 3.1 – 3.0 Program Office Performance Goal Score Development

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 $^{^6}$ A complete listing of the S&T Goals & Objectives weightings for the SC Programs is provided within Attachment I to this plan.

Science Program Office	Letter	Numerical	Funding	Weighted	Overall			
	Grade	Score	Weight	Score	Weighted			
			(BA)		Score			
Office of Advanced Scientific			TBD%					
Computing Research			100%					
Office of Biological and			TBD%					
Environmental Research			100%					
Office of Basic Energy Sciences			TBD%					
Office of Workforce Development			TBD%					
for Teachers and Scientists			100%					
Overall Program Office Total								

Table 3.2 – Overall Performance Goal Score Development⁷

Total	4.3-	4.0-	3.7-	3.4-	3.0-	2.7-	2.4-	2.0-	1.7-	1.0-	0.7-0
Score	4.1	3.8	3.5	3.1	2.8	2.5	2.1	1.8	1.1	0.8	
Final Grade	A+	A	A-	B+	В	В-	C+	C	C-	D	F

Table 3.3 – 3.0 Goal Final Letter Grade

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Final weights to be utilized for determining weighted scores will be determined following the end of the performance period and will be based on actual Budget Authority for FY 2007.

4.0 Provide Sound and Competent Leadership and Stewardship of the Laboratory

The Contractor's Leadership provides effective and efficient direction in strategic planning to meet the mission and vision of the overall Laboratory; is accountable and responsive to specific issues and needs when required; and corporate office leadership provides appropriate levels of resources and support for the overall success of the Laboratory.

The weight of this Goal is 20%.

The Provide Sound and Competent Leadership and Stewardship of the Laboratory Goal shall measure the Contractor's Leadership capabilities in leading the direction of the overall Laboratory. It also measures the responsiveness of the Contractor to issues and opportunities for continuous improvement and corporate office involvement/commitment to the overall success of the Laboratory.

Each Objective within this Goal is to be assigned the appropriate numerical score by the evaluating office as described within Section I of this document. Each Objective has one or more measures, the outcomes of which collectively assist the evaluating office in determining the Contractor's overall performance in meeting that Objective. Each of the measures identifies significant tasks, activities, requirements, accomplishments, and/or milestones for which the outcomes/results of are important to the success of the corresponding Objective. Although other performance information available to the evaluating office from other sources may be used, the outcomes of measures identified for each Objective shall be the primary means of determining the Contractor's success in meeting an Objective. The overall Goal score is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 4.1 at the end of this section). The overall score earned is then compared to Table 4.2 to determine the overall Goal letter grade.

4.1 Provide a Distinctive Vision for the Laboratory and an Effective Plan for Accomplishment of the Vision to Include Strong Partnerships Required to Carry Out those Plans

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- Quality of the Vision developed for the Laboratory and effectiveness in identifying its distinctive characteristics;
- Quality of Strategic/Work Plan for achieving the approved Laboratory vision;
- Quality of required Laboratory Business Plan;
- Ability to establish and maintain long-term partnerships/relationships that advance/expand ongoing Laboratory missions and/or provide new opportunities/capabilities; and
- Effectiveness in developing and implementing commercial research and development opportunities that leverage accomplishment of DOE goals and projects with other federal agencies that advances the utilization of Laboratory technologies and capabilities

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the

numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 35%.

- 4.1a The Contractor provides effective strategic guidance and support for Ames Laboratory's science programs and operations, strengthening core competencies and growing the Laboratory into the future.
- 4.1b The Contractor and Ames Laboratory Senior Leadership develop and promote scientific initiatives and continue to seek opportunities to grow the Laboratory consistent with the stated vision.
- 4.1c The Contractor and the Laboratory develop new, and strengthen existing, mutually beneficial partnerships with key government, industry, university and other Laboratory partners.
- 4.1d The Laboratory Business Plan provides all required data in a clear and concise manner and is completed within established guidelines and schedules.
- 4.1e The Contractor and Ames Laboratory seek opportunities for public outreach thru science education in concert with DOE.

4.2 Provide for Responsive and Accountable Leadership throughout the Organization

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- Leadership's ability to instill responsibility and accountability down and through the entire organization; and
- The effectiveness and efficiency of Leadership in identifying and/or responding to Laboratory issues or opportunities for continuous improvement.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 30%.

- 4.2a The Contractor Senior Leadership is responsive to resolving strategic issues that impact the overall performance of the Laboratory, if any.
- 4.2b The Contractor and Ames Laboratory's Senior Leadership's response to Laboratory issues is timely and immediate mitigating actions are identified and implemented as appropriate.
- 4.2c Leadership proactively implements opportunities for improvement and maintains cognizance of corrective action plans, ensuring timely and effective implementation of corrections.
- 4.2d The Senior Management will ensure that commitments made during the RFP process (if applicable) and significant contractor commitments made to DOE during the current performance period are successfully accomplished as planned.

4.3 Provide Efficient and Effective Corporate Office Support as Appropriate

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- Corporate Office involvement in and support of business and other infrastructure process and procedure improvements;
- The willingness to enter into and effectiveness of joint appointments when appropriate; and
- Where appropriate, the willingness to develop and work with the Department in implementing innovative financing agreements and/or provide private investments into the Laboratory.

The overall effectiveness/performance of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 35%.

- 4.3a The contractor participates in peer reviews of Laboratory science programs and provides for review of Laboratory business management and ES&H systems to feed the development of strategic guidance, refine performance measures and assist with enhancing and improving the Laboratory's core competencies.
- 4.3b The Laboratory Director works with the Contractor/Corporate Office to identify openings that could be filled with split-appointees that would help grow the Laboratory and enhance core competencies, while supporting the mission of both institutions.
- 4.3c The contractor exhibits willingness to consider innovative options, such as third party financing, to grow and/or maintain the Laboratory

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Total Points	Total Points
4.0 Effectiveness and Efficiency of					
Contractor Leadership and					
Stewardship					
4.1 Provide a Distinctive Vision for the Laboratory and an Effective Plan for Accomplishment of the Vision to Include Strong Partnerships Required to Carry Out those Plans			35%		
4.2 Provide for Responsive and Accountable Leadership throughout the Organization			30%		
4.3 Provide Efficient and Effective Contractor Support			35%		
		Perform	nance Goal 4	.0 Total	

Table 4.1 – 4.0 Goal Performance Rating Development

Total	4.3-	4.0-	3.7-	3.4-	3.0-	2.7-	2.4-	2.0-	1.7-	1.0-	0.7-0
Score	4.1	3.8	3.5	3.1	2.8	2.5	2.1	1.8	1.1	0.8	
Final Grade	A+	A	A-	B+	В	В-	C+	С	C-	D	F

Table 4.2 – 4.0 Goal Final Letter Grade

5.0 Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health, and Environmental Protection

The Contractor sustains and enhances the effectiveness of integrated safety, health and environmental protection through a strong and well deployed system.

The weight of this Goal is 30%.

The Sustain Excellence and Enhance Effectiveness of Integrated Safety, Health, and Environmental Protection Goal shall measure the Contractor's overall success in preventing worker injury and illness; implement ISM down through and across the organization; and provide effective and efficient waste management, minimization, and pollution prevention.

Each Objective within this Goal is to be assigned the appropriate numerical score by the evaluating office as described within Section I of this document. Each Objective has one or more measures, the outcomes of which collectively assist the evaluating office in determining the Contractor's overall performance in meeting that Objective. Each of the measures identifies significant tasks, activities, requirements, accomplishments, and/or milestones for which the outcomes/results of are important to the success of the corresponding Objective. Although other performance information available to the evaluating office from other sources may be used, the outcomes of measures identified for each Objective shall be the primary means of determining the Contractor's success in meeting an Objective. The overall Goal score is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 5.1 at the end of this section). The overall score earned is then compared to Table 5.2 to determine the overall Goal letter grade.

5.1 Provide a Work Environment that Protects Workers and the Environment

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

• The success in meeting ES&H goals.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 35%.

5.1a The Contractor's success in reducing serious illnesses and injuries as measured by the days away, restricted or transferred (DART) case rate.

Days Away, Restricted, or Transferred (DART) Case Rate – the number of cases of an injury or illness case where the most serious outcome of the case, as identified on the OSHA Form 300 columns H or I, resulted in days away from work or days of job restriction or transfer x 200,000 (100 employees working 40 hours per week for 50 weeks per year) / the actual number of hours worked. The SC DART Goal for 2007 = 0.25.

5.1a (1) Targets DART Case Rate for FY 2007.

<u>Target</u>	DART Case Rate
A	\leq 0.20
В	0.20 - 0.65 (B+ = 0.25)
C	0.66 - 1.05
D	> 1.06

5.1b The Contractor's success in reducing accidents, illnesses and injuries as measured by the total reportable case rate (TRCR)

Total Recordable Case Rate - The number of all occupational illnesses and occupational injuries resulting in loss of consciousness, restriction of work or motion, transfer to another job, or require medical treatment beyond first aid x 200,000 (100 employees working 40 hours per week for 50 weeks per year) / the actual number of hours worked. The SC TRCR target for 2007 = 0.87.

5.1b (1) Targets TRCR for FY 2007.

Target	<u>TRCR</u>	
A	≤ 0.60	
В	0.60 - 1.05	(B+=.87)
C	1.06 - 1.47	
D	> 1.47	

- 5.1c The number of reportable occurrences related to environmental compliance 5.1 c (1) No more than a single environmental compliance occurrence that meets the thresholds for ORPS reporting at a significance category level 1, 2, or 3 will be considered a B+.
- 5.1d Completion of corrective actions related to ES&H reviews and reportable events, as designated and agreed to by the Laboratory and Ames Site Office within the scheduled due date. All changes in scheduled due dates must be agreed to by Ames Site Office.
- 5.1d(1) Target

Target Levels Expectation

- A 0-1 corrective actions are not completed as scheduled.
- B 2-3 corrective actions are not completed as scheduled. (B+ =2 not completed as scheduled)
- C 4-5 corrective actions are not completed as scheduled.
- D more than 5 corrective actions are not completed as scheduled.
- 5.1e The strength of the Laboratory's Independent Walk-through Program, as measured by performance of walk-throughs of laboratory spaces by a team of safety specialists, with participation by Senior Management.
 - 5.1e (1) To meet expectations (B+), Senior Laboratory Management participates in ≥ 85% of Walkthroughs.
 - 5.1e (2) To meet expectations (B+), inspections of 100% of the Laboratory space is completed during FY 2007.

5.2 Provide Efficient and Effective Implementation of Integrated Safety, Health and Environment Management

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- The commitment of leadership to strong ES&H performance is appropriately demonstrated;
- The maintenance and appropriate utilization of hazard identification, prevention, and control processes/activities; and
- The degree to which scientists and workers are involved and engaged in the ES&H program at the bench level.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 35%.

- 5.2a Commitment to hazard awareness is demonstrated by employee completion of required ESH training.
 - 5.2a (1) To meet the target expectation (B+) 90% of mandatory ES&H training is completed on time.
 - 5.2a (2) To meet the target expectation (B+), upon completion of a new employee's Training Needs Questionnaire (TNQ) the resulting Employee Training Profiles will be provided to the employee and the employee's supervisor. Also, quarterly Training Summary Reports will be provided to supervisors indicating all mandatory training modules and completion statistics, including a list of employees with pending mandatory training. The purpose of the communication is to reinforce the supervisor's awareness to ensure that employees are compliant with mandatory training and specifically note the critical importance of training for student employees. New software will allow for improved tracking of training records for specific work groups, such as graduate students, undergraduate students by individual training module.
- 5.2b Completion rate of concerns identified during the Annual Independent Walk-through which are completed within scheduled time period.
 5.2b (1) To meet the target expectation (B+), 90% of the concerns identified during the annual independent walk-throughs are completed within the scheduled time period.
- 5.2c The strength of the Laboratory's program to improve safety systems as measured by the quality and number of Topical Appraisals of ES&H.
 5.2c (1) To meet the target expectation (B+), internal topical appraisals are completed annually to address issues identified and agreed to by the Laboratory and Ames Site Office.
- 5.2d Repeat findings are minimized by effective causal analysis and corrective action development and implementation.

- 5.2d (1) To meet the target expectation (B+) repeat findings do not account for more than 7% of all internal and external appraisal findings.
- 5.2e The strength of the Laboratory's processes to plan work safely as measured by completion and/or updating of readiness reviews.
 - 5.2e(1) To meet target (B+), 100% of readiness reviews are completed by the scheduled review date and in all cases prior to work beginning.
 - 5.2e (2) No work processes are observed that have not been properly reviewed..
- 5.2f The Laboratory implements effective systems of reporting ESH concerns and conducting causal analyses.
 - 5.2f (1) To meet target (B+) all ORPS and PAAA concerns and events are reported consistent with requirements and within the specified time periods.
- 5.2g The Laboratory will conduct quarterly forums with safety specialists from Iowa State University's Environment Health and Safety Department and student representatives to discuss safety program improvements and share lessons learned from DOE and The Contractor and other academic institutions.

5.3 Provide Efficient and Effective Waste Management, Minimization, and Pollution Prevention

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

• Efficiency and Effectiveness of efforts to minimize the generation of waste.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 30%.

- 5.3a Success in implementation of the Laboratory's Environmental Management System 5.3a (1) To meet the target (B+) the Laboratory fully implements the EMS. To achieve a higher level, the Laboratory conducts a benchmark study of EMS objectives and targets used at similar facilities.
- 5.3b Success in ongoing efforts to reduce hazardous waste 5.3b (1) All new activities will be specifically reviewed for waste minimization efforts. These reviews will be documented in the individual readiness reviews.

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Total Points	Total Points
5.0 Sustain Excellence and Enhance					
Effectiveness of Integrated					
Safety, Health, and					
Environmental Protection					
5.1 Provide a Work Environment that					
Protects Workers and the			35%		
Environment					
5.2 Provide Efficient and Effective					
Implementation of Integrated			35%		
Safety, Health and Environment			3370		
Management					
5.3 Provide Efficient and Effective					
Waste Management, Minimization,			30%		
and Pollution Prevention					
		Perforn	nance Goal 5	.0 Total	

Table 5.1 – 5.0 Goal Performance Rating Development

Total	4.3-	4.0-	3.7-	3.4-	3.0-	2.7-	2.4-	2.0-	1.7-	1.0-	0.7-0
Score	4.1	3.8	3.5	3.1	2.8	2.5	2.1	1.8	1.1	0.8	
Final Grade	A+	A	A-	B+	В	В-	C+	С	C-	D	F

Table 5.2 – 5.0 Goal Final Letter Grade

6.0 Deliver Efficient, Effective, and Responsive Business Systems and Resources that Enable the Successful Achievement of the Laboratory Mission(s)

The Contractor sustains and enhances core business systems that provide efficient and effective support to Laboratory programs and its mission(s).

The weight of this Goal is 20%.

The Provide Business Systems that Efficiently and Effectively Support the Overall Mission of the Laboratory Goal shall measure the Contractor's overall success in deploying, implementing, and improving integrated business system that efficiently and effectively support the mission(s) of the Laboratory.

Each Objective within this Goal is to be assigned the appropriate numerical score by the evaluating office as described within Section I of this document. Each Objective has one or more measures, the outcomes of which collectively assist the evaluating office in determining the Contractor's overall performance in meeting that Objective. Each of the measures identifies significant tasks, activities, requirements, accomplishments, and/or milestones for which the outcomes/results of are important to the success of the corresponding Objective. Although other performance information available to the evaluating office from other sources may be used, the outcomes of measures identified for each Objective shall be the primary means of determining the Contractor's success in meeting an Objective. The overall Goal score is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 6.1 at the end of this section). The overall score earned is then compared to Table 6.2 to determine the overall Goal letter grade.

6.1 Provide an Efficient, Effective, and Responsive Financial Management System(s)

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- Demonstration of efficient and effective financial management system(s) support;
- The effectiveness of the financial management system(s) as validated by internal and external audits and reviews:
- The continual improvement of financial management system(s) through the use of results of audits, review, and other information; and
- The degree of knowledge and appropriate utilization of established system processes/procedures by Contractor management and staff.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 30%.

6.1a Demonstrate an effective financial management system through external reviews, surveys and inspections and routine communication with AMSO and the CH.

- 6.1b Control uncosted balances as measured by the percentage of uncosted balances to total available cost (TAC). (Only uncosted balances that exceeded \$1 million at the four-digit B&R level will be included in this evaluation)
 6.1b (1) Acceptable range for Operating costs are less than or equal to 13% of TAC and acceptable range of Capital Equipment costs is less than or equal to 50% of TAC.
- 6.1c Contractor billings should conform to signed Work For Others agreements in that total billing should not exceed agreement amounts, funding expiration dates should be observed, and closeouts should be initiated promptly upon completion of work.
 6.1c (1) Zero billing errors on non-corporate/interoffice invoices

6.2 Provide an Efficient, Effective, and Responsive Acquisition and Property Management System(s)

In measuring the performance of this Objective the DOE evaluator shall consider the following:

- Demonstration of efficient and effective acquisition and property management system(s) support;
- The effectiveness of the acquisition and property management system(s) as validated by internal and external audits and reviews;
- The continual improvement of acquisition and property management system(s) through the use of results of audits, review, and other information; and
- The degree of knowledge and appropriate utilization of established system processes/procedures by management and staff.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 10%.

- 6.2a Demonstrate effective acquisition and property management systems through mechanisms such as external reviews, surveys, inspections and ongoing communication with the AMSO and the Chicago Office.
- 6.2b Perform Procurement Balanced Scorecard evaluation in accordance with the FY 2007 Balanced Scorecard Plan and successfully meet at least 11 of the BSC targets.
- 6.2c Perform Property Balanced Scorecard evaluation in accordance with the FY 2007 Balanced Scorecard Plan and successfully meet at least 90% of the BSC targets.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 10%.

6.3 Provide an Efficient, Effective, and Responsive Human Resources Management System

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- Demonstration of efficient and effective human resources management system support;
- The effectiveness of the human resources management system as validated by internal and external audits and reviews;
- The continual improvement of the human resources management system through the use of results of audits, review, and other information; and
- The degree of knowledge and appropriate utilization of established system processes/procedures by Contractor management and staff.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 10%.

- 6.3a Effectiveness of HR systems processes and services as validated through the use of a customer service survey.
 - 6.3a (1) Overall customer feedback is between 2 and 2.5 on a five point scale or action plans are implemented and measurable progress and actions have been taken.
- 6.3b Success in attraction and/or retention of highly qualified employees 6.3b (1) In-hire compensation package assures 85% acceptance rate
- 6.3c Demonstrate effective compensation management through alignment with competitive market.
 - 6.3c (1) Benchmark 85% of Ames Lab's scientific jobs against market to validate accuracy
 - 6.3c (2) Evaluate any difference between market rates and internal value to validate Lab's salary ranges for scientific jobs
- 6.3d Maintains a systematic approach to the recruiting and retention of new talent from diverse populations
- 6.3e Increase diversity in the workforce through participation of minorities and women in feeder programs (such as, two year training programs, four year colleges, and graduate level) and increase participation by technical staff in hosting minority and female students in their respective departments.

6.4 Provide Efficient, Effective, and Responsive Management Systems for Internal Audit and Oversight; Quality; Information Management; and Other Administrative Support Services as Appropriate

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- Demonstration of efficient and effective management systems support;
- The effectiveness of the management systems as validated by internal and external audits and reviews;

- The continual improvement of management systems through the use of results of audits, review, and other information; and
- The degree of knowledge and appropriate utilization of established system processes/procedures by Contractor management and staff.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 30%.

- 6.4a Demonstrate effective Internal Audit and Oversight; Quality; Information Management; and Other Administrative Support Services management systems through reviews, surveys and inspections
- 6.4b Completion of corrective actions from reviews surveys and inspections in accordance with approved Corrective Action Plans
- 6.4c Percentage of unlimited-distribution technical reports, which are issued during the fiscal year, and are available to DOE-OSTI in full-text electronic form within 15 business days of Ames Laboratory receipt.
- 6.4d The Laboratory provides effective tactical IT planning in support of the Laboratory's mission and goals
 - 6.4d(1) FY 2007 IM plans are in alignment with the Laboratory's Operations and Infrastructure Strategic Plan; IT related goals and strategies are in place by December 31, 2006.
 - 6.4d(2) FY 2008 IM plans are in alignment with the Laboratory's Operations and Infrastructure Strategic Plan; IT related goals and strategies are in place by September 30, 2007.
- 6.4e The Information Management Program provides cost effective products and improved services.
 - 6.4e(1) Information management accomplishments completed based on FY 2007 IM plans and demonstrate measurable improvement and cost effective IM services and products.
- 6.4f IM products and services meet customer requirements as demonstrated by customer feedback.
- 6.4g The Laboratory uses the results of the Peer Review Process to revitalize all communications and trust activities.
- 6.4h The Lab performs a thorough analysis of its productivity and allocation of resources to ensure they are aligned with those of the DOE-SC.
- 6.4i The Laboratory Public Affairs Office leads a lab-wide (and including IPRT) process to prepare a cross-cutting plan to coordinate and increase the external exposure of the lab.

6.5 Demonstrate Effective Transfer of Technology and Commercialization of Intellectual Assets

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- The proper stewardship of intellectual assets and Laboratory owned or originated technology;
- The market impacts created/generated as a result of technology transfer and deployment activities; and
- Communication products contributing to the transfer of Laboratory originated knowledge and technology.

The overall performance (outcomes/results) of the following set of key measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 20%.

- 6.5a Send Customer Surveys to all current WFO/CRADA customers within three months of each instruments end of performance period and/or immediately following performance completions (A customer survey example is provided in DOE G-481.1-1 entitled "Department of Energy Work For Others Guide"). List the total number of sponsors/customers available to send surveys? Identify total number of sponsors/customers that responded? What was your overall response rate? Please describe the overall results from customer surveys Identify opportunities for improvement and/or notable practices.
- 6.5b Describe Common Technical Transfer Mechanisms used during this period to promote collaborative technology relationships. For example, collegial exchanges- what workshops were attended by Laboratory personnel, conferences, etc., that promoted the Laboratory's Technology Transfer Program.
- 6.5c Provide the total number of proposal instruments submitted by the Laboratory's Technology Transfer Program Office during this period. Taking into account Ames size, how does this compare to other DOE Laboratories?
- 6.5d Please list the total number of active WFO agreements/CRADAs in relation to the Laboratory's core competency. Please explain what WFO agreement tie to which core competency.

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Total Points	Total Points
6.0 Deliver	•				
Responsive Business Systems and					
Resources that Enable the					
Successful Achievement of the					
Laboratory Mission(s)					
6.1 Provide an Efficient, Effective, and					
Responsive Financial Management			30%		
System(s)					
6.2 Provide an Efficient, Effective, and					
Responsive Acquisition and Property			10%		
Management System(s)					

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Total Points	Total Points				
6.3 Provide an Efficient, Effective, and Responsive Human Resources Management System			10%						
6.4 Provide Efficient, Effective, and Responsive Management Systems for Internal Audit and Oversight; Quality; Information Management; and Other Administrative Support Services as Appropriate			30%						
6.5 Demonstrate Effective Transfer of Technology and Commercialization of Intellectual Assets			20%						
	Performance Goal 6.0 Total								

Table 6.1 – 6.0 Goal Performance Rating Development

Total Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Final Grade	A+	A	A-	B+	В	B-	C+	С	C-	D	F

Table 6.2 – 6.0 Goal Final Letter Grade

7.0 Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs

The Contractor provides appropriate planning for, construction and management of Laboratory facilities and infrastructures required to efficiently and effectively carry out current and future S&T programs.

The weight of this Goal is 20%.

The Sustain Excellence in Operating, Maintaining, and Renewing the Facility and Infrastructure Portfolio to Meet Laboratory Needs Goal shall measure the overall effectiveness and performance of the Contractor in planning for, delivering, and operations of Laboratory facilities and equipment needed to ensure required capabilities are present to meet today's and tomorrow's complex challenges.

Each Objective within this Goal is to be assigned the appropriate numerical score by the evaluating office as described within Section I of this document. Each Objective has one or more measures, the outcomes of which collectively assist the evaluating office in determining the Contractor's overall performance in meeting that Objective. Each of the measures identifies significant tasks, activities, requirements, accomplishments, and/or milestones for which the outcomes/results of are important to the success of the corresponding Objective. Although other performance information available to the evaluating office from other sources may be used, the outcomes of measures identified for each Objective shall be the primary means of determining the Contractor's success in meeting an Objective. The overall Goal score is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 7.1 at the end of this section). The overall score earned is then compared to Table 7.2 to determine the overall Goal letter grade.

7.1 Manage Facilities and Infrastructure in an Efficient and Effective Manner that Optimizes Usage and Minimizes Life Cycle Costs

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- The management of real property assets to maintain effective operational safety, worker health, environmental protection and compliance, property preservation, and cost effectiveness while meeting program missions, through effective facility utilization, maintenance and budget execution;
- The day-to-day management and utilization of space in the active portfolio;
- The maintenance and renewal of building systems, structures and components associated with the Laboratory's facility and land assets; and
- The management of energy use and conservation practices.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 80%.

7.1a The Maintenance Investment Index (MII) for the fiscal year `associated with the performance period.

The MII, expressed as a percentage, is defined as the Actual OE funded Maintenance and Repair (M&R) Expenditures (at the end of the fiscal year associated with the performance period) divided by the Replacement Plant Value (RPV).

7.1a (1) MII Target for FY 2007; B+ level = 1.8:

7.1b The Facility Condition Index (FCI)

The FCI, expressed as a percentage, is defined as the Total Needed OE funded Maintenance and Repair (M&R) Deficiencies (at the end of the fiscal year associated with the performance period) divided by the Replacement Plant Value (RPV).

$$FCI = \frac{Total\ Needed\ M\ \&\ R\ Deficiencies\ (\$)}{RPV\ (\$)}$$

- 7.1b (1) FCI Target for FY 2007; B+ level = 1.9 2.5
- 7.1c Successful implementation of facility improvements that achieve cost savings in the form of material or contract dollars that will not need to be spent for facility maintenance.
- 7.1d Effective execution of the goals within the Energy Performance Management Agreement
 - 7.1d (1) Target expectation B+=75% of the Energy requirements scheduled to be accomplished during the Fiscal Year in accordance with the Comprehensive Energy Management Plan (CEMP) are completed.

<u>Target</u>	CEMP % Requirements Completed
A	78 %
B+	75 %
C+	72 %
D	69 %

7.1d (2) Target expectation B+= Energy use per gross square foot is less than the previous year as negotiated between the DOE and the lab.

<u>Targets</u>	Energy Use Rating Scale
A	> 0.04
B+	0.039 - 0.030
C+	0.029 - 0.020
D	0.019 - 0.010

7.1.d.(3) Demonstrate commitment to purchases of energy efficient products, including products with low standby power devices. [Note: A list of device types and

specific products within the type having recommended low standby levels can be found at http://oahu.lbl.gov/.]

<u>Target</u>	Energy Efficient products
A	> 10
$\mathrm{B}+$	7 - 9
C	4 - 8
D	1 - 3

- 7.1.d.(4) Establish a plan that will enable the metering of electricity for all Ames Laboratory buildings by 2012. The plan should identify the meters to be installed according to the guidelines of the DOE Metering Plan. The target to achieve the B+ level is to meter at least one additional Laboratory building during FY2007.
- 7.1.d (5) New buildings are designed (conceptual design, Title 1, and Title 2) to use 30 percent less energy than the ASHRAE 90.1 2004 standard. To achieve the B+ level, at least 50% of new buildings designed during FY2007 are designed to use 30 percent less energy than the ASHRAE 90.1 2004 standard.

7.2 Provide Planning for and Acquire the Facilities and Infrastructure Required to support Future Laboratory Programs

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- Integration and alignment of the Ten Year Site Plan to the Laboratory's comprehensive strategic plan;
- The facility planning, forecasting, and acquisition for effective translation of business needs into comprehensive and integrated facility site plans;
- The effectiveness in producing quality site and facility planning documents as required;
- The involvement of relevant stakeholders in all appropriate aspects of facility planning and preparation of required documentation;
- Overall responsiveness to customer mission needs; and
- Efficiency in meeting Cost and Schedule Performance Index for construction projects (when appropriate).

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 20%.

- 7.2a Facility planning, forecasting, and acquisition activities translate needs and facility condition information into useful strategic plans
- 7.2b The Ten Year Site Plan and the IFI Budget are submitted according to the required schedule and demonstrate effective and realistic facility planning
- 7.2c The management information systems development projects are executed in accordance with generally acceptable project management practices.

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Total Points	Total Points				
7.0 Sustain Excellence in Operating, Maintaining, and Renewing the									
Facility and Infrastructure									
Portfolio to Meet Laboratory									
Needs									
7.1 Manage Facilities and									
Infrastructure in an Efficient and									
Effective Manner that Optimizes			80%						
Usage and Minimizes Life Cycle									
Costs									
7.2 Provide Planning for and Acquire									
the Facilities and Infrastructure			20%						
Required to support Future			20/0						
Laboratory Programs									
	Performance Goal 7.0 Total								

Table 7.1 – 7.0 Goal Performance Rating Development

Total	4.3-	4.0-	3.7-	3.4-	3.0-	2.7-	2.4-	2.0-	1.7-	1.0-	0.7-0
Score	4.1	3.8	3.5	3.1	2.8	2.5	2.1	1.8	1.1	0.8	
Final Grade	A+	A	A-	B+	В	B-	C+	С	C-	D	F

Table 7.2 – 7.0 Goal Final Letter Grade

8.0 Sustain and Enhance the Effectiveness of Integrated Safeguards and Security Management (ISSM) and Emergency Management Systems

The Contractor sustains and enhances the effectiveness of integrated safeguards and security and emergency management through a strong and well deployed system.

The weight of this Goal is 10%.

The Sustain and Enhance the Effectiveness of Integrated Safeguards and Security Management (ISSM) and Emergency Management Systems Goal shall measure the Contractor's overall success in safeguarding and securing Laboratory assets that supports the mission(s) of the Laboratory in an efficient and effective manner and provides an effective emergency management program.

Each Objective within this Goal is to be assigned the appropriate numerical score by the evaluating office as described within Section I of this document. Each Objective has one or more measures, the outcomes of which collectively assist the evaluating office in determining the Contractor's overall performance in meeting that Objective. Each of the measures identifies significant tasks, activities, requirements, accomplishments, and/or milestones for which the outcomes/results of are important to the success of the corresponding Objective. Although other performance information available to the evaluating office from other sources may be used, the outcomes of measures identified for each Objective shall be the primary means of determining the Contractor's success in meeting an Objective. The overall Goal score is computed by multiplying numerical scores earned by the weight of each Objective, and summing them (see Table 8.1 at the end of this section). The overall score earned is then compared to Table 8.2 to determine the overall Goal letter grade.

8.1 Provide an Efficient and Effective Emergency Management System

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- The Contractor's success in meeting Emergency Management goals and expectations;
- The commitment of leadership to a strong Emergency Management performance is appropriately demonstrated; and
- The maintenance and appropriate utilization of Emergency Management procedures and processes are effectively demonstrated.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 35%.

- 8.1a Emergency Management events are mitigated and reporting is done according to requirements
- 8.1b Results of reviews, surveys, and inspections demonstrate that Emergency Management systems are effective

- 8.1c Employee and Management are trained in their Emergency Management responsibilities
- 8.1d 90% of the corrective actions associated with Emergency Management reviews are completed in accordance with scheduled due dates.

8.2 Provide an Efficient and Effective System for Cyber-Security

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- The Contractor's success in meeting Cyber-Security goals and expectations;
- The commitment of leadership to a strong Cyber-Security performance is appropriately demonstrated:
- Integration of Cyber-Security into the culture of the organization for effective deployment of the system is demonstrated; and
- The maintenance and appropriate utilization of Cyber-Security risk identification, prevention, and control processes/activities.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 50%.

The status of the Cyber Security Program is reported in accordance with FISMA and NIST Guidance and Cyber-Security Events are reported and mitigated as necessary.

8.2a(1) Target Levels

- [A] In addition to below, incident reporting includes analysis of causal factors, impact to network security, and evaluation of corrective actions to prevent re-occurrence.
- [B+] In addition to below, Plan of Action and Milestones (POAMs) reporting is accompanied by a security status update for each cyber enclave. Incident reporting includes all classes of incidents from DOE Manual 205.1-1.
- [C+] In addition to below, POAMs reporting addresses all issues from external reviews and the program self assessment. All incident reporting to CIAC is compliant with CIAC issued procedures.
- [D] POAMs are reported on a quarterly basis and system re-certification and re-accreditation is accomplished in required timeframes. System root compromises are reported to CIAC. In the event there are no incidents, a negative report is submitted.
- 8.2b Establish and maintain a program of system and network configuration management for each defined system enclave.

8.2b(1) Target Levels

[A] - In addition to below, systems for automated patch management have been implemented for prevalent system environments.

- [B+] In addition to below, configuration guidelines are reviewed quarterly and updated as needed to address security advisories.
- [C+] In addition to below, specific configuration guidelines address prevalent system environments.
- [D] General Configuration guidelines are adopted and distributed to system administrators.
- 8.2c Conduct a robust program of vulnerability scanning to include but not be limited to: 1) semi-annual network vulnerability scans on network systems that provide communications services visible to the public Internet community and 2) network vulnerability scans on the Ames Laboratory internal network systems so that all systems are scanned each year
- 8.2d Demonstrate promptness in correcting identified vulnerabilities and addressing corrective actions associated with reviews according to schedule. Ensure that the identified high-risk vulnerabilities on high risk systems, as defined by the Ames Laboratory Risk Management Plan, are addressed through corrective action or document the reasons for accepting the risk. Justified exceptions are to be approved by the Ames Site Office. High risk vulnerabilities on high risk systems will be addressed within 30 business days of discovery and moderate vulnerabilities on high risk systems within 80 business days.

Ensure that high and moderate vulnerabilities on identified critical and/or sensitive systems are addressed within 30 business days of discovery. Document the reasons for accepting the risk and identify the corrective measures taken that reduce the risk these systems have on the internal and external networks.

8.2d(1) Target Levels

Target Level	% Vulnerabilities addressed within Schedule
[A]	95%
[B+]	90%
[C+]	85%
[D]	<80%

8.2e Employee and Management awareness of their Cyber-Security responsibilities. 8.2e(1)

Target Level	% Training Completed within Schedule
[A]	97%
[B+]	90%
[C+]	85%
[D]	<80%

8.3 Provide an Efficient and Effective System for the Protection of Special Nuclear Materials, Classified Matter, and Property

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- The Contractor's success in meeting Safeguard goals and expectations:
- The commitment of leadership to strong Safeguards performance is appropriately demonstrated;
- Integration of Safeguards into the culture of the organization for effective deployment of the system is demonstrated; and
- The maintenance and appropriate utilization of Safeguards risk identification, prevention, and control processes/activities.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks, activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 10%.

- 8.3a Incidents of Safeguards and Security concerns are detected, reported, investigated and resolved promptly.
- 8.3b Demonstrate an effective Integrated Safeguards and Security Management System through a thorough annual self-assessment and by positive results from any external reviews surveys and inspections
- 8.3c Corrective actions or compensatory measures for deficiencies are promptly implemented and monitored until resolution
- 8.3d Employee and Management awareness of their Safeguards responsibilities
- 8.3e Vulnerability Assessments accurately address current Laboratory operations.

8.4 Provide an Efficient and Effective System for the Protection of Classified and Sensitive Information

In measuring the performance of this Objective the DOE evaluator(s) shall consider the following:

- The Contractor's success in meeting protection of classified and sensitive information goals and expectations;
- The commitment of leadership to strong protection of classified and sensitive information performance is appropriately demonstrated;
- Integration of protection of classified and sensitive information into the culture of the organization for effective deployment of the system is demonstrated; and
- The maintenance and appropriate utilization of protection of classified and sensitive information risk identification, prevention, and control processes/activities.

The overall performance (outcomes/results) of the following set of measures (tasks, activities, requirements, accomplishments, and/or milestones) shall be utilized by evaluators as the primary measure of the Contractor's success in meeting this Objective and for determining the numerical score awarded. The evaluation of this Objective may also consider other tasks,

activities, requirements, accomplishments, and/or milestones not otherwise identified below but that provide evidence to the effectiveness/performance of the Contractor in meeting this Objective. The weight of this Objective is 5%.

- 8.4a The sensitive subjects list is maintained current.
- 8.4b Reporting requirements related to counterintelligence, including trip reports are met on time.
- 8.4c Laboratory reports are made promptly to the CH CI Office or the local FBI of any contacts or elicitation attempts with people of any nationality who seek sensitive unclassified information (e.g., proprietary or CRADA information) without proper authorization by any means. This includes any compromising situation or other inconsistencies associated with foreign travel or a visit or assignment.
- 8.4d Counterintelligence awareness training materials are provided effectively to staff

ELEMENT	Letter Grade	Numerical Score	Objective Weight	Total Points	Total Points			
8.0 Sustain and Enhance the								
Effectiveness of Integrated								
Safeguards and Security								
Management (ISSM)								
8.1 Provide an Efficient and Effective			35%					
Emergency Management System			33/0					
8.2 Provide an Efficient and Effective			50%					
System for Cyber-Security			30%					
8.3 Provide an Efficient and Effective								
System for the Protection of			10%					
Special Nuclear Materials,								
Classified Matter, and Property								
8.4 Provide an Efficient and Effective								
CI System for the Protection of			5%					
Classified and Sensitive			370					
Information								
Performance Goal 8.0 Total								

Table 8.1 – 8.0 Goal Performance Rating Development

Total	4.3-	4.0-	3.7-	3.4-	3.0-	2.7-	2.4-	2.0-	1.7-	1.0-	0.7-0
Score	4.1	3.8	3.5	3.1	2.8	2.5	2.1	1.8	1.1	0.8	
Final Grade	A+	A	A-	B+	В	B-	C+	С	C-	D	F

Table 8.2 – 8.0 Goal Final Letter Grade

ATTACHMENT I. OFFICE OF SCIENCE PROGRAM OFFICE GOAL & OBJECTIVE WEIGHTINGS

Science Program Office	Letter Grade	Numerical Score	Weight	Weighted Score	Overall Score
Office of Basic Energy Sciences	32444	50010		20010	50010
1.1 Impact			50%		
1.2 Leadership			20%		
1.3 Output			15%		
1.4 Delivery			15%		
			Overa	ll BES Total	
Office of Advanced Scientific Computing Research					
1.1 Impact			40%		
1.2 Leadership			30%		
1.3 Output			15%		
1.4 Delivery			15%		
			Overall	ASCR Total	
Office of Biological and Environmental Research					
1.1 Impact			30%		
1.2 Leadership			20%		
1.3 Output			20%		
1.4 Delivery			30%		
			Overal	l BER Total	
Office of Workforce Development for					
Teachers and Scientists					
1.1 Impact			25%		
1.2 Leadership			30%		
1.3 Output			30%		
1.4 Delivery			15%		

Science Program Office	Letter Grade	Numerical Score	Funding Weight (BA)	Weighted Score	Overall Weighted Score
Office of Basic Energy Sciences			TBD%		
Office of Advanced Scientific Computing Research			TBD%		
Office of Biological and Environmental Research			TBD%		
Office of Workforce Development for Teachers and Scientists			TBD%		
		Per	formance G	oal 1.0 Total	
Overall WDTS Total					

ATTACHMENT II. EVALUATION SCHEDULE

01/01/2007	Effective Start Date for 2007 PEMP.
05/15/2007	The Contractor reports to DOE on mid-year status. **(Note: Mid-year Self-Assessment will be conducted on Sections 4-8 of the PEMP)
09/30/2007	The evaluation period ends.
10/25/2007	The Contractor submits to DOE its Self-Assessment based on the PEMP.
01/05/2008	DOE develops a draft report and transmits it to the Contractor.
01/12/2008	The Contractor submits comments on the draft report to DOE.
02/15/2008	DOE transmits the final report to the Contractor.

Contract No.: DE-AC02-07CH11358

Section J Appendix C

ATTACHMENT J.3

APPENDIX C

SPECIAL FINANCIAL INSTITUTION ACCOUNT AGREEMENT

The current Special Financial Institution Account Agreement is attached only as an example.

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

AMENDMENT TO SPECIAL FINANCIAL INSTITUTION ACCOUNT AGREEMENT FOR USE WITH THE PAYMENTS CLEARED FINANCING ARRANGEMENT

BANKERS TRUST COMPANY, N.A. (hereinafter referred to as the "Financial Institution"), and IOWA STATE UNIVERSITY of Science and Technology (hereinafter referred to as the "Contractor") and the UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as "DOE"), agree to amend the above-referenced Agreement (hereinafter referred to as "Agreement") dated June 9, 1997 and the extension agreements (hereinafter referred to as the "Extension Agreement") dated August 1, 2000 and May 15, 2002 for the special demand deposit account designated "Iowa State University, United States Department of Energy Contract No. W-7405-ENG-82, Special Bank Account".

- 1. TERM OF AGREEMENT The Amendment dated May 15, 2002 extended the term of the Agreement by three (3) years to June 30, 2005. By this amendment, all three parties agree to extend the term by an additional three (3) years. The expiration date is changed to June 30, 2008, contingent upon renewal of Contract No. W-7405-ENG-82 between the Contractor and DOE. Both parties also agree that this Agreement may be automatically extended for an additional three-year term should Contract No. W-7405-ENG-82 between the Contractor and DOE be extended.
 - A. All parties are willing to continue the Agreement.
 - B. Any proposed price changes are acceptable to the Contractor and to DOE.
 - C. The Financial Institution's proposed prices compare favorably to a market comparison performed by the Contractor.
 - D. The contract between Iowa State University and DOE has been extended beyond December 31, 2006.

2. PRICES

- A. The price increase of the first year, effective July 1, 2005, shall be based on Attachment A; subsequent years shall be based on the Consumer Price Index (CPI) on July 1, 2006, and July 1, 2007.
- B. Calculation of the CPI The CPI increase for the additional three year Agreement period, for years 2008, 2009 and 2010, would not exceed the prior one-year CPI increase.
- C. All parties agree that the proposed increases will be capped at a maximum of 3.4%

3. OTHER TERMS AND CONDITIONS

All other terms and conditions of the original Agreement and Extension Agreement remain in full force and effect.

IN WITNESS WHEREOF, the parties have hereunto set their hands and caused this Amendment to be executed in triplicate with each of the copies to be considered an original dated ______, 200_____. IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY Ames, Iowa 50011 Warren R. Madden Vice President for Business & Finance UNITED STATES DEPARTMENT OF **ENERGY CONTRACT NO. W-7405-ENG-82** AMES_LABORATORY 6/28/2005 Date (Signature of DOE's representative) Thomas Harrison Contracting Officer (Typed name & title) BANKERS TRUST COMPANY, N.A. Vice President and Manager **Business Services**

Section J Appendix D

ATTACHMENT J.4

APPENDIX D

BUDGET PROGRAM

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

Section J Appendix D

BUDGET PROGRAM

This Appendix implements the clause of this contract entitled, "Long Range Planning, Program Development and Budgetary Administration." The parties agree that the following procedures will be used on a Government fiscal year basis to establish the Laboratory's work program and budgets.

- During January February of each year (or such other date as may be established by DOE), DOE will supply the Contractor with the dollar amounts for the Laboratory contained in the President's budget as well as a set of program assumptions for the budget and accounting policies and procedures to be used in the current budget preparation.
- 2. Prior to April 1 of each year (or such other date as may be agreed upon), the Contractor will submit to DOE a detailed work program and budget estimate for the next two succeeding fiscal years based on the level of the current year financial plan and the President's Budget, or other program guidance provided by DOE. The Contractor will provide construction project data sheets to DOE for each construction project proposed for the budget year as necessary for changes in cost estimate, funding, or scope. Prior to submission of the data sheets, DOE will be given an opportunity to review draft construction project data sheets and present the results of that review to the Contractor for consideration in the final data sheets.
- As soon as possible after October 1 of each year, DOE shall issue to the Laboratory financial plans for the current fiscal year for operations and plant and capital equipment.
- 4. DOE approval of the work program and budget estimates will be reflected in approved funding programs, prime contract supplements and program letters/authorization, issued to the Contractor as soon as possible after October 1. The approved funding programs specify the funds available for work under the contract for the fiscal year and, in addition, establish obligations and cost limitations for specified individual portions of the work.
- 5. An initial modification to this contract will be executed by the Parties on or before November 1 of each fiscal year to provide all or portion of the funding for the current fiscal year, provided that appropriations have been made to DOE at this time, and if not then as soon as possible thereafter. Subsequent modifications will be written throughout the fiscal year to increase or decrease the available funding.
- 6. In order to provide added assurance of continuity of operations, it is the intent of DOE that the funds obligated under this contract be maintained at all times at an adequate level. Which shall be defined as funds at least sufficient to provide for an estimated 20 days operating costs and outstanding commitments for each

Section J Appendix D

obligational control level as stated in the DOE Control and Reporting Levels. The Contractor will inform DOE when circumstances for DOE actions or proposed actions threaten to reduce any operational control levels below the level indicated in the previous sentence.

- 7. During the course of the work, DOE will review the work program and its costs based upon information submitted by the Contractor, and may, after consultation with the Contractor, revise the program letters and financial plans established by DOE under paragraph 4 of this Appendix.
- 8. It is recognized in the maintenance and operation of the Laboratory facilities, the Contractor is obliged to meet various standards and that DOE will make every effort to assure that adequate funds are provided under the contract to enable the Contractor to meet such requirements.

Section J Appendix E

ATTACHMENT J.5

APPENDIX E

AMES LABORATORY DEPARTMENT OF ENERGY (LESSEE) INGRANTS

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

Section J Appendix F

ATTACHMENT J.6

APPENDIX F

CONTRACTOR'S COMMITMENTS

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

8(b) List of Resources and Commitments with Authorized Signature

L.8; M.1(f)(1); M.8

The Iowa State University of Science and Technology, when selected as the successful bidder, willingly pledges to provide the following resources and/or commitments to the Department of Energy in support of AMES.

Commitment #1: Director's Discretionary Fund

Commitment #2: Network Spares

Commitment #3: Software Interface Support

Commitment #4: Install New Network Connection

Commitment #5: Access to BOREAS-Net Regional Optical Network

Commitment #6: ES&H Training

Commitment #7: Continuation of Existing Services

Warren Madden

Vice President Business and Finance

Iowa State University of Science and Technology

August 25, 2006

Commitment 1: Director's Discretionary Fund

Description of resource and/or commitment

ISU, as a scientific research institution, operates AMES for the Department of Energy primarily in support of the programs of the Office of Science. Our goals are the advancement of science, the cost-effective management of science, the training of the next generation of scientists, and the transfer of our technology to the private sector. Making profit to pass on to shareholders is not one of our goals or performance measures. As a result, ISU commits to return 50 percent of our performance fee to the Laboratory Director's Discretionary Fund as soon as the Risk Management Fund has been established and funded to an acceptable level.

Location of the resource

AMES.

Estimated total value

\$485K over five years (\$25K in Years 1 and 2; \$100K in Year 3; 50 percent of performance fee in Years 4 and 5).

Benefits to AMES

The Director will be able to provide seed funding for new research that has not yet matured sufficiently to have a DOE sponsor; fund additional educational programs from K–12 to post-graduate fellowships to encourage aspirations and career paths as scientists and engineers; provide for the welfare and morale of ISU/AMES employees by establishing awards for exceptional performance; provide funding for technology transfer activities; and support other activities that further the goals and objectives of ISU/AMES.

Date resource provided

Contributions will be made upon receipt of each performance fee payment subject to the terms of the fee proposal.

Liability related to resource

Assumes no major litigation.

How resource will be managed and integrated into AMES

The Director will have the responsibility to manage the fund. He will consult with his senior staff and the ISU Vice Provost on the application of the funds, but, ultimately, he will have sole responsibility for the disbursement. The fund will be used primarily for seed money for new research, additional equipment not funded by DOE, facilities improvements not funded by DOE, technology transfer activities, and staff morale activities.

Proposals for seed money for new research not yet sponsored by DOE will be submitted by each researcher to the Division Director for Science and Technology. He will review the proposals and recommend approvals for funding to the Director.

Proposals for new equipment and facilities improvements targeted for scientific research will be handled the same as seed money. Requests for facilities improvements will also be reviewed by the Chief Operations Officer.

Proposals for technology transfer activities will be submitted by each researcher/inventor to the Associate Director—Sponsored Research Administration.

The Laboratory Director will use funds from his Discretionary Fund for morale issues whenever he determines a need. Public Affairs and Human Resources will advise the Director in these matters.

Commitment 2: Network Spares

Description of resource and/or commitment

ISU network infrastructure is based upon Cisco equipment. ISU/AMES is in the process of upgrading its network with new Cisco switches. For switches that are common to both entities, ISU commits to allow AMES access to network spares at no charge to the government.

Location of the resource ISU.

Estimated total value

\$47,100 cost avoidance on equipment plus \$17,000/year savings on maintenance. Based on empirical evaluation, there are 14 different parts identified on the AMES spares list. Of those 14 parts, nine are available as spares from ISU with a replacement value of \$47,100.

Benefits to AMES

By making network spares available to AMES, ISU will allow the Laboratory to benefit in several ways.

- (1) AMES will recover from network equipment failure faster, will reduce downtime, and will minimize the disruption of work.
- 2) Using ISU spares for central components of the network will allow AMES to purchase next-day maintenance on those components (\$24K) rather than a more expensive sameday maintenance agreement (\$41K).
- (3) This commitment integrates the relationship between ISU and AMES while further leveraging the knowledge and skills available in the two Information Systems departments.

Date resource provided

Immediately, as needed.

Liability related to the resource

Assumes the same spare is not needed by both entities at the same time.

How the resource will be managed and integrated into AMES

ISU and AMES network staffs will maintain a list of common spare parts and contact persons for distribution of parts as needed. Inventory will be maintained by ISU and loaned to AMES on demand.

AMES Information Systems Department will submit a request for parts to ISU Information Technology Services Department. AMES will have the responsibility for picking up the part from the storage facility and transporting it to the Laboratory. Installation will be performed by AMES Information Systems staff. Once the faulty parts are replaced by the vendor, the spare will be returned to ISU in the same state as received. ISU and AMES will communicate with each other in regards to future upgrades and type of equipment in order to expand the benefits of this commitment. This commitment applies to equipment that is common to both networks.

Commitment 3: Software Interface Support

Description of resource and/or commitment

AMES is currently installing new financial software as a continuous improvement effort in the Operations and Business Management area. Due to the unique relationship between ISU and AMES, ISU performs many financial functions for AMES such as payroll and treasury services. As a result there are interface points required between the new AMES software and the existing ISU systems. Some of these interfaces will need to be modified and others will need to be developed for the first time. ISU will provide at no cost to the government the software expertise to establish these connections and maintain them in good working order.

Location of the resource

ISU campus/AMES Laboratory.

Estimated total value

Total value is approximately \$1,000 to \$29,000. Each interface (depending on the complexity) runs \$1,000 to \$5,000 each. AMES currently has four interface programs (approximately \$1,000 each) that need immediate conversion. Additionally, there are five other interfaces that may cost as much as \$5,000 each. The need for each interface will be individually evaluated.

Benefits to AMES

The new financial systems at AMES will interface with the ISU systems resulting in the reduction of redundant data entry. Certain business functions such as Human Resources, payroll, and check writing are performed by ISU. Software interface support will allow AMES to collect data and prepare vouchers within its business system and transmit the electronic files to ISU for processing. Similarly, the interface will be used to transmit various financial reports and human resources data back to AMES electronically avoiding duplicate data entry. These interfaces will reduce the potential for data entry error and improve the efficiency of both business systems.

Date resource provided

Support will start immediately and continue over the next three to four years as needs are identified and as resources become available.

Liability related to resource

Sufficient skill level and support from ISU to develop system interfaces.

How resource will be managed and integrated into AMES

AMES will use the new financial system on a daily basis for budgeting, financial record keeping, cost accounting, and other financial functions crucial to the day-to-day operations of AMES. The system will be managed by AMES through the Division Director for Technical and Administrative Services. The AMES Information Systems Department will be responsible for obtaining software interface support from the ISU Information Technology Services Department once a request for assistance has been received from the AMES Accounting, Budgeting, or other relevant departments. Official points of contact will be identified both at ISU and at AMES. These individuals will specifically define the tasks, manage request processing, identify needed resources, provide quality assurance, and verify successful performance of the task.

Immediate focus will be placed on existing interfaces that need to be rewritten for the new business system. Once existing interfaces are converted, the focal point will shift to developing new interfaces that will enhance the business processes. The new processes will be prioritized to focus on those processes that will provide the greatest performance improvement.

Commitment 4: Install New Network Connections

Description of resource and/or commitment

ISU intends to rewire the network connections in Zaffarano Hall, a research laboratory building located on campus near AMES. As an adjunct to this upgrade, ISU will remove the AMES obsolete network equipment and connect to the new equipment located in Zaffarano Hall. ISU charges all departments for network connections on a per-port basis.

Location of the resource

Zaffarano Hall on the ISU campus.

Estimated total value

Equipment installation of approximately \$65,000.

Benefits to AMES

In the past, AMES found it necessary to equip Zaffarano Hall with its own network equipment to enable researchers to have secure access to the AMES network. New network infrastructure equipment has made that need obsolete. With the advent of Virtual Private Networks (VPN), researchers located in other buildings, including Zaffarano Hall, may securely connect to the AMES network without the need of a direct connection. By using ISU resources to upgrade the Zaffarano Hall network equipment, AMES avoids the initial capital investment of approximately \$65,000 and still has available state-of-the-art network gear. This installation will allow AMES to focus on upgrading the remainder of the Laboratory network and will reduce the initial investment of DOE in the network upgrade.

Date resource provided

Calendar year 2007.

Liability related to resource

ISU must keep the network connections in good working order.

How resource will be managed and integrated into AMES

Network services will be operated by the ISU Information Technology Services from the port forward the responsibility for maintenance would rest with the AMES Information Systems Department. Official points of contact will be identified in case issues arise; policies and procedures will be developed for handing routine maintenance functions as well as emergencies. Performance objectives will be identified for network operation. Backup plans will also be developed in case of network failure.

ISU Information Technology Services staff will work with residents of Zaffarano Hall to identify the number of ports needed in each room. Ports will be assigned to either an ISU charge code or an AMES charge code based on the work performed. ISU Information Technology Services staff will then proceed to install new network equipment and remove the outdated equipment. AMES will keep the old equipment as spares for its existing network infrastructure. Staff housed in Zaffarano Hall will be connected to the AMES network via a Virtual Local Area Network (VLAN) configuration.

Commitment 5: Access to the BOREAS-Net Regional Optical Network

Description of resource and/or commitment

ISU is a member of a consortium of universities building BOREAS-Net (Broadband Optical Research, Education, and Science Network), a regional optical network that will connect the upper-Midwest to major internet hubs in Chicago and Kansas City. BOREAS-Net will provide its members with lambda-level transport, 10 gigabits per second per lambda, with an initial total capability of 40 lambdas. It is anticipated that BOREAS-Net will facilitate access to the two major national research networks, Internet 2 and the National Lambda Rail. The objective for developing BOREAS-Net was to provide dedicated high-bandwidth connections between researchers at the consortium universities and collaborators at national laboratories and other locations.

ISU has committed more than \$2.2M in capital costs toward establishing the BOREAS-Net infrastructure, and ISU is prepared to allow AMES to have access to this infrastructure. ISU will charge a pay-for-use fee to all users, including AMES.

Location of the resource

ISU campus.

Estimated total value

Value to AMES and DOE is the avoidance of \$2.2M investment that would be required to create/update a research fiber optical network. The AMES cost for BOREAS-Net access will be similar to other utilities provided by ISU; that is ISU maintains the service infrastructure and AMES pays on a per-use basis. The pay-per-use fee has not been established at this time. Overall value to AMES will depend on the use by Laboratory investigators.

Benefits to AMES

The most unique and important characteristic is BOREAS-Net's flexible infrastructure that can support multiple advanced research networks, and therefore permit multiple research groups/projects to experiment with or adopt leading-edge technologies and services.

Access to BOREAS-Net enables a variety of partnerships and strategic relationship models involving a wide mix of research groups, universities, corporations, non-profit organizations, non-governmental research organizations, and government research entities. ISU/AMES researchers will have the opportunity to use these state-of-the-art tools as needed without having had to pay for the capital cost of system acquisition and installation. Usage fees will be used for system maintenance and occasional upgrades.

Date resource provided

Third quarter of FY2007.

Liability related to resource

None.

How resource will be managed and integrated into AMES

AMES will be tied into BOREAS-Net through a network connection. ISU will be responsible for the upkeep and maintenance of the system and the capital equipment. AMES will be responsible for the interface equipment between its network and the ISU access point.

Commitment 6: ES&H Training

Description of resource and/or commitment

ISU has just completed the construction of a state-of-the-art facility on campus for the handling of hazardous materials and the training of hazardous waste management staff. The facility is to be used by ISU campus employees and can be provided at no cost to the government for training ISU/AMES staff in specialized ES&H areas such as the handling and usage of biological materials and the development of other safety training programs.

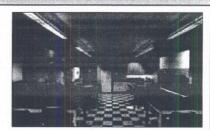


Figure 8.1 On ISU campus, ES&H facility is available for hazardous materials training programs.

Location of the resource

ISU campus.

Estimated total value

\$5,000-10,000/year depending on the number of trainings conducted.

Benefits to AMES

As AMES moves into the development of bio-inspired materials, it is critical that personnel have the skills necessary to (1) readily identify and mitigate associated hazards, (2) understand applicable regulatory requirements, and (3) use acceptable protocols for the handling, storage, and transportation of materials. These skills require training outside of the current expertise of ISU/AMES safety specialists. ISU, due to its extensive research activities with biological materials, has assurance and safety specialists with skills well suited for bio-inspired materials research. ISU also has specially equipped facilities that can be used for hands-on training of ISU/AMES employees.

Date resource provided

January 1, 2007.

Liability related to resource

Training schedule availability.

How resource will be managed and integrated into AMES

The AMES ES&H Manager will be responsible for scheduling training courses for ISU/AMES employees. He will periodically review training requirements for staff with particular emphasis on new areas of research and their ES&H implications. Both the AMES ESH&A Manager and the ISU Director of EH&S will collaborate to develop or acquire training courses addressing the specific requirements. The AMES ES&H Manager will be responsible for notifying the Laboratory staff of any new training requirements and advertising the training opportunities. Individual staff members are responsible for registering for training and maintaining their training records. These records are periodically reviewed by AMES ES&H specialists for quality assurance and compliance with DOE Directives.

Commitment 7: Continuation of Existing Services

Description of resource and/or commitment

ISU will continue its practice of allowing selected faculty to enter into joint appointment roles with AMES. Additionally, ISU will continue providing seamless services to AMES at no cost to the government. These services include: (1) roads and grounds maintenance, (2) check writing services, (3) campus mail delivery, (4) employee tuition reimbursement program, (5) employee in-service learning programs, and (6) access to the ISU library. In these cases, it is both difficult and cost prohibitive to separate AMES services from those services performed for the rest of the ISU campus. This is a result of the unique, long-term relationship between ISU and AMES; therefore, it is conditional upon ISU being the selected Offeror.

Of special note is the ISU policy of providing a 50 percent tuition scholarship from central funds to all graduate assistants. This practice has been extended to also cover the graduate assistants at AMES. AMES employs graduate assistants (171 in FY2006) who provide critical support to the research programs.

Location of the resource

AMES Laboratory.

Estimated total value

Over \$500,000/year, including \$360,000 in tuition scholarships for research assistants.

Benefits to AMES

AMES does not have to hire full-time research and support staff or hire subcontractors to perform services supplied at no cost by ISU. Providing the graduate tuition scholarship allows ISU to recruit the highest caliber graduate assistants in the academic disciplines related to AMES. This provides AMES with a source of highly sought after graduate students to help with research as they are being trained to become the next generation of scientists.

Date resource provided

January 1, 2007.

Liability related to the resource

None.

How the resource will be managed and integrated into AMES

Agreement will be reached between ISU and AMES on the extent of the furnished services. ISU will perform services meeting the performance standards and schedules delineated in the agreement. The AMES Division Director for Technical and Administrative Services will monitor the deliverables and periodically meet with his ISU counterpart to address any issues.

ATTACHMENT J.7

APPENDIX G PURCHASING SYSTEM REQUIREMENTS

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

Appendix G

Purchasing System Requirements

This Appendix and Clause I.131, "Contractor Purchasing System," sets forth DOE requirements applicable to the Purchasing System established under the Contract for the management of the AMES Laboratory.

Subcontracts Not Binding on DOE

As used herein, the term "subcontracts" includes subcontracts, purchase orders, letter agreements, basic ordering agreements, consultant agreements, micropurchases, Electronic Data Interchange (EDI) and FACNET transactions, and lower tier subcontracts under cost-type subcontracts (in an unbroken cost-type chain) that represent costs properly chargeable to the Prime Contract.

All applicable subcontracts shall be made in the name of the Contractor, shall not bind or purport to bind the Government, shall not relieve the Contractor of any obligation under the Prime Contract (including, among other things, the obligation to properly supervise and coordinate the work of subcontractors), and shall contain such provisions as are required by this Contract or as DOE may prescribe based on Federal statutes and regulations, or DOE Orders and Policies.

DOE Approval

Prior DOE written approval is required for the following actions:

- 1. Contractor award of any subcontract having a value of \$500,000.00 or greater, or any subcontract modification which will cause the value to exceed \$500,000.00;
- Except as otherwise expressly provided or directed, in writing, by DOE
 Patent Counsel with notification to the Contracting Officer, actions which
 involve any one of, or combination of, the following intellectual property
 matters:
 - a. Acquisition of software by negotiated lease or license;
 - b. Purchase of patents or patent license rights, including the payment of royalties and permits, or license fees;
 - c. Recognition of proprietary rights, including the recognition of technical data as trade secrets; or,

- d. Any restriction of DOE's use of data procured under a subcontract.
- 3. Inter-Contractor Purchases (ICP's) expected to exceed \$1,000,000.00.
- 4. The purchase of utilities defined as: steam, gas, electricity, telephone lines, water and sewage furnished to ISU-owned building space occupied by AMES-funded personnel.
- 5. Contractor Procurement Policies and Procedures

All additions to, modifications or deletions of, Contractor Procurement Policies and Procedures which result in substantive changes thereto shall be submitted to DOE for approval prior to implementation.

The above approval requirements do not eliminate any other requirement for review, concurrence, or approval of other proposed actions specified in the subject contract or DOE's right to require consent on any single or class of purchasing actions selected for special surveillance.

Section J Appendix H

ATTACHMENT J.8

APPENDIX H

SMALL BUSINESS, VETERAN-OWNED SMALL BUSINESS, SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS, HUBZONE SMALL BUSINESS, SMALL DISADVANTAGED BUSINESS, AND WOMEN-OWNED SMALL BUSINESS MODEL SUBCONTRACTING PLAN

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

Section J Appendix I

ATTACHMENT J.9

APPENDIX I

DOE DIRECTIVES/LIST B

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

Contract No.: DE-AC02-07CH11358 Section J Appendix I

ES&H		
O 151.1C	11/02/05	Comprehensive Emergency Management System
O 225.1A	11/26/97	Accident Investigation
M 231.1- 1A Chg. 1	09/09/04	Environment Safety & Health Reporting Manual
M 231.1-2	08/19/03	Occurrence Reporting and Processing of Operations Information
O 414.1C	06/17/05	Quality Assurance
O 420.1A	05/20/02	Facility Safety
O 435.1 Chg. 1	07/09/99 08/28/01	Radioactive Waste Management
O 440.1A	03/27/98	Worker Protection Management for DOE Federal and Contractor Employees
O 450.1 Chg. 2	12/07/05	Environmental Protection Program
O 460.1B	04/04/03	Packaging and Transportation Safety
O 460.2A	12/22/04	Departmental Materials Transportation and Packaging Management
O 5400.5* Chg. 1 Chg. 2	02/08/90 06/05/90 01/07/93	Radiation Protection of the Public and the Environment
O 5480.19 Chg. 1 Chg. 2	07/09/90 05/18/92 10/23/01	Conduct of Operations Requirements for DOE Facilities
O 5480.4* Chg. 1 Chg. 2 Chg. 3 Chg. 4	05/15/84 05/16/88 05/16/89 09/20/91 01/07/93	Environmental Protection, Safety, and Health Protection
DOE Std. 1090-2004	June 2004	Hoisting and Rigging Standard

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SAFEGUARDS AND SECURITY

O 142.3	06/18/04	Unclassified Foreign Visits and Assignments
O 205.1	03/21/03	Department of Energy Cyber Security Management Program
M 205.1-1	09/30/04	Incident Prevention, Warning and Response (IPWAR) Manual System
M 205.1-2	06/26/05	Clearing, Sanitation, and Destruction of Information Storage Media, Memory Devices, and Related Hardware Manual
N 205.2	11/01/99	Foreign National Access to DOE Cyber Systems (extended by DOE N 205.16)
N 205.3	11/23/99	Password Generation, Protection, and Use (extended by DOE N 205.16)
N 205.8	02/11/04	Cyber Security Requirements for Wireless Devices and Information Systems (extended by DOE N 205.15)
N 205.9	02/19/04	Certification and Accreditation Process for Information Systems Including National Security Systems (extended by DOE N 205.15)
N 205.10	02/19/04	Cyber Security Requirements for Risk Management (extended by DOE N 205.15)
N 205.11	02/19/04	Security Requirements for Remote Access to DOE and Applicable Contractor Information Technology Systems (extended by DOE N 205.15)
N 206.3	11/22/05	Personal Identity Verification
O 470.2B	10/31/02	Independent Oversight and Performance Assurance Program
O 470.3A	11/29/05	Design Basis Threat Policy
O 470.4	08/26/05	Safeguards and Security Program
M 470.4-1 Chg. 1	03/07/06	Safeguard Security and Awareness Program

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M 470.4-2 & 3 Chg. 1	03/07/06	Physical Protection
M 470.4-3 Chg. 1	03/07/06	Protective Force
M 470.4-6	08/26/05	Nuclear Material Control and Accountability
M 470.4-7	08/26/05	Safeguards and Security Program References
O 471.3	04/09/03	Identifying and Protecting Official Use Only Information
M 471.3-1	04/09/03	Manual for Identifying and Protecting Official Use Only Information
O 475.1	12/10/04	Counterintelligence Program
N 481.1A	04/21/03	Reimbursable Work for Department of Homeland Security (extended by DOE N 251.62, 04/21/05)
M 481.1- 1A Chg. 1	09/28/01	Work for Others (Non-Department of Energy Funded Work)
O 481.1C	01/24/05	Work for Others (Non-Department of Energy Funded Work)
O 551.1B	08/19/03	Official Foreign Travel
O 5660.1B	05/26/94	Management of Nuclear Materials

FINANCIAL MANAGEMENT

O 130.1	09/29/95	Budget Formulation Process (extended by DOE N 251.45, 05/29/02)
O 413.1A	04/18/02	Management Control Program
O 522.1	11/03/04	Pricing of Departmental Materials & Services
O 534.1B	01/06/03	Accounting

OTHER

Contract No.: DE-AC02-07CH11358 Section J Appendix I

O 110.3	11/03/99	Conference Management
O 200.1	09/30/96	Information Management Program
N 203.1	10/02/00	Software Quality Assurance (extended by DOE N 251.40)
O 203.1	01/07/05	Limited Personal Use of Government Office Equipment Including Information Technology
O 221.1	03/22/01	Reporting Fraud, Waste, and Abuse to the Office of Inspector General
O 221.2	03/22/01	Cooperation with the Office of Inspector General
O 226.1	09/15/05	Implementation of Department of Energy Oversight Policy
O 241.1A Chg. 1	04/09/01 10/14/03	Scientific and Technical Information Management
O 243.1	02/03/06	Records Management
O 251.1A	01/30/98	Directives System
O 252.1	11/19/99	Technical Standards Program
O 350.1 Chg. 1	09/30/96 05/08/98	Contractor Human Resource Management Programs (Except as otherwise modified in Appendix A of this Contract)
O 350.2A	10/29/03	Use of Management and Operating or Other Facility Management Contractor Employees for Services to DOE in the Washington, D.C., Area
O 412.1A	04/21/05	Work Authorization System
O 413.2B	04/19/06	Laboratory Directed Research and Development
O 413.3A	07/28/06	Program and Project Management for the Acquisition of Capital Assets
M 413.3-1	03/28/03	Project Management for the Acquisition of Capital Assets Manual
O 430.1B	09/24/03	Real Property Asset Management
O 430.2A	04/15/02	Departmental Energy & Utilities Management
O 442.1A	06/06/01	Department of Energy Employee Concerns Program

Contract No.: DE-AC02-07CH11358 Section J

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P 443.1	05/15/00	Protection of Human Subjects
N 450.7	10/17/01	The Safe Handling, Transfer, and Receipt of Biological Etiologic Agents at Department of Energy Facilities (extended by DOE N 450.14, 06/03/05)
O 482.1	01/12/01	DOE Facilities Technology Partnering Programs
O 483.1	01/12/01	DOE Cooperative Research and Development Agreements
O 1220.1A Chg. 1	06/28/92	Congressional and Intergovernmental Affairs

^{*} Parts cancelled by new Orders

Note: Additional Manuals may apply

Section J Appendix J

ATTACHMENT J.10

APPENDIX J

TREATIES AND INTERNATIONAL AGREEMENTS/WAIVED INVENTIONS

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

United States Department of Energy Agreement Listing

Expiration Date	DOE Office	Title
1-6-97; exec 1-6-92	PO	Agreement relating to scientific and technical cooperation between the Government of the United States of America and the Government of the Republic of Korea.
7-6-99; exec 7-6-94	IA and Department of State	Agreement between the Government of the United States of America and the Government of Estonia on science and technology cooperation.
7-6-99; exec 7-6-94	IA and Department of State	Agreement between the Government of the United States of America and the Government of Latvia on science and technology cooperation.
7-6-99; exec 7-6-94	IA and Department of State	Agreement between the Government of the United States of America and the Government of the Republic of Lithuania on science and technology cooperation.
		Arrangement for the Exchange of Technical Information and for Cooperation in the Field of Peaceful uses of nuclear energy between the Atomic Energy Office for Peace and the U.S. National Laboratory.
Exec 1-15-92		Agreement between the Government of the Republic of Indonesia and the Government of the United States of America for cooperation in scientific research and technology development.
Exec 6-14-96		Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Science and Technology of the Republic of Korea for a cooperative laboratory relationship.
Exec 12-11-96		Agreement between the Department of Energy and the Nuclear Power Engineering Corporation of Japan for cooperation in the field of research and development of light water reactor-associated technologies.

United States Department of Energy Agreement Listing

Listing of Agreements Under the Aegis of: IAEA

Exp Date	DOE Office	Agreement #	Title
7/20/98	ER	000233	Agreement among the European Atomic Energy Community, Japan, Russia and the United States on Cooperation in the Engineering Design Activities of the International Thermonuclear Experimental Reactor (ITER)

Office of Policy and International Affairs

All In Force Bilateral Agreements

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description	
Country: Argentina										
61	407	8/1/1996	8/1/2001	Primary DOE			None	Energy Research and Development	Energy Technology Cooperation	
	Title: Specific Arrangement between the Department of Energy of the United States of America and the Public Works and Services Secretariat of the Argentine Republic in the Area of Energy Technology Cooperation									
Cor	Comment: Energy Forecasting meeting was hosted by FE in Oct. of 97. Seminar on New Technologies for the Energy Sector was held in Buenos Aires in Dec 98. EERE has work on energy efficiency and renewable projects started under a statement of intent which was a precursor to this agreement. In Dec of 97 four priority areas of work were identified - energy efficiency, energy and environment, energy planning, and renewable energy by then Secretaries of Energy.									
62	409	10/16/199	10/16/200	Primary DOE			None	Arms Control and Nonproliferation	Nuclear Technologies	
	Title:			nt between the Departma Peaceful Uses of Nuclea		gy of the	United States of Ame	erica and the National Atomic Energy Commission	of the Argentine Republic for Technical Exchange and	
Cor			_	ement supporting Article advanced fuels.	IV of the N	PT. Exi	sting annexes cover w	ork in Molybdenum-99 production for LEU, boron	neutron capture therapy, decontamination and	
475	431	4/13/1998	10/16/200	Secondary DOE		62	Primary DOE	Arms Control and Nonproliferation	Annex 1 - LEU Moly-99 production	
	Title:	Project Annex	c 1 Cooperat	tion in the Field of Moly	bdenum-99	Produc	tion from Low-Enrich	hed Uranium		
Cor	nment:	In force as lon	g as the Impl	ementing Arrangement.	Action shee	ets are u	nder development.			
521	431	2/8/1999	2/8/2003	Tertiary DOE		475	Secondary DOE	Nuclear Energy	Action Sheet 1 - Project Annex 1	
	Title:		•	o Project Annex 1 for Co sy of Chicago, as Operate	•			9 Production for Low-Enriched Uranium between	the National Atomic Energy Commission of he Argentine	
Cor	nment:									
476	431	4/13/1998	10/16/200	Intergovernmental		62	Primary DOE	Arms Control and Nonproliferation	Annex 2 - Boron Neutron Capture Therapy	
	Title:	Project Annex	c 2 Cooperat	tion in the Area of Boro	n Neutron (Capture	Therapy			
Cor	nment:	In force as lon	g as the Impl	ementing Arrangement.	Expert visit	ts are un	derway.			
503	431	8/11/1998		Tertiary DOE		476	Secondary DOE	Arms Control and Nonproliferation	Action Sheet 1	
	Title:	Action Sheet	l Purusant to	o Project Annex 2 Coope	eration in th	ne Field	of Boron Neutron Ca	pture Theraphy		
Cor	Comment: Technical exchange visits.									

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description	
477	431	4/13/1998	10/16/200	Secondary DOE		62	Primary DOE	Arms Control and Nonproliferation	Annex 3 - D&D of Nuclear Facilities	
	Title:	Project Annex	3 Cooperat	ion in the Field of Deco	ntaminatio	n and De	commissioning of Nu	clear Facilities		
Cor	Comment: In force as long as the Implementing Arrangement. Workshop was successfully held in fall of 98 at ANL.									
496	431	8/18/1998	10/16/200	Secondary DOE		62	Primary DOE	Arms Control and Nonproliferation	Annex 4 - Advanced Fuels	
	Title:	Project Annex	: 4 Cooperat	ion in Field of Low Enr	iched Uran	ium Adv	anced Fuels			
Cor	nment:	Remains in for	rce as long as	the Implement Arranger	ment. Actio	n sheets	are under developmen	t.		
555 Develo	431 opment	2/8/1999	2/8/2003	Tertiary DOE		496	Secondary DOE	Arms Control and Nonproliferation	Action Sheet 1 Annex 4, Dart Code	
	Title:			Project Annex 4 for Co of Chicago, as Operato				ranium Advanced Fuels between the National Atomic Ene	rgy Commission of the Argentine Republic	
Cor	nment:									
63	331	4/18/1994	4/18/2004	Primary DOE			None	Arms Control and Nonproliferation	International Safeguards Applications	
				•				ry Commission of Argentina Concerning Research and De e Technology for International Safeguards Applications	velopment in Nuclear Material Control,	
Cor	nment:			elopment, testing, and ever surveillance technologies		_	v . 1 1	cedures in order to improve nuclear material control, accoun-	tancy, verification, physical protection and	
64	387	5/29/1996	5/29/2006	Primary DOE			None	Environmental Restoration and Waste Management	Radioactive and Mixed Waste Management	
				nt between the Departme Radioactive and Mixed				rica and the National Atomic Energy Commission of the A	rgentine Republic for Technical Exchange and	
Cor	nment:	•		d waste management act al in geologic formations		ch areas a	s: preparation and pac	ekaging; decontamination and decommissioning; surface and	subsurface storage; characterization of	
Cou	Country: Australia									

456 9/15/1998 9/14/2008 Primary DOE None Arms Control and Nonproliferation Safeguards Arrangement

Title: Arrangement between the United States Department of Energy and the Australian Safeguards and Nonproliferation Office Concerning Research and Development in Nuclear material Control Accountancy, Verification, Physical Protection, Advance Containment and Surveillance Technologies for International Safeguards

Comment:

Country: Austria

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Start End Legally Parent

ID File# Date Date Agreement Type Binding ID Parent Type Subject Brief Description

Title: Memorandum of Understanding on Cooperation in Environmental Aspects of Energy Policy and the Protection of Global Climate

Comment: Cooperate in areas of sufficient growth of energy supplies; energy efficiency and conservation measures and protection of the biosphere (climate change).

Country: **Bangladesh**

501 450 12/15/199 Statement of Intent None Energy Research and Development SOI in Enregy Cooperation

Title: Joint Statement of Cooperation in Energy

Comment:

514 460 2/11/1999 2/11/2004 Primary DOE None Information and/or Personnel Exchange Exchange of Energy Information

Title: Arrangement between the Department of Energy of the United States of America and the Ministry of Energy and Mineral Resources, Government of the People's Republic of Bangladesh for Exchange

of Energy Information

Comment: EIA will work with an agency designated by MEOMR to establish a reasonably balanced exchange of energy information.

Country: **Botswana**

600 495 12/15/200 Statement of Intent None Fossil Energy Cooperation in the Field of Fossil Energy

Title: Statement of Intent Between The Department of Energy of the United States of America and The Ministry of Minerals, Energy and Water Afairs of the Republic of Botswana for Cooperation in the Field of Fossil Energy Technology

Comment:

Country: Brazil

26 391 9/30/1996 Statement of Intent None Fossil Energy Clean Coal Technologies

Title: Joint Statement of Intent on Clean Coal Technologies between the Department of Energy of the United States of America and the State of Rio Grande do Sul and the State of Santa Catarina, and the Sindicato Nacional da Industria da Extracao do Carvao, Eletrabras, and the Ministry of Mines and Energy of the Federal Republic of Brazil

Comment: Intention to cooperate between DOE, the State of Rio Grande do Sul, the State of Santa Catarina, The Sindicato National da Industria da Extracao do Carvao, Electrobras, and the Ministry of Mines and Energy of Brazil in clean coal technologies.

655 550 6/20/2003 6/20/2008 Primary DOE None Science and Technology Cooperation in Nuclear Energy

Title: Agreement between the Department of Energy of the United States of America nd the Ministry of Science and Technology of the Federative Republic of Brazil Concerning Cooperation in Nuclear Energy

Comment:

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description			
75	412	10/14/199	10/14/200	Primary DOE			None	Energy Research and Development	Energy Technology			
	Title: Implementing Arrangement between the United States of America and the Federative Republic of Brazil for Cooperation in the Area of Energy Technology											
Con	Comment: Umbrella Agreement											
279	412	10/14/199	10/14/200	Secondary DOE		75	Primary DOE	Fossil Energy	Annex 1 - Coal and Power Systems			
	Title: Annex I to the Implementing Arrangement between the United States of America and the Federative Republic of Brazil for Cooperation in the Area of Energy Technology in the Field of Coal and Power Systems											
Con	ment:	Exchange expe	erience and v	iews on clean coal techno	ologies, adv	anced po	ower systems, advance	d coal preparation, and environmental monitoring technolog	gies and standards.			
280	412	10/14/199	10/14/200	Secondary DOE		75	Primary DOE	Energy Efficiency and Renewable Energy	Annex 2 - Renewable Energy			
	Title:	Annex II to th Energy	e Implement	ing Arrangement betwee	en the Unit	ed States	of America and the F	Sederative Republic of Brazil for Cooperation in the Area	of Energy Technology in the Field of Renewable			
Con	ment:	Collaboration	on renewable	s resource assessment, ir	ntegration ir	electric	utility, policy analysis	s, and identification of opportunities for renewable energy in	n Brazil.			
281	412	10/14/199	10/14/200	Secondary DOE		75	Primary DOE	Energy Efficiency and Renewable Energy	Annex 3- Energy Efficiency			
		Annex III - to Efficiency	the Impleme	nting Arrangement betv	veen the Ui	ited Sta	es of America and the	e Federative Republic of Brazil for Cooperation in the Are	a of Energy Technology in the Field of Energy			
Con	ment:	Collaboration	to increase er	ergy, efficiency, promot	e global en	vironmer	tal protection, and stir	nulate the market in Brazil for energy efficiency goods and	services.			
76	332	4/18/1994	4/18/2004	Primary DOE			None	Arms Control and Nonproliferation	International Safeguards Applications			
	Title:							gency for Accounting and Control of Nuclear Materials Co Technologies for International Safeguards Applications	oncerning Research and Development in Nuclear			
Con	ment:											
77	376	9/19/1995	9/19/2000	Primary DOE			None	Arms Control and Nonproliferation	International Safeguards Applications			
		0			9			gy Commission of Brazil Concerning Research and Devel illance Technologies for International Safeguards Applica	•			
Con	ment:											
651	546	9/17/2001	9/17/2006	Secondary DOE		77	Primary DOE	Arms Control and Nonproliferation	Extension - Agreement bet. DOE and the			
Nation	al								Nuclear Energy Commission			
	Title: Agreement to Extend the Agreement between the Department of Energy of the United States and the National Nuclear Energy Commission of Brazil Concerning Research and Development in Nuclear Material Control, Accountancy, Verification, Physical Protection, and Advanced Containment and Surveillance Technologies for International Safeguards Applications											

Country: Canada

Comment: 5- year extension

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
28	363	7/21/1995		Statement of Intent		21	Broad	Energy Efficiency and Renewable Energy	Building Energy Simulation Tools
	Title:	Statement of I	ntent between	n the United States Depo	artment of	Energy a	nd the Department of	Natural Resources of Canada on Building Energy Simula	tion Tools
Com	ment:	Collaborate in	building ener	gy simulation R&D and	informatio	n dissemi	nation.		
614 Natural	509	10/22/200	10/22/200	Primary DOE			None	Energy Efficiency and Renewable Energy	Arrangement between DOE and Dept. of
									Resources Canada
		Implementing and Communic			ent of Energ	gy of the	United States of Amer	rica and the Department of Natural Resrouces Canada for	Cooperation in the areas of Microgeneration
Com	ment:								
632	527	5/10/2000	5/10/2005	Primary DOE			None	Science and Technology	Cooperation in the area of Bioenergy
	Title:	Implementing	Arrangemen	t between the United St	ates Depari	tment of	Energy and the Depar	rtment of Natural Resources of Canada for Cooperation in	the area of Bioenergy
Com	ment:								
656	551	6/17/2003	6/17/2008	Primary DOE			None	Nuclear Energy	Nuclear Energy Research
		Implementing area of Nuclea			ates Depari	tment of I	Energy and the Depar	rtment of Natural Resources of Canada and Atomic Energ	y of Canada Limited for Collaboration in the
Com	ment:	Foreign Party	for Atomic Er	nergy of Canada Limited	l signed this	s agreeme	ent also on June 17, 20	003.	
81	425	3/18/1998	3/18/2008	Primary DOE			None	Energy Research and Development	Energy R&D
		Memorandum Development	of Understan	nding between the Depa	ertment of I	Energy of	the United States of A	America and the Department of Natural Resources of Can	ada on Collaboration in Energy Research and
Com	ment:	Establish wide	r areas of coo	peration for mutual bene	efit				
524 Arrange	469 ment	2/1/2000	2/1/2005	Secondary DOE		81	Primary DOE	Fossil Energy	DOE/NRCan Fuel Cells Implementing
	Title:	Implementing	Arrangemen	t between the Departme	ent of Energ	gy of the	United States of Ame	rica and the Department of Natural resources Canada for	Cooperation in the area of Fuel Cells
Com	ment:	Automatic Ren	newal after 5	years with written agree	ment of the	participa	nts.		
525	470	2/1/2000	2/1/2005	Secondary DOE		81	Primary DOE	Fossil Energy	DOE/NRCan Fossil Fuels Implementing
	Title:	Implementing	Arrangemen	t between Department o	of Energy o	f the Uni	ted States of America	and the Department of Natural Resources Canada for Cod	operation in the area of Fossil Fuels
Com	ment:	Automatic ren	ewal for 5 year	ars with written agreeme	nt of the pa	rticipants	i.		

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description			
646	541	9/11/2002	9/11/2007	Tertiary DOE		525	Secondary DOE	Fossil Energy	Project Annex I - Weyburn CO2 Sequestration			
	Title:	le: Project Annex I - Weyburn CO2 Sequestration Project under the Implementing Arrangement Between the Department of Energy of the United States of America and the Department of Natural Resources Canada for Cooperation in the Area of Fossil Fuels										
Comment:												
27	341	11/18/199		Statement of Intent		21	Broad	Energy Efficiency and Renewable Energy	Biennial Biomass Conf. of the Americas			
	Title:	Statement of I	Intent betwee	n the United States Depo	artment of I	Energy a	and the Department of	f Mines and Resources on Biennial Biomass Confer	rence of Americas			
Cor	nment:	Collaborate in	a biennial co	nference to present the la	itest results	in bioma	ass energy research an	d development.				
Cou	Country: <u>Chile</u>											
35	352	3/7/1995		Statement of Intent			None	Energy Efficiency and Renewable Energy	Control Emissions of Greenhouse Gases			
	Title: Statement of Intent for Sustainable Development Cooperation and Joint Implementation of Measures to Control Emissions of Greenhouse Gases Between the Department of Energy of the United States of America and the National Energy Commission of Chile											
Cor	Comment: Intent to facilitate the development of joint implementation projects in order to encourage: market deployment of greenhouse gas-reducing technologies, including energy efficiency and renewable energy technologies; education and training programs, etc.											
474	430	4/18/1998	4/12/2000	Statement of Intent			None	Energy Efficiency and Renewable Energy	Natural Gas-Powered Bus Pilot Project			
	Title:	Statement of I	Intent Concer	rning the Natural Gas-P	owered Bus	Pilot P	roject in the Metropol	itan Region of Chile				
Cor	nment:	Signed in San	tiago, Chile, c	luring the SOAII								
Cou	ntry	China										
1	427	1/31/1979	4/30/2001	Intergovernmental			None	Science and Technology	Gov't to Gov't S&T			
	Title:	Agreement be	tween the Go	vernment of United Stat	es of Ameri	ica and t	the Government of Pe	ople's Republic of China on Cooperation in Science	e and Technology			
Comment: Need copy of agreement												
238 Fusion	123	5/11/1983	4/30/2001	Primary DOE		1	Intergovernmental	Fusion Energy	Protocol on Nuclear Physics and Magnetic			
	Title: Protocol between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China on Cooperation in the Fields of Nuclear Physics and Controlled Magnetic Fusion Research											
	G. A.C. A. S. A. A. S. N. I. D. S. A. G. A. H.M. A. F. S. G. A. S. A. M. A. H.G. T.											

Comment: Cooperate in promoting each other's program in Nuclear Physics and Controlled Magnetic Fusion. Co-terminates with umbrella S&T agreement.

290 223 9/28/1987 4/30/2001 Secondary DOE 239 Primary DOE Fossil Energy Annex 2 - Mine Safety and Health

Title: Annex II to the Protocol on Cooperation in the Field of Fossil Energy Research and Development between the Department of Energy of the United States of America and the Ministry of Coal Industry

of the People's Republic of China in the Area of Mine Safety and Health

Comment: Co-terminates with the Protocol

Industry

Comment: Co-terminates with the Protocol

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description			
291	217	8/19/1987	4/30/2001	Secondary DOE		239	Primary DOE	Energy Research and Development	Annex 3 - Atmospheric Trace Gasses			
	Title:	: Annex III to t	he protocol o	n fossil energy R&D on	Cooperation	on in the	e field of atmospheric	1	1			
Cor	Comment: Co-terminates with the Protocol											
292	226	10/13/198	4/30/2001	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 4 - Coal Preparation & Waste Stream Utilization			
	Title:	Annex IV to p			sil energy l	R&D bet	ween U.S. Departmen	nt of Energy & Ministry of Coal Industry of the People's Rep	public of China in the area of coal preparation			
Cor	mment:	TASKS PLA	NNED WERI	E COMPLETED IN 10/9	0. DISCUS	SSIONS	ON POSSIBLE FURT	THER COOPERATION IN COAL PREP. Co-terminates with	h the Protocol			
293	227	10/13/198	4/30/2001	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 5 - Atmospheric Fluidized Bed			
Comb	ustion								Info Exchange			
	Title:	e: Annex V to protocol on cooperation in field of fossil energy R&D between U.S. Department of Energy - Ministry of Coal Industry of the People's Republic of China in the area of atmospheric fluidized bed (AFB) combustion information exchange										
Cor	mment:	EXCHANGE	OF REPORT	S AND DATA. Co-term	inates with	Protocol						
296	349	2/23/1995	2/23/2000	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 11 - Coal Bed Methane Recovery and Utilization			
	Title:	e: Annex XI to the Protocol for Cooperation in the Field of Fossil Energy Research and Development between the Department Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China for Cooperation in the Area of Coalbed Methane Recovery and Utilization										
Cor	mment:			economic cooperation in al gas energy resources.	coal bed m	ethane re	ecovery and utilization	n technology in order to make positive contributions toward in	mproving recovery efficiency and utilization			
297	348	2/23/1995	2/23/2000	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 12 - Regional Climate Research			
	Title:	le: Annex XII to the Protocol on Cooperation in the Field of Fossil Energy Research and Development between the Department Energy of the United States of America and the Ministry of Coal Industry of the People's Republic of China for Cooperation in the Area of Regional Climate Research with the China Meteorological Administration										
Cor	mment:	Establish a pro	ogram of joint	R&D and information e	xchange to	docume	nt regional climate and	d climate change, to predict regional climate and climate char	ge and to identify regional impacts of climate			
485	439	11/14/199	11/14/200	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 13 - Fossil Fuel Utilization			
	Title:			for Cooperation in the public of China in the A				velopment between the Department of Energy of the United tion of Chemicals	States of America and the Ministry of Coal			
Cor	mment:	Co-terminiates	s with Protoco	ol								
298 Indust	413 ry	11/14/199	11/14/200	Secondary DOE		239	Primary DOE	Fossil Energy	Annex 14 - Bilateral Consultations on Coal			
	Title:	Annex XIV to	the Protocol	for Cooperation in the j	field of Fos	sil Ener	gy Research & Develo	opment between the Department of Energy of the United Sta	ttes of America and the Ministry of Coal			

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of the People's Republic of China on Bilateral Consultations and Exchanges on Coal Industry Development and Information

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description			
618 and	513	12/7/2000	12/7/2005	Secondary DOE		239	Primary DOE	Fossil Energy	Annex III - for Cooperation in the areas of Oil			
Title: Annex III to the Protocol for Cooperation in the Field of Fossil Energy Technology Development and Utilization between the Department of Energy of the United Sof Science and Technology of the People's Republic of China for Cooperation in the areas of Oil and Gas								gy of the United States of America and The Ministry				
Comment:												
240	351	2/23/1995	2/22/2005	Primary DOE		1	Intergovernmental	Energy Efficiency and Renewable Energy	Protocol for Energy Efficiency and Renewable			
				n the Fields of Energy E Technology of the Peop				ology Development and Utilization between the Departm	ent of Energy of the United States of America and			
Con				energy consultations by f nd technologies.	orming a C	hinese-A	merican Ministerial V	Working Group to enhance the understanding of energy is	sues and promote the exchange of information on			
478	432	6/27/1995	6/27/2000	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 1 - 100 Counties Renewable Energy			
Title: Annex I to the Protocol for Cooperation in the Field of Energy Efficiency and Renewable Energy between the Department of Energy of the United States of America and the Technology of the People's Republic of China for Developing Cooperative Activities in the Area of Renewable Energy Under the Hundred Counties Integrated Rural Energy I China between the Department of Energy of the United States of America and the Ministry of Agriculture of the People's Republic of China												
Con	ment:	Remains in for	rce for five ye	ears or until termination of	of the Proto	col, whic	thever occurs first					
299	420	10/25/199	10/25/200	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 2 - Wind Energy Development			
		Citle: Wind Energy Development in China Developing Cooperative Activities between the Department of Energy of the United States of America and the Ministry of Electric Power of the People's Republic of China ANNEX II under the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization between the Department of Energy of the United States of America and the State Science and Technology Commission of the People's Republic of China										
Comment: Remains in force for five years or until termination of the Protocol, whichever occurs first.												
300	422	10/25/199	10/25/200	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 3 - Energy Efficiency			
c	Title:	Annex III to t	he Protocol f	for Cooperation in the F	ields of En	ergy Effi	ciency and Renewabl	le Energy Technology Development and utilization betw	een the Department of Energy of the United States			
of			America and the State Science and Technology Commission of the People's Republic of China for Cooperation Between the Department of Energy of the United States of America and the State Planning Commission of the People's Republic of China in the Area of Energy Efficiency									
Con	ment:	Remains in for	rce for five ye	ears or until termination of	of the Proto	col, whic	hever occurs first					
301 Develo	421 pment	10/25/199	10/25/200	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 4 - Renewable Energy Business			
	Title: Renewable Energy Business Development ANNEX IV Cooperative Activities between the Department of Energy of the United States of America and the State Economic and Trade Corpole's Republic of China								nd the State Economic and Trade Commission of the			
Con	ment:	Remains in for	rce for five ye	ears or until termination of	of the Proto	col, whic	hever occurs first					
302	414	11/18/199	11/18/200	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 5 - Electric Vehicle Development			
		: The Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China for Cooperation in the Field of Energy Efficiency and Renewable Energy Technology Development and Utilization Annex V Electric Vehicle and Hybrid-Electric Vehicle Development										
Con	ment:	Remains in force for five years or until termination of the Protocol, whichever occurs first.										

			C							
ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description	
303	415	11/18/199	11/18/200	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 6 - Geothermal Production and Use	
United		China Annex	VI under The		n in the Fi	eld of Ei	nergy Efficiency and re	f the United States of America and the Ministry of Science enewable Energy Technology Development and Utilization		
Con	nment:	·		ears or until termination	0.			u oj China		
			100 101 1110 30		or the Froto			E ECC I ID II E		
490	443	7/9/1998 Statement of	Work hotwood	Secondary DOE	yray of the l	240 United S	Primary DOE	Energy Efficiency and Renewable Energy the Ministry of Science and Technology of the People's Rep	Design Criteria for Energy Efficient Building	
Con	nment:	зинетені ој	work beiweer	і іне Берантені ој Ене	rgy of the C	эписи э	uues oj America ana in	te ministry of Science and Technology of the Teople's Rep	navic of China	
563 Plannii	486	5/11/2000	5/11/2005	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex 7 - Renewable Energy Policy and	
	Title:	Renewable E People's Repu		· ·	I Cooperati	ve Activ	ities between Departme	ent of Energy of the United States of America and the State	e Development Planning Commission of the	
Con	nment:	Remains in fo	rce for five ye	ears or until termination of	of the Proto	col, whic	chever occurs first.			
616	511	7/18/2001		Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Design Criteria for Energy Efficient Building	
	Title:	Amendment i	o The Statem	ent of Work of July 9, 1	998 betweer	n The De	epartment of Energy of	f the United States of America and The Ministry of Science	e and Technology of the People's Republic of	
Con	nment:									
621 China	516	2/12/2002	2/12/2007	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex II - The State Power Corporation of	
	Title:	itle: Agreement to Extend Annex II to the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization for Cooperative Activities in Wind Development in China between the Department of Energy of the United States of America and the State Power Corporation of China								
Con	nment:									
622	517	2/12/2002	2/12/2007	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex III - State Planning Commission	
	Title:	Agreement to Extend and Amend Annex III to the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization for Cooperative Activities in Energy Efficiency between The Department of Energy of the United States of America and the State Planning Commission of the People's Republic of China								
Con	nment:									
623 Commi	518 ission	2/12/2002	2/12/2007	Secondary DOE		240	Primary DOE	Energy Efficiency and Renewable Energy	Annex IV - State Economic and Trade	
	Title: Agreement to Extend and Amend Annex IV to the Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization for Cooperative Activities in Renewable Enerby Business Development between the Department of Energy of the United States of America and the State Economic and Trade Commission of the People's Republic of America and the State Economic and Trade Commission of the People's Republic of States of America and the States of America and the States of America and States of America									
Con	nment:									
241	38	1/31/1979	4/30/2001	Primary DOE		1	Intergovernmental	High Energy Physics	High Energy Physics	
	Title:	Implementing Accord between the U.S. Department of Energy and the State Scientific and Technological Commission of the People's Republic of China on Cooperation in the Field of High Energy Physics.								
Con	nment:	Co-Terminate	s with the S&	T Agreement						

Comment: Attached to original agreement.

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description		
242	311	11/4/1992	11/4/2002	Primary DOE		1	Intergovernmental	High Energy Physics	Superconducting Super Collider		
	Title:	Implementing	Accord betw	een the U.S. Departmen	t of Energy	and the	Chinese Academy of	Sciences for a Program of Collaboration on the Supercond	lucting Super Collider		
Con	Comment:										
522	467	1/12/2000	1/12/2005	Primary DOE		1	Intergovernmental	Information and/or Personnel Exchange	Exchange of Energy Information		
	Title:	Protocol for C Republic of C		Concerning the Exchang	e of Energ	y Inform	ation between the Dep	partment of Energy of the United States of America and the	e National Bureau of Statistics of the People's		
Con	ıment:										
531	476	4/20/2000	4/30/2001	Primary DOE		1	Intergovernmental	Fossil Energy	Fossil Energy Protocol		
	Title:	Protocol for Cooperation in the Field of Fossil Energy Technology Development and Utilization between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China									
Comment: Remains in force for 5 years from date of signature or as long as the Umbrella Agreement (US-China S&T) remains in force, whichever is shorter.											
649 Fuels	544	11/19/200	11/19/200	Secondary DOE		531	Primary DOE	Fossil Energy	Annex II - Cooperation in the area of Clean		
	Title:	Annex II to the Protocol on Cooperation in the Field of Fossil Energy Technology Development and Utilization between The Department of Energy of the United States of America and The Ministry of Science and Technology of the People's Republic of China for Cooperation in the Area of Clean Fuels									
Con	ıment:										
3	410	10/29/199		Intergovernmental			None	*Other - Energy and Environment	Energy and Environment Cooperation Initiative		
	Title:	United States	of American	and People's Republic of	f China Er	iergy and	d Environment Coope	ration Initiative			
Con	ıment:										
31	347	2/23/1995		Statement of Intent			None	Nuclear Energy	Research Reactor Fuel		
	Title:	Statement of I	Intent betwee	n the Department of En	ergy of the	United S	tates of America and t	the China Atomic Energy Authority of the People's Repub	lic of China on Research Reactor Fuel		
Con	ıment:	Exchange info	ormation and	views on opportunities for	r the conve	rsion of	research reactors to the	e use of low enriched uranium.			
493	445	6/29/1998	6/29/2003	Primary DOE			None	Nuclear Energy	Nuclear Technologies Agreement		
	Title:	Agreement between the Department of Energy of the United States of America and the State Development Planning Commission of the People's Republic of China on Cooperation Concerning Peaceful Uses of Nuclear Technologies									
Con	ıment:	Subject to the Gov't to Gov't Peaceful Uses of Nuclear Energy Agreement signed July 23, 1985.									
494	445	6/29/1998	6/29/2003	Secondary DOE		493	Primary DOE	Nuclear Energy	Annex 1 - IPR		
	Title:	Annex I- Inte	llectual Prop	erty							

				011101105					
ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
620	515	5/11/2000	5/11/2005	Secondary DOE		493	Primary DOE	Energy Efficiency and Renewable Energy	Annex VII
		Renewable En People's Repu			I Cooperati	ive Activi	ities Between the Dep	artment of Energy of the United States of America an	nd the State Development Planning Commission of the
Con	nment:								
554 Techno	483 ologies	3/29/1999		Statement of Intent			None	*Other - Energy and Environment	MOU on Clean Energy Projects and
			•	nding Among The State United States Regarding	•			he People's Republic of China, China Development i and Technologies	Bank, The United States Department of Energy, and
Con	nment:								
642	537	9/10/2002		Statement of Intent			None	Science and Technology	SOI - Clean Energy Technologies
	Title:	Statement of I	ntent betwee	n the Department of En	ergy of the	United S	tates of America and	the Municipality of Beijing of the People's Republic	of China Concerning Clean Energy Technologies
Con	ment:								
84	345	2/23/1995		Primary DOE			None	*Other - Bilateral Energy Consultations	Bilateral Energy Consultations
		Memorandum Consultations	of Understa	nding between the Depa	rtment of I	Energy of	f the United States of	America and the State Planning Commission of the	People's Republic of China on Bilateral Energy
Con				energy consultations by f nd technologies.	orming a C	hinese-A	merican Ministerial V	Vorking Group to enhance the understanding of energy	y issues and promote the exchange of information on
Cou	ntry:	Costa Ri	<u>ca</u>						
36	401	5/9/1997	5/9/2002	Statement of Intent			None	Energy Efficiency and Renewable Energy	Electric Transport
	Title:	Statement of 1	ntent by the	Ministry of Environmen	t and Ener	gy of Co	sta Rica and the Depo	artment of Energy of the United States of America fo	r Cooperation in the Field of Electric Transport

Comment:

504 451 11/17/199 11/17/200 Primary DOE None Arms Control and Nonproliferation Sister Lab Arrangement

Title: Arrangement for information Exchange and Cooperation in the Area of Peaceful Uses of Nuclear Energy between Argonne National Laboratory and Atomic Energy Commission of Costa Rica

Comment: ACDA led sister lab.

Country: Czech Republic

4 300 10/22/199 10/22/200 Intergovernmental None Science and Technology Science & Technology

Title: Agreement between the Government of the Czech and Slovak Federal Republic and the Government of the United States of America for Scientific and Technological Cooperation

Comment: Develop, support and facilitate S&T cooperation between cooperating organizations between the two countries in the areas of basic science, environmental protection, medical sciences and health, agriculture, engineering research, energy, natural resources and their useful utilization, standardization, S&T policy and management.

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Start End Legally Parent

ID File# Date Date Agreement Type Binding ID Parent Type Subject Brief Description

Country: Egypt

517 463 7/1/1999 7/1/2004 Primary DOE None Energy Research and Development Energy Technology Agreement

Title: Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Electricity and Energy of the Arab Republic of Egypt for Cooperation in Energy Technology

Comment:

527 472 2/23/2000 2/23/2005 Secondary DOE 517 Primary DOE Energy Efficiency and Renewable Energy Annex 1 - Renewable Energy

Title: Annex I to the Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Electricity and Energy of the Arab Republic of Egypt in the Field of Renewable Energy

Comment:

528 473 2/23/2000 2/23/2005 Secondary DOE 517 Primary DOE Energy Efficiency and Renewable Energy Annex 2 - Fuel Cells

Title: Annex II to the Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Electricity and Energy of the Arab Republic of Egypt for Cooperation in Energy Technology in the Field of Fuel Cells

Comment:

Country: Estonia

526 471 2/4/2000 2/4/2003 Primary DOE None Fossil Energy Oil Shale Research and Utilization

Title: Agreement between the Department of Energy of the United States of America and the Ministry of Economic Affairs of the Republic of Estonia for Scientific and Technology Cooperation on Oil Shale

Research and Utilization

Comment: Establishes a Joint Coordinating Committee to manage cooperative work under the agreement.

99 353 3/13/1995 3/13/2000 Primary DOE None Environmental Restoration and Waste Management Technical Cooperation in Clean-up Paldiski

Site

Title: Memorandum of Understanding between the Department of Energy of the United States and the Ministry of Economy of Estonia for Technical Cooperation in the Clean-up of the Paldiski Nuclear Training Site

Comment: Cooperate and share interests and objectives in environmental restoration and in the safe and effective management of hazardous wastes and the clean-up of the environment at and around the nuclear training site at Paldiski, Estonia.

Country: European Atomic Energy Community (EURATOM)

568 490 1/6/1995 1/6/2005 Primary DOE None International Safeguards EURATOM Safeguards

Title: Agreement between the European Atomic Energy Community Represented by the Commission of the European Communities and the United States Department of Energy in the field of Nuclear Materials Safeguards Research and Development

Comment: Auto renewal for five years periods.

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
576	490	2/18/1999	2/18/2001	Secondary DOE		568	Primary DOE	International Safeguards	Action Sheet 10 - Tank Analysis
Сотрі	ıter			ed States Department of omated Acquisition and			-	ic Energy Community represented by The Commission of a nent Data	European Communities (EURATOM) for
Cor	nment:								
612 DOE	507	5/14/2001	5/14/2006	Primary DOE			None	Fusion Energy	Fusion Agreement between EURATOM and
			•	n between the European sion Energy Research a		0.	nmunity Represented	by the Commission of the European Communities and the	Department of Energy of the United States of
Cor	nment:								
Cou	ntry:	<u>Europea</u>	n Union						
648	543	5/14/2001		Primary DOE			None	Science and Technology	Non-Nuclear Energy S&T Agreement
Cor	Title: nment:	Implementing	Agreement l	petween the Department	of Energy	of the Ui	ited States of America	a and the European Commission for Non-Nuclear Energy	Scientific and Technological Co-operation
Cou	ntry:	<u>Finland</u>							
116	393	1/17/1997	1/17/2001	Primary DOE			None	Energy Research and Development	Energy R&D
	Title:	Implementing	Arrangemen	nt between the Departme	ent of Energ	gy of the	United States of Amer	rica and the Ministry of Trade and Industry of Finland for	r Cooperation in Energy Research and
Cor	nment:	Auto renewal	for 5 years						
Cou	ntry:	<u>France</u>							
39	132	10/27/198		Secondary DOE		121	Primary DOE	Environmental Restoration and Waste Management	Radioactive Waste ManagementWest Valley
		•		•	•	0.		issariat a l'Energie Atomique on the West Valley Demons	·
Cor				eatment of radioactive w est Valley, New York.	aste and dec	contamin	ation and decommission	oning activities throughout the course of the DOE Demonstr	ration Project at the Western New York Nuclear
40	185	6/20/1986		Secondary DOE		121	Primary DOE	Civilian Radioactive Waste Management	Low-Level Radioactive Waste

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Title: Statement of Intent between the United States Department of Energy and the French Commissariat a l'Energie Atomique in the Field of Low-Level Radioactive Waste

Comment: Confirm intent to expand radioactive waste management cooperation in the area of surface and subsurface disposal and storage of low-level radioactive waste, as well as defined activities.

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
128	416	12/29/199	12/29/200	Primary DOE			None	Arms Control and Nonproliferation	Material Control and Accounting
	Title:	Agreement be Control and A			he United S	States and	l the Commissariate a	l'Eenergie Atomique of France Concerning Researc	ch and Development in the Field of Nuclear Material
Cor	mment:	Cooperate on	research, deve	elopment, testing and eva	aluation in t	he area o	f nuclear material cont	trol and accounting measures.	
577	416	1/20/2000	1/20/2001	Secondary DOE		128	Primary DOE	Arms Control and Nonproliferation	Action Sheet 2 - Isotopic Analysis Evaluation Using the PC/FRAM Physics Isotopics
Softwa							1.00 A		
	Title:	Section Sheet Isotopics Soft		ited States Department	of Energy (DOE) an	d The Commissariat a	a l'Energie Atomique (CNEA) of France for Isotopic	Analysis Evaluation Using the PC/FRAM Physics
Cor	mment:								
129	417	12/29/199	12/29/200	Primary DOE			None	Arms Control and Nonproliferation	Physical Protection of Nuclear Materials
	Title:	Agreement be	tween the De	partment of Energy of t	he United S	States and	d the Commissariat a l	l'Energie Atomique of France Concerning Research	and Development in the Field of Physical Protection
of		Nuclear Mate	rials and Fac	ilities					
Cor	mment:	Improve the U	S & France n	uclear materials and faci	lities physic	cal protec	ction procedures		
567 Transı	417 oortatio	3/14/2000	3/14/2002	Secondary DOE		129	Primary DOE	International Safeguards	Action Sheet 3 - Nuclear Materials
									Security
			No. 3 The Un	ited States Department	of Energy (DOE) an	d the Commissariat a	l'Energie Atomique of France (CEA) for Nuclear Tr	ransportation Security
Coi	mment:								
130	357	4/26/1995		Primary DOE			None	High Energy Physics	Accelerator Driven Technology
~		Ü	•					for Cooperation in Research Development and Applie	cation for Accelerators driven Technology
Cor	mment:	Conduct coop	erative progra	m of scientific and techi	nical engine	ering in i	esearch, development	and application for accelerator driven technology	
131	377	9/20/1995		Primary DOE			None	Civilian Radioactive Waste Management	Radioactive Waste Management
		· ·		•	0			a l'Energie Atomique in the field of Radioactive Wast	
Coi	mment:		nuclear energ	y. Cooperation includes				quences of radioactive contamination on health and en ield/laboratory testing; preparation/packaging of radio	
132	379	10/8/1995	10/8/2000	Primary DOE			None	Civilian Radioactive Waste Management	Radioactive Waste Management
	Title:	Agreement be	tween the Un	ited States Department	of Energy a	ınd the N	ational Radioactive V	Vaste Management Agency of France in the Field of	Radioactive Waste Management
~									

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Comment: Cooperate for purposes of minimizing consequences of radioactive contamination on health and environment and promoting safe and economic application of nuclear energy.

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description	
564	487	5/9/2000	5/9/2005	Primary DOE			None	Defense Programs	DOE/DGA Emerging Technologies	
		Technical Arr	angement be	etween the Department o	f Energy o	f the Uni	ted States of America	and the Minster of Defense of the French Repubic Concer	rning Cooperation in the Application of	
Emerg	ing	Technologies								
Con	nment:	Auto Renewal	for 5 year pe	eriods.						
582	257	8/9/1994	8/9/2004	Primary DOE			None	Defense Programs	1994- High Energy Lasers	
	Title:	Agreement between the Department of Energy of the United States of America and the Commissariat a l'Energie Atomique of France of Cooperation in Research, Development and Applications of High Energy Lasers and high Energy Laser-Mater Interaction Physics								
Con	nment:									
316	342	11/19/199		Secondary DOE		582	Primary DOE	Defense Programs	Megajoule-Class Solid State Lasers - IA #1	
	Title:	Implementing Megajoule-cla			States Depa	ırtment o	f Energy and the Frei	nch Atomic Energy Commission concerning Sharing of Sc	ience and Technology Information Related to	
Con	nment:	Sharing of spe	cific S&T inf	formation related to mega	ajoule-class	solid sta	ite lasers.			
317 - IA	343	11/19/199	8/9/2004	Secondary DOE		582	Primary DOE	Defense Programs	Megajoule-Class Solid State Laser Technology	
Techno		Implementing	Arrangemei	nt #2 between the United	States Dep	partment	of Energy and the Fr	ench Commissariat a l'Energie Atomique on Cooperation	in Megajoule-Class Solid State Laser	
Con	nment:	Implement cod	operative acti	vities in research and dev	elopment i	n megajo	oule-class solid state la	ser technology (high-power, high-energy solid state lasers as	nd target experimental chambers and support	
601	496	9/18/2000	9/18/2005	Primary DOE			None	Nuclear Energy	Advanced Nuclear Reactor	
	Title:	Agreement be Technology	tween The D	epartment of Energy of	the United	States of	America and The Co	mmissariat A L'Energie Atomique of France for Cooperate	ion in Advanced Nuclear Reactor Science and	
Con	nment:									
635 Techno	530 ology	7/9/2001	7/9/2006	Secondary DOE		601	Primary DOE	Nuclear Energy	Advanced Nuclear Reactor Science and	
									(I-NERI)	
	Title:			nt No. 1 under the Agree Science and Technolog		een the L	Department of Energy	of the United States of America and Commissariat A L'En	ergie Atomique of France for Cooperation in	
Con	nment:	International N	Nuclear Energ	gy Research Initiative						
629	524	1/2/2002	1/2/2007	Statement of Intent			None	Exchange of Information on Research in Life Sciences	SOI between DOE and France	
	Title:	Statement of Life Sciences	Intent Betwee	en the Department of En	ergy of the	United S	States of America and	the Commissariat A' L'Energie Atomique of France Conc	erning Exchange of Information on Research in	
Con	nment:									
630	525	3/13/2002	3/12/2007	Primary DOE			None	Computer Sciences	Computer Sciences	
	Title:	Agreement be	tween the De	epartment of Energy of t	he United S	States of .	America and the Com	missariat A' L'E'nergie Atomique of France Concerning (Cooperation in Computer Sciences	
Con	nment:									

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
631	526 Title:	3/13/2002 Agreement be Stockpile Stew		Primary DOE partment of Energy of the	ie United S	tates of A	None America and the Con	Fundamental Science nmissariat A' L'E'nergie Atomique of France Concerning	Fundamental Science on Stockpile Stewardship Cooperation in Fundamental Science Supporting
Con	ıment:	Stockpile Sten	ф						
650		5/23/2002 Agreement be		Primary DOE partment of Energy of the	ne United S	tates of A	None America and the Com	Civilian Radioactive Waste Management amissariat A L'Energie Atomique of France in the field of	Radioactive Waste Management Agreement Radioactive Waste Management
Соп	ıment:								
Cou	ntry	German	<u>y</u>						
613 Dense	508	7/24/2001	7/24/2006	Primary DOE			None	Science and Technology	Agreement between DOE and Germany on
Benge									Plasma Physics
	Title:	1 0	0	between the Federal Min of Dense Plasma Physics		ucation a	and Research of the 1	Federal Republic of Germany and the Department of Ener	gy of the United States of America on
Con	ıment:								
88	419	2/20/1998	2/20/2003	Primary DOE			None	Energy Research and Development	Energy Research
	Title:			epartment of Energy of the earch, Science and Tech				leral Ministry of Education, Science, Research and Technol	ology of the Federal Republic of Germany on
Con	ıment:	Auto renewal	for 5 year per	riods. Broad-based umbr	ella agreem	ent to all	ow formal cooperation	n in various program areas	
480	434			Secondary DOE		88	Primary DOE	Environmental Restoration and Waste Management	Project: Transportation of Rad Waste
	Title:			n the Department of Ene n on Transportation Requ				the Federal Institute for Material Research and Testing of f Radioactive Waste	the Federal Republic of Germany: Technical
Con	ıment:								
93	31	9/27/1977		Primary DOE			None	Arms Control and Nonproliferation	Nuclear Materials Safeguards/Physical Security
	Title:	Agreement be Security Research		•	of Energy (and the I	Tederal Minister for I	Research and Technology of Germany Cooperate in the fi	eld of Nuclear Material Safeguards and Physical
Con	ıment:	Open-end exp	ration date						

Country: Ghana

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
149	392	10/1/1996	10/1/2001	Primary DOE			None	Energy Research and Development	Energy Policy, S&T and Development
				nding between the Depa nd, Development	rtment of E	Energy o	f the United States of A	America and the Ministry of Mines and Energy of the Rep	public of Ghana on Cooperation in Energy Policy,
Con		environmental	management,		energy tech			energy; fossil energy, including natural gas, liquefied petr ctive technologies aimed at reducing emissions of greenhou	
330	399	2/27/1997	2/27/2001	Secondary DOE		149	Primary DOE	Energy Efficiency and Renewable Energy	Industrial Assessment Center
		Implementing	Arrangemen	t Between the Departme	ent of Ener	gy of the	United States of Ame	rica and the Ministry of Mines and Energy of the Republi	ic of Ghana: Exchange of Information,
Techni		Assistance and	! Collaboratio	on for the Establishment	t of the Ind	ustrial A	ssessment Center at tl	ne University of Science and Technology in Kumasi, Ghai	na
Con	ment:			y	oy				
43	378	9/29/1995		Statement of Intent			None	Energy Efficiency and Renewable Energy	Energy Efficiency and Renewable Energy
73			ntent between		ergy of the	United S		of Mines and Energy of the Republic of Ghana to Coope	
		Renewable En			<i>3. 3</i>		-		3 33 33
Con	ment:	Exchanging ex	perience and	views on opportunities f	or the utiliz	zation of	energy efficiency and	renewable energy technologies.	
44	380	10/30/199		Primary DOE			None	Nuclear Energy	Peaceful Uses of Nuclear Energy
1	Title:	Memorandum	of Understa	nding for the Exchange	of Technic	al Infor	mation and for Cooper	ration in the Field of Peaceful Uses of Nuclear Energy be	tween the Ghana Atomic Energy Commission
and		Argonne Natio	nal Laborato	ory					
Con		Establish the b			ationship fo	or the exc	change of S&T information	tion regarding the peaceful uses of atomic energy. This is	between Ghana Atomic Energy Commission and
Cou	ntry:	<u>India</u>							
615 Energy	510	9/13/2000	9/13/2005	Primary DOE			None	Energy Efficiency and Renewable Energy	MOU between DOE and India concerning
									Consultations
	Title:	Memorandum	of Understa	nding between the Minis	stry of Pow	er of the	Republic of India and	the Department of Energy of the United States of Americ	ca Concerning Energy Consultations
Con	ment:								
Cou	ntry:	<u>Israel</u>							
156	384	2/1/1996	2/1/2001	Primary DOE			None	Energy Efficiency and Renewable Energy	Energy Cooperation
	Title:	Agreement bei	tween the Dep	partment of Energy of th	he United S	States of	America and the Mini	stry of Energy and Infrastructure of Israel Concerning E	Energy Cooperation

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Comment: Establish a framework for collaboration in energy R&D activities including: solar energy; biomass; energy efficiency; wind energy; fossil energy, including oil, gas and coal; electric power production and transmission. Annex I on Intellectual Property and Annex II on Security Obligations are attached. Discussion underway in clean coal technology and electric vehicles.

358 3/24/1998 3/24/2008 Secondary DOE

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
ш	rnen	Date	Date	Agreement Type	Dilluling	ID	ratent Type	Subject	Brief Description
530	475	2/22/2000		Statement of Intent			None	Arms Control and Nonproliferation	SOI on Nonproliferation, Arms Control and Regional Security
		Letter of Inte Regional Secu		e Department of Energy	of the Uni	ted State	s of America and the	Atomic Energy Commission of Israel on cooperation	n in the Fields of Non-Proliferation, Arms Control, and
Cor	mment:								
617	512	10/23/200	10/23/200	Primary DOE			None	Energy Efficiency and Renewable Energy	Cooperation in the Field of High Temperature Superconductivity
	Title:	Implementati Temperature			ent of Ene	rgy of th	e United States of Am	perica and the Ministry of National Infrastructure of	the State of Israel for Cooperation in the Field of High
Cor	mment:								
Cou	ntry:	<u>Italy</u>							
160	358	5/26/1995	5/26/2000	Primary DOE			None	Energy Research and Development	Energy R&D
		Agreement be Development	etween the De	partment of Energy of the	he United S	States of	America and the Min	istry of Industry, Commerce and Handicraft of the I	talian Republic in the Field of Energy Research and
Cor	mment:	continues 198	5 MOU in En	nergy R&D					
344	358	5/7/1997		Secondary DOE		160	Primary DOE	Fossil Energy	Annex 3 - Fossil Energy
		Annex III to a Field of Fossi		at between the Departme	nt of Energ	gy of the	United States of Ame	rica and the Ministry of Industry, Commerce and Ho	andicraft of the Republic of Italy to Cooperate in the
Cor	mment:	Two additiona	al areas were a	added in March 1998;fue	l cells for p	ower app	olications and external	ly fired combined cycle systems	
345	358	3/24/1998	3/24/2003	Secondary DOE		160	Primary DOE	Energy Efficiency and Renewable Energy	Annex 4 - Advanced Geothermal Technology
				nt between the Department of for Cooperation on Adv				rica and the Ministry of Industry, Commerce and ha	ndicraft of the Republic of Italy in the Field of Energy
Cor	mment:	Provides for c	ollaboration b	between Ladrello and the	Geyser Ge	othermal	Facilities		
346	358	3/24/1998	3/24/2008	Secondary DOE		160	Primary DOE	Energy Efficiency and Renewable Energy	Annex 5 - Biomass Energy
	Title:			between the Departmen t for Cooperation in the				ica and the Ministry of Industry, Commerce and Han	ndicraft of the Republic of Italy in the Field of Energy
Cor	mment:	Information E	xchange on b	iomass systems. Task sh	aring on ho	ot gas cle	an-up for medium-sca	le gasifiers.	

Research and Development for Cooperation in the Field of Photovoltaic Technology

160 Primary DOE

Comment: Info exchange on reducing manufacturing costs of PV cells. Cooperation on guidelines for building integrated PV systems.

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Title: Annex VI to the Agreement between the Department of Energy of the United States of America and the Ministry of Industry, Commerce and Handicraft of the Republic of Italy in the Field of Energy

Energy Efficiency and Renewable Energy

Annex 6 - Photovoltaic Technology

Comment:

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
492	444	7/10/1998	7/10/2003	Secondary DOE		160	Primary DOE	Energy Research and Development	Annex 7 - Electric and Hybrid Vehicles
	Title			nt between the Departme for Cooperation in the				rica and the Ministry of Industry, Commerce and Handicro	aft of the Republic of Italy in the Field of Energy
Con	nment:	Remains in for	rce for 5 years	s or until the Agreement	expires, wh	ichever i	is sooner.		
7	323	10/4/1993	10/4/2003	Intergovernmental			None	Science and Technology	Gov't to Govt S & T
	Title	Agreement be	tween the Go	vernment of the United	States of An	nerica a	nd the Government of	the Italian Republic for Scientific and Technological Coop	peration
Con	nment:	Science and To Renewed last is	0, 0	reement between the Uni	ted States a	nd the G	Sovernment of Italy wh	ich allows U.S. Government agencies to undertake cooperati	on in their respective areas of responsibility.
46	323	10/31/198		Statement of Intent		7	Intergovernmental	Information and/or Personnel Exchange	Synchrotron Light Source
	Title	Protocol of In	tent of Inten	t between the Departmen	t of Energy	of the l	United States of Ameri	ica and the Ministry of the University and of Scientific and	Technological Research of the Republic of Italy
Con	nment:								
Cou	ntry	: <u>Japan</u>							
251	385	5/3/1996	5/3/2001	Primary DOE		10	Intergovernmental	Science and Technology	DOE/STA Basic Science & Technology
	Title	Implementing	Arrangemen	it between the Departme	nt of Energ	y of the	United States of Amer	rica and the Science and Technology Agency of Japan in th	ne Field of Basic Science and Technology
Con	nment:			oint projects in the field of Heavy Ion Collider and b				hysics; synchrotron radiation; medical application of the rad	ation produced by accelerators; spin physics
166	195	12/3/1986	12/2/2001	Primary DOE			None	Nuclear Energy	Radioactive Waste Management
	Title	Agreement be	tween the Un	ited State Department o	f Energy an	d the Po	ower Reactor and Nuc	lear Fuel Development Corp of Japan in the Area of Radio	active Waste Management
Con	nment:	Study topics a	nd develop co	ooperatively and jointly t	echnology a	and techi	niques necessary for th	e safe management of radioactive wastes.	
511	195	7/17/1998	7/17/2000	Secondary DOE		166	Primary DOE	Civilian Radioactive Waste Management	Project Annex on Engineered Barriers
United		Project Annex	for Coopera	tion in Near-Field Perfe	ormance an	d Analy	ses on the Long-Term	Behavior of the Engineered Barriers under the Agreement	between the Department of Energy of the
Onnea		States of Amer	ica and the I	Power Reactor and Nucl	ear Fuel De	velopme	ent Corporation Japan	in the Area of Radioactive Waste Management	
Con	nment:								
395 (PNC)	365	2/19/1997	5/19/2000	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 30 - Randomized Inspection
	Title			United States Departmen otice Randomized Inspe		(DOE)	and The Power React	tor and Nuclear Fuel Development Corporation of Japan (A	PNC) for Joint Study of Improved Safeguards

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
545	365	12/18/199	12/18/200	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 37 - A-MAGB at Plutonium Fuel Production Facility
				e United States Departn I Material Accountancy				clear Cycle Development Institute (JNC) for Development	ent of Plutonium Isotopic Systems for Measuring
Con	ment:								
546	365	12/18/199	12/18/200	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 38 - Remote Monitoring for Tokai
		Action Sheet 3 Facility Safego			ient of Ene	ergy (DO	E) and the Japan Nu	clear Cycle Development Institute (JNC) for Developme	ent of Remote Monitoring for Tokai Vitrification
Con	ment:								
547	365	3/12/1999	3/12/2002	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 39 - Radiation Sensor Monitors at
		Action Sheet 3 C/S at Monju			ment of En	ergy (DC	DE) and The Japan N	Juclear Cycle Development Institute (JNC) for Develop	ment of Radiation Sensor Monitors to Improve Dual
Con	ment:								
548	365	3/22/1999	3/22/2002	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 40 - Isotope Dilution Gamma-Ray Spectrometry
				The United States Depar a-Ray Spectrometry (ID		Energy (L	OOE) and The Japan	Nuclear Cycle Development Institute (JNC) for Joint R	desearch and Development Study of the Metrology of
Con	ment:								
549	365	3/24/1999	9/24/2000	Secondary DOE		171	Primary DOE	Arms Control and Nonproliferation	Action Sheet 41 Conceptual Design for RETF Safeguards System Phase 2.
		Action Sheet 4 Safeguards Sy			Developm	ent Instit	tute (JNC) And The U	United States Department of Energy (DOE) For Joint St	tudy on the Conceptual Design for the RETF
Con	ment:								
173	356	4/11/1995	4/11/2005	Primary DOE			None	Nuclear Energy	Nuclear Reactor Technologies R&D
		Memorandum Research and			d States Ro	esearch a	and Development Org	ganizations and the Japanese Research Organizations for	or Cooperation in Nuclear Reactor Technologies
Con				ration between DOE and ear reactor technologies		l laborato	ories, EPRI and the A	dvanced Reactor Corporation, and the Japanese R&D Or	ganizations, including PNC, JAPC, JAERI and
174	362	7/17/1995	7/17/2005	Primary DOE			None	Nuclear Energy	Nuclear Research and Development - JAERI
	Title:	Agreement be	tween the De	partment of Energy of th	he United S	States of 2	America and the Jap	an Atomic Energy Research Institute in the Field of Nu	clear Research and Development
Con	ment:	Cooperation to	conduct pro	grams associated with nu	clear R&D	in such	areas as basic nuclear	S&T, nuclear safety, and advanced nuclear technologies	

Comment:

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
397 for	428	4/23/1998	4/23/2001	Secondary DOE		174	Primary DOE	High Energy Physics	Collaborative program for target development
									high power spallation neutron sources
	Title:			Agreement between the . er Spallation Neutron S		nic Energ	gy Research Institute	and the Department of Energy of the United States of Amo	erica for Collaborative Program of Target
Con	nment:	Work will be	preformed at	the Alternating Gradient	Synchrotro	n facility	at Brookhaven Natio	onal Laboratory	
481	435	6/9/1997	6/9/2007	Secondary DOE		174	Primary DOE	Arms Control and Nonproliferation	SMA - Safeguards
	Title:			Agreement Between the Accountancy, Verificati	•	,		e and the Department of Energy of the United States of Am	erica Concerning Research and Development in
Con	nment:								
523	468	1/27/2000	1/27/2005	Primary DOE			None	Arms Control and Nonproliferation	DOE/JNC Safeguards Agreement
	Title:			partment of Energy of t and Accounting Measur			•	an Nuclear Cycle Development Institute For Cooperation i	n Research and Development (R&D) Concerning
Con	nment:	Improving the	efficiency ar	nd effectiveness of equip	ment and te	chniques	for safeguards and no	onproliferation to implement policies and procedures pursua	nt to the non-proliferation treaty.
550 Scrap	482	1/27/2000	7/27/2001	Secondary DOE		523	Primary DOE	Arms Control and Nonproliferation	Action Sheet 42 Measurement Methods for
Con	Title:	Action Sheet with High Imp		he Japan Nuclear Cycle	e Developm	ent Instit	tute (JNC) and The U	Inited States Department of Energy (DOE) For Investigation	Materials on of Measurements Methods for Scrap Materials
551	482	1/27/2000		Secondary DOE		523	Primary DOE	Arms Control and Nonproliferation	Action Sheet 43 NDA Techniques at Ningyo
	1 itie:			ne United States Depart ntion at the Ningyo Enr		05 ()E) ana 1 ne Japan N	Nuclear Cycle Development Institute (JNC) for Design Stud	ies and Development of NDA Techniques for
Con	nment:								
552	482	1/27/2000	1/27/2002	Secondary DOE		523	Primary DOE	Arms Control and Nonproliferation	Action Sheet 44 - Dry Reprocessing Methods
	Title:	Action Sheet	44 between T	he Japan Nuclear Cycle	Developm	ent Instit	tute (JN) and The Un	ited States Department of Energy (DOE) for A Joint Study	of Safeguards Systems for Dry Reprocessing
Con	nment:								
553 PFPF	482	1/27/2000	1/27/2003	Secondary DOE		523	Primary DOE	Arms Control and Nonproliferation	Action Sheet 45 Remote Monitoring System at
	Title:			he United States Depart ction Facility in Japan	ment of En	ergy (DC	DE) and The Japan N	Nuclear Cycle Development Institute (JNC) for Developmen	at of the Integrated Remote Monitoring System at

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description			
597	492	8/22/2000	8/22/2005	Primary DOE			None	Nuclear Energy	Agreement for Nuclear Technologies			
	Title:	Agreement Be	tween The D	epartment of Energy of	the United	States of	f America and The Jap	an Nuclear Cycle Developments Institute in the Field of	Nuclear Technologies.			
Con	nment:											
640	535	7/10/2002	7/10/2005	Primary DOE			None	Civilian Radioactive Waste Management	Nuclear Waste Management Organization			
Agreer	nent								(NUMO)			
	Title	A greement he	tween the De	nartment of Energy of t	ha Unitad S	tates of	America and the Nucle	ar Waste Management Organization of Japan in the Fie	•			
Con	nment:	Agreement be	iween ine De	рантені ој Енегду ој н	пе Опией 5	uues oj .	America ana ine ivacie	ar waste Management Organization of Japan in the Pie	a of Radioactive waste Management			
643 Energy	538	9/2/2002	9/2/2005	Primary DOE			None		Agreement bet. DOE and the Japan Atomic			
Eliciby									Research Institute			
		Specific Mem	orandumm oj	f Agreement between the	e Departme	nt of En	ergy of the United State	es of America and the Japan Atomic Energy Research In	stitute on Cooperation in the Field of			
Synchi	otron	Radiation Res	earch									
Con	nment:											
653	548		2/10/2009	Primary DOE			None	Civilian Dadioactiva Wests Management	Dadioactiva Wasta Managament			
033		3/19/2003		•	ho United S	tates of	- 10	Civilian Radioactive Waste Management Nuclear Cycle Development Institute in the Field of Rad	Radioactive Waste Management			
Con	nment:	tle: Agreement between the Department of Energy of the United States of America and the Japan Nuclear Cycle Development Institute in the Field of Radioactive Waste Management										
657	552	8/18/2000		Amendment	44	263	None	Fusion Energy	Amendment V			
	mue:	Amenament v	to ine Agree	тені вегжеен іне зараї	n Atomic Ei	nergy Ke	searcn Institute ana in	e United States Department of Energy on Cooperation in	Doublet III Project			
Con	nment:											
8 Agreer	42 nent	5/2/1979	5/1/2005	Intergovernmental			None	Energy Research and Development	US/Japan Energy and Related Fields			
	Title:	Agreement be	tween the Go	vernment of the United	States of A	merica a	and the Government of .	Japan on Cooperation in Research and Development in I	Energy and Related Fields			
Con	nment:	Maintaining an	nd intensifyin	g cooperation in research	h and devel	opment i	n energy and related fie	lds.				
22	114	1/24/1983	5/1/2005	Broad		8	Intergovernmental	Fusion Energy	Fusion Energy			
	Title:	Exchange of I	Notes establis	hing the Cooperation in	ı Fusion Re	esearch a	and Development					
Con	nment:	Ministry of Ed	ucation, the S	TA, MONBUSHO, and	the MITI, a	s establi:	shed by an exchange of	activities as may be mutually agreed, in various technical a diplomatic notes and separate agreements within each orgated Fields remains in force.				
255	116	1/25/1983	5/1/2005	Primary DOE		22	Broad	Fusion Energy	Fusion Energy - MITI			
	Title:	Exchange of I	Letters establ	ishing the MITI-DOE C	Cooperation	in Fusio	on Research and Devel	opment				
Con	nment:	Remains in eff	fect as long as	s the Exchange of Notes	between US	SA-Japar	on Cooperation in Fus	ion Research and Development				

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description			
256 agreen	117 nent	1/25/1983	5/1/2005	Primary DOE		22	Broad	Fusion Energy	Fusion Energy - STA - Primary DOE			
	Title:	Exchange of I	Letters establ	ishing the STA-DOE Co	operation i	n Fusion	n Research and Devel	opment				
Cor	nment:	Remains in eff	fect as long as	s the Exchange of Notes	between US	SA-Japan	on Cooperation in Fu	sion Research and Development				
417	134	11/8/1983	5/1/2005	Secondary DOE		256	Primary DOE	Fusion Energy	Fusion Research and Development - JAERI			
	Title:	Implementing	Arrangemen	nt between the Japan Ato	omic Energ	y Resear	ch Institute and the U	nited States Department of Energy on Cooperat	ion in Fusion Research and Development			
Cor	nment:	Appoint coordinators to report to Fusion Committee and to cooperate in such areas as plasma-containment devices, such as tokamaks; joint research related to plasma physics; magnetic fusion concepts; magnetic systems for fusion devices; plasma engineering; fusion-reactor materials; fusion-systems engineering; environmental and safety aspects of fusion energy; plasma diagnostics and vacuum technology; and applications of fusion energy.										
463	133	11/8/1983	3/31/2004	Tertiary DOE		417	Secondary DOE	Fusion Energy	Annex 1 - First Wall and Blanket Structural			
	Title:			Arrangement between J rst Wall and Blanket Str					n Fusion Research and Development U.SJapan			
Cor	nment:	JOINT IRRAI	DIATION EX	PERIMENTS AND EV	ALUATION	OF RE	SULTS.					
466	210	6/11/1987	6/11/2001	Tertiary DOE		417	Secondary DOE	Fusion Energy	Annex 4 - Fusion - Fuel Processing			
				ting Arrangement betwe orative Program Techno				stitute and the United States Department of Ene	rgy on Cooperation in Fusion Research and Development			
Cor	nment:								nonstrating fuel process technology for fusion power rial for tritium services in the fusion energy program,			
471	270	1/11/1990	1/11/2005	Tertiary DOE		417	Secondary DOE	Fusion Energy	Annex 9 - Data Link			
	Title:			ting Arrangement betwe tion on the Data Link	en the Japa	ın Atomi	ic Energy Research II	stitute and United States Department of Energy	on Cooperation in Fusion Research and Development for			
Cor	nment:	comparison; (3	access to co		ies by visiti	ng scient	ists for computations i		usage; (2) data analysis and/or theory/experiment e Data Link. VISITS: Yes DURATION: To Be			
257	115	1/29/1983	5/1/2005	Primary DOE		22	Broad	Fusion Energy	Fusion Energy - Monbusho - Primary DOE			
	Title:	Exchange of	Letters establ	ishing the Monbusho-D	OE Cooper	ation in	Fusion Research and	Development				
Cor	nment:	Remains in eff	fect as long as	s the Exchange of Notes	between US	SA-Japan	on Cooperation in Fu	sion Research and Development				
419	214	7/17/1987	7/19/2001	Secondary DOE		257	Primary DOE	Fusion Energy	Annex 1 - Irradiation Effects Utilizing Fission			
	Title:			nge of letters between J utilizing fission	apan Minis	try of Ed	lucation (Monbusho)	and USDOE on cooperation in fusion R&D for a	collaboration in fundamental studies of irradiation			
Cor	nment:	JOINT IRRAI	DIATION AN	ID EVALUATION EXP	ERIMENT	S ON MA	ATERIALS					

			O								
ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description		
420	258	12/12/198	12/21/200	Secondary DOE		257	Primary DOE	Fusion Energy	Annex 2 - Data Link & Data Link Projects for		
				5, 1983 Exchange of Let tion on a data Link and				Department of Energy of the United States on Cooperatio	n in Fusion Research and Development		
Con	nment:	STEERING C	OMMITTEE	MEETING							
602	497	1/17/2001	7/19/2007	Secondary DOE		257	Primary DOE	Fusion Energy	Amedment 4 - Annex 1 Fusion Research and Development		
	Title:	Amendment 4	of Annex I to	o the DOE - Monbusho	Exchange	of Letters	s on Cooperation in F	usian Research and Development			
Con	nment:										
259	228	10/16/198	5/1/2005	Primary DOE		8	Intergovernmental	Fossil Energy	Coal R&D - AIST and ANRE		
	Title:	Implementing	Arrangemen	it between the Agency of	f Industrial	Science	and Technology and	the Agency of Natural Resources and Energy of Japan and	the United States Department of Energy in		
Coal	l Research and Development										
Con		Establish com	prehensive co					relopment of coal R&D efforts, i.e., coal liquefaction, coal gon.	asification; materials and components for coal		
262	48	8/24/1979	5/1/2005	Primary DOE		8	Intergovernmental	Fusion Energy	Fusion Energy/Coordinating Committee		
	Title:	Exchange of I	Letters Estab	lishing a Coordinating (Committee (on Fusio	n Energy				
Con	nment:			ommittee on Fusion Ener ght of such cooperative a		ate the co	oordination and imple	mentation of cooperative activities in the area of fusion as w	ell as to assure proper balance and to ensure the		
263	50	8/28/1979	8/28/2000	Primary DOE		8	Intergovernmental	Fusion Energy	Fusion Energy/Doublet III		
	Title:	Agreement be	tween the Un	ited States Department o	of Energy a	nd the J	apan Atomic Energy I	Research Institute on Cooperation in Doublet III Project			
Con	nment:	Undertake exp	erimental res	earch on tokamak plasma	as with dou	blet and o	lee-shaped cross-section	ons in the Doublet III, a tokamak facility, located in LaJolla	California.		
264	58	11/11/197	5/1/2005	Primary DOE		8	Intergovernmental	High Energy Physics	High Energy Physics		
		Implementing Physics	Arrangemen	nt between the Departme	nt of Energ	gy of the	United States of Amer	rica and the Ministry of Education, Science and Culture of	Japan on Cooperation in Field of High Energy		
Con	nment:							ccelerator and detector instrumentation R&D the fabricatio I Related Fields Agreement signed on May 2, 1979	n and subsequent use of new experimental		

Country: Kazakhstan

186 402 7/12/1996 Primary DOE None Science and Technology Energy R&D and Tech exchange

Title: Agreement between the Department of Energy of the United States of America and the Ministry of Science-Academy of Sciences of the Republic of Kazakhstan on Scientific Research and Development

and Technology Exchange Programs

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description			
428	402	5/13/1997		Secondary DOE		186	Primary DOE	*Other - Remote Sensing	Remote Sensing Mission			
	Title:	Annex 1 - For	r the Conduct	t of the Remote Sensing	Mission (A	MPS) in	the Republic of Kazak	khstan				
Con	nment:											
529	474	12/19/200		Primary DOE			None	Arms Control and Nonproliferation	Decommissioning of the BN-350 Reactor			
	Title: Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Energy, Industry and trade of the Republic of Kazakhstan Concerning Decommissioning of the BN-350 Reactor											
Con	nment:											
Cou	ntry	: <u>Korea, F</u>	Republic	<u>of</u>								
180	389	6/14/1996		Primary DOE		11	Intergovernmental	Fusion Energy	Fusion Energy Research and Related Fields			
	Title:			it between the Departme nd Related Fields	ent of Energ	gy of the	United States of Amer	ica and the Ministry of Science and Technology of the Re	public of Korea for Cooperation in the Area of			
Con	nment:	Promote S&T	cooperation i	n fusion energy research	and related	fields in	order to enhance contr	ributions. Remains in force for 5 years or until termination	of the S&T Agreement, whichever occurs first.			
626	521	6/14/2001	6/14/2006	Secondary DOE		180	Primary DOE	Fusion Energy	Extension on the Implementing Arrangement between DOE and Korea			
	Title:			mplementing Arrangem Fusion Energy Researc		-	0 00 0	the United States of America and the Ministry of Science	and Technology of the Republic of Korea for			
Con	nment:											
179	388	6/14/1996	6/14/2001	Primary DOE			None	Nuclear Energy	Cooperative Laboratory Relationship			
		Memorandum	ı of Understa	nding between the Depa	rtment of E	Energy of	the United States of A	America and the Ministry of Science and Technology of th	ne Republic of Korea for a Cooperative			
Labora	itory	Relationship										
Con	nment:			aceful uses of nuclear en				management; nuclear safety and environment; nuclear saf	eguards technology; basic sciences; education;			
595	388	6/29/2000	6/29/2005	Secondary DOE		179	Primary DOE	Nuclear Energy	Annex 4 - Cintichem Process Technology (first project annex)			
	Title:							Inited States of America and the Korea Atomic Energy Re Iinistry of Science and Technology of the Republic of Kor				

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
608	503	5/16/2001	5/16/2006	Secondary DOE		179	Primary DOE	Nuclear Energy	Annex V - MOU between DOE and Ministry of Science and Technology of the Republic of
Korea	on								I-NERI
	Title:							Inited States of America and the Ministry of Science and T al Nuclear Energy Research Initiative (INERI)	echnology of the Republic of Korea for a
Cor	nment:	:							
609 Institu	504 tions	5/16/2001	6/14/2001	Secondary DOE		179	Primary DOE	Nuclear Energy	Amendment C to Annex III Participating
Scienc	e								to the MOU between DOE and Ministry
									and Technology
	Title:			I - Participating Institut of Korea for a Coopera				ng between the Department of Energy of the United States	of America and the Ministry of Science and
Cor	nment:	;							
644	539	6/14/2001	6/14/2006	Secondary DOE		179	Primary DOE	Science and Technology	Extend and Amend MOU bet. DOE and MOST
of	Title:	: Agreement to	Extend and A	Amend the Memorandur	n of Under	standing	between the Departm	ent of Energy of the United States of America and the Min	istry of Science and Technology of the Republic
<i>O</i> J		Korea for a C	ooperative La	boratory Relationship					
Cor	nment:	:							
639	534	9/17/2002	9/17/2007	Primary DOE			None	Science and Technology	Safeguards Agreement
	Title:							inistry of Science and Technology of the Republic of Kored Ontainment and Surveillance Technologies for Internationa	
Cor	nment:	:							
Cou	ntry	: <u>Mexico</u>							
12	41	6/15/1972		Intergovernmental			None	Science and Technology	Science & Technology
	Title:	Agreement B	etween the Un	iited States of America o	ınd Mexico	for Scie	ntific and Technical (Cooperation	
Cor	nment:	Effected by E	xchange of No	otes Signed at Washingto	on June 15,	1972			
270	386	5/7/1996	5/7/2001	Primary DOE		12	Intergovernmental	Energy Research and Development	Energy Cooperation
	Title:	: Agreement be	etween the De	partment of Energy of th	he United S	States of 2	America and the Secre	etariat of Energy of the United Mexican States for Energy	Cooperation
Cor	nment:		fossil energy	technologies, giving due				search, development and commercialization to promote impr as well as to exchange, develop, and analyze energy strateg	

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
483	437	6/10/1998	6/10/2001	Secondary DOE		270	Primary DOE	Energy Efficiency and Renewable Energy	Annex 1 - Renewable Energy
	Title:	Project Annex	: 1 Cooperati	on in the Field of Renew	vable Energ	gy			
Con	nment:	Project areas u	nder discussi	on by SNL and CNEA (I	Mexico Nat	ional Co	mmission for Energy S	avings)	
484	438	6/10/1998	6/10/2001	Secondary DOE		270	Primary DOE	Energy Efficiency and Renewable Energy	Annex 2 - Energy Efficiency
	Title:	Project Annex	2 Cooperat	ion in the Field of Energ	gy Efficien	cy			
Con	nment:	Project areas u	nder discussi	on.					
498	447	10/21/199	10/21/200	Secondary DOE		270	Primary DOE	Environmental Restoration and Waste Management	Annex 3 - Enviro Cooperation in hydrocarbons
	Title:	Project Annex	3 - Environ	mental Cooperation in th	he Field of	Hydroca	rbons		
Con	ıment:	Facilitating wo	ork between N	Mexico Institute of Petrol	leum and O	RNL.			
519	465	12/7/1999	5/7/2001	Secondary DOE		270	Primary DOE	Fossil Energy	Annex 4- Clean Fossil Energy Technologies
	Title:	Project Annex	: 4 Cooperat	ion in the field of Clean	Fossil Ene	rgy Tech	nologies		
Con	ment:	Annex is in for	rce as long as	the Agreement is in force	ce.				
610	505	5/7/2001	5/7/2006	Secondary DOE		270	Primary DOE	Science and Technology	
	Title:	Extension of t	he Agreemen	it for Energy Cooperation	on between	the Depo	arment of Energy of th	e United States of America and the Secretariat of Energy	of the United Mexican States, and its Four
Con	ment:								
188	405	3/25/1985	3/25/2005	Primary DOE			None	Arms Control and Nonproliferation	Sister Lab Arrangement
			•	nding (MOU) for the Ex e Los Alamos National l	0 0		· ·	Cooperation in the Field of Peaceful Uses of Nuclear End	ergy between the National Institute of Nuclear
Con	nment:	Sister lab arrar	ngement supp	orting Article IV of the I	NPT.				
604	499	3/9/2001		Broad			None	Fifth Hemispheric Energy Ministers Meeting	Mexico Declaration
	Title:	Fifth Hemisph	heric Energy	Ministers Meeting Mexi	io City, Me.	xico - Ma	urch 9, 2001. Mexico	Declaration - Energy: A Crucial Factor for Integration an	d Sustainable Development in the Hemisphere
Con	nment:								
Cou	ntry:	Morocco	<u> </u>						

Agreement on Concerning Cooperation in 599 10/16/200 10/16/200 Primary DOE None Energy Efficiency and Renewable Energy Energy

Efficiency and Renewable Energy

Title: Agreement Between The Department of Energy of the United States of America and The Ministry of Industry, Commerce, Energy and Mines of the Kingdom of Morocco Concerning Cooperation in Energy Efficiency and Renewable Energy

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
627	522	10/16/200	10/16/200	Secondary DOE		599	Primary DOE	Energy Efficiency and Renewable Energy	Project Annex I - EERE
				eement between the Dep Energy Efficiency and		0.	of the United States of	America and the Ministry of Industry, Commerce, Energy	gy and Mines of the Kingdom of Morocco
Con	ment:								
647	542	6/3/2002	6/3/2007	Secondary DOE		599	Primary DOE	Energy Efficiency and Renewable Energy	Project Annex 2 - Clean Energy Technologies
				eement between the Dep Clean Energy Technol		Energy	of the United States of	f America and the Ministry of Industry, Commerce, Ener	gy and Mines of the Kingdom of Morocco
Con	ment:								
Cou	ntry:	<u>Nigeria</u>							
48	76	7/23/1980		Statement of Intent			None	Energy Research and Development	Energy R&D
	Title:	Memorandum	of Intent Co	ncerning Energy Coope	eration betw	veen the	Government of the U	nited States of America and the Government of the Feder	al Republic of Nigeria
Con		1		<i>U</i> , ,	1		•	onmental effects of energy, develop and demonstrate techn ncreased official cooperation. Formal cooperation never e	<i>C</i>
520	466	8/14/1999		Primary DOE			None	*Other - Energy Policy	MOU on Energy Policy
	Title:	Memorandum	of Understa	nding between the Depa	rtment of I	Energy of	the United States of	America and the Federal Ministry of Power and Steel of	the Federal Republic of Nigeria on Energy Policy
Con	ment:								
Cou	ntry:	<u>Pakistan</u>							
49	339	9/24/1994		Statement of Intent			None	*Other - Climate Change	Climate Change
	Title:	Joint Statemen	it of Intent b	etween the Department	of Energy o	of the Un	ited States of America	a and the Environment and Urban Affairs Division of the	Islamic Republic of Pakistan
Con	ment:	Enhancing mut	tual environn	nental protection, in part	icular, conti	rolling gr	eenhouse gas emission	ns to limit potential adverse climate change impacts (Envir	onment and Urban Affairs Division).
50 and	338	9/24/1994		Statement of Intent			None	Fossil Energy	Statement of Intent w/ Ministry of Petroleum
									Natural Resources
	Title:	Statement of I	ntent between	n the Department of En	ergy of the	United S	tates of America and	the Ministry of Petroleum and Natural Resources, Gover	nment of the Islamic Republic of Pakistan

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Comment: Promoting trade, investment and cooperation between U.S. & Pakistan (Min of Petroleum and Natural Resources) public and private-sector entities in the fields of fossil fuels (petroleum and minerals,

including coal) and new and renewable energy resources, related infrastructure development, and in the exchange of experience and views on opportunities in these sectors.

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
51 Power	340	9/24/1994		Statement of Intent			None	Energy Efficiency and Renewable Energy	Statement of Intent w/ Ministry of Water and

Title: Statement of Intent between the Department of Energy of the United States of America and the Ministry of Water and Power of the Islamic Republic of Pakistan

Comment: Promoting trade, investment and cooperation between the U.S. and Pakistan (Ministry of Water and Power) private and public sector entities in the fields of fossil and renewable energy, and in the exchange of experience and views on opportunities for improving energy efficiency and enhancing electricity policy.

Country: Palestinian Authority

535 479 2/22/2000 Statement of Intent None Energy Research and Development Energy Planning SOI

Title: Joint Statement of Intent between the Department of Energy of the United States of America and the Palestinian Energy Authority on Cooperation in the Field of Energy

Comment:

Country: Peru

512 458 6/17/1991 6/16/2001 Primary DOE None Arms Control and Nonproliferation Sister Lab Arrangement

Title: Arrangement for the Exchange of Technical Information and for Cooperation in the Field of Peaceful Uses of Nuclear Energy between the Peruvian Institute of Nuclear Energy and the Los Alamos National Laboratory

Comment:

603 498 3/8/2001 Statement of Intent None Cooperation in the Field of Energy Cooperation in the Field of Energy

Title: Joint Statement of Intent between the Department of Energy of the United States of America and The Ministry of Energy and Mines of the Republic of Peru on Cooperation in the Field of Energy

Comment:

645 540 8/14/2001 8/14/2006 Primary DOE None Science and Technology MOU - Cooperation in the Field of Energy

Title: Memorandum of Understanding between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Peru on Cooperation in the Field of

Comment:

Country: Philippines

195 403 6/19/1997 6/19/2002 Primary DOE None Information and/or Personnel Exchange Info Exchange

Title: Memorandum of Agreement between the Department of Energy of the United States of America and the Department of Energy of the Republic of the Philippines for the Exchange of Energy

Comment:

Country: Poland

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description			
13	224	9/28/1987	9/28/2002	Intergovernmental			None	Science and Technology	Science & Technology			
	Title:	Agreement be	etween the Go	overnment of the United	States of A	merica an	d the Government o	of the Polish People's Republic on Cooperation in Science	and Technology and its Funding			
Con	Comment: Develop, support and facilitate S&T cooperation on the basis of the principles of equality, reciprocity, and mutual benefit. Joint projects of mutual interest are funded by a fund contributed to by the two governments. Renewed last in 1997.											
198 Mgmt	367	8/21/1995	8/21/2000	Primary DOE			None	Environmental Restoration and Waste Management	Environmental Restoration Hazardous Waste			
				Exchange and Cooperat Restoration and Hazar				f the United States of America and the Institute for Ecolog	y of Industrial Areas of the Republic of Poland in			

mment: Study topics associated with the safe management of hazardous wastes, e.g., risks associated with human exposure to environmental contamination from chemical and heavy metals in soils; demonstration

Comment: Study topics associated with the safe management of hazardous wastes, e.g., risks associated with human exposure to environmental contamination from chemical and heavy metals in soils; demonstration of technologies or methodologies for soil cleaning; and other areas determined by both parties.

Country: Romania

513 459 3/29/1999 3/26/2004 Primary DOE None Arms Control and Nonproliferation Sister Lab Arrangement

Title: Arrangement for Information Exchange and Cooperation in Area of Peaceful Uses of Atomic Energy between United States Department of Energy (DOE) and the Ministry of Industry and Commerce

(MIC) - Romania

Comment: Establishes the basis for a cooperative institutional relationship between the participants for the exchange of scientific and technological and other information regarding the peaceful uses of atomic

Country: Russian Federation

203 395 9/16/1996 9/16/2001 Primary DOE 14 Intergovernmental Restoration and Waste Management Environmental Restoration and Waste Management

Title: Memorandum of Cooperation between the Department of Energy of United States of America and the Ministry of the Russian Federation on Atomic Energy in the Fields of Environmental Restoration and Waste Management

Comment:

211 396 9/16/1996 9/16/2001 Primary DOE 14 Intergovernmental Nuclear Energy Nuclear Reactor Safety

Title: Memorandum of Cooperation between the United States of America and the Russian Federation in the Field of Civilian Nuclear Reactor Safety

Comment: replaces MOU in Civilian Nuclear Reactor Safety signed 26 April, 1988

213 397 9/16/1996 9/16/2001 Primary DOE 14 Intergovernmental Fusion Energy Magnetic Confinement Fusion

Title: Memorandum of Cooperation between the Department of Energy of the United States of America and the Ministry of the Russian Federation on Atomic Energy in the Field of Magnetic Confinement Fusion

Comment: Focus on Fusion science research and development

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ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
436	397	9/16/1996	9/16/2001	Secondary DOE		213	Primary DOE	Nuclear Energy	Annex 1
	Title:	Annex 1 - List	t of Organiza	tions that could particip	ate				
Cor	nment:								
214	398	2/17/1997	2/17/2002	Primary DOE		14	Intergovernmental	*Other - High Energy and Nuclear Physics	Fundamental Properties of Matter
	Title:	Memorandum	of Cooperat	ion in the Field of Resea	rch on Fu	ndament	al Properties of Matte	r between the Department of Energy of the United States of	f America and the Ministry of Atomic Energy
and		the State Com	mittee for Sc	ience & Technologies of	the Russia	ın Feder	ation		
Cor	nment:		v	0				roperties of Matter (FCC-FPM)	
15 Weapo	315	2/18/1993	·	Intergovernmental			None	Nuclear Energy	Disposition HEU Extracted From Nuclear
		Agreement be Weapons	tween the Go	vernment of the United	States of A	merica a	nd the Government of	the Russian Federation Concerning the Disposition of Hig	ghly Enriched Uranium Extracted from Nuclear
Cor	nment:			ed from nuclear weapons trol, and environmental r				eapons; the establishment of appropriate measures to fulfill the stable of the stable	he nonproliferation, physical protection, nuclear
202	394	9/16/1996	9/16/2001	Primary DOE			None	*Other - Fuel Cell Technology	RAFCO
	Title:	Agreement be	tween the De	epartment of Energy of t	he United S	States of	America and the Mini	istry of the Russian Federation on Atomic Energy Regardi	ng a Russian-American Fuel Cell Consortium
Cor	nment:	Joint R&D wo	ork in fuel cel	l technology developmen	t				
208 Enviro	324 nment	1/14/1994	1/14/2004	Intergovernmental			None	Environmental Safety Health	Radioactive Contamination Health &
	Title:	0		vernment of the United active Contamination or			•	the Russian Federation on Cooperation in Research on Ro	adiation Effects for the Purpose of Minimizing
Cor	nment:			cooperation in research or onisable for coordination				nization of the consequences of radioactive contamination or	health and the environment. DOE is the
210 Expert	360 ise	6/16/1995		Primary DOE			None	Arms Control and Nonproliferation	Nonproliferation of Weapons/Weapons
				nt between the Departme tate the Nonproliferation				rica and the International Science and Technology Center	in the Russian Federation for Cooperation in
Cor	nment:	Facilitate coop	eration under	r the ISTC agreement inc	luding the	efforts to	reduce or eliminate we	eapons of mass destruction in a safe and secure manner.	
209	359	6/15/1995		Secondary DOE		210	Primary DOE	Fusion Energy	Annex 1 Weapons Expertise for the Globus-M
	Title:							l States of America and the International Science and Tech nd Weapons Expertise for the Globus-M Project	anology Center in the Russian Federation
Cor	nment:	Institute in ord	er to accomm		-M spherica	al tokama	ak device and the near-	BUS-M project by participating in the modification (or reco	

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connections/conduits between the experimental hall and those buildings needed by the GLOBUS-M project.

Comment:

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
536 equipm	480 ent	6/22/1999	6/22/2001	Secondary DOE		210	Primary DOE	Fusion Energy	ISTC Annex III -Advanced Diagnostics
- T T									for Spherical Tokamak Globus-M
			ooperation in					ted States of America and the International Science and To and Weapons Expertise for Advanced Diagnostics Equipo	
Con	ment:								
435 Reactor	328	3/16/1994		Primary DOE			None	Nuclear Energy	Replacement of Russian Pu Production
	Title:	Protocol of M	leeting betwee	en the United States and	d the Russia	n Federa	ution on the Replacem	nent of Russian Plutonium Production Reactors	
Con	ment:	Plan for replac	cement of plu	tonium production react	ors with alte	ernate ene	ergy sources.		
515	461	9/22/1998	9/22/2003	Intergovernmental			None	Arms Control and Nonproliferation	Nuclear Cities Initiative
	Title:	Agreement be	tween the Go	overnment of the United	States of A	merica a	nd the Government of	f the Russian Federation on the Nuclear Cities Initiative	
Con	ment:	DOE is the US	S Executive A	Agent for the carrying or	ut provision:	s of the a	greement. Ministry of	the Russian Federation for Atomic Energy is the Executive	agent for Russia
518	464	3/24/1999	3/24/2004	Primary DOE			None	Science and Technology	MOU w/ Russian Academy of Sciences
	Title:	Memorandun	n of Understa	nding between the Depo	artment of I	Energy of	the United States of	America and the Russian Academy of Sciences on Coopera	ation in Science and Technology
Con	ment:								
565	488	5/15/2000	3/24/2004	Secondary DOE		518	Primary DOE	Environmental Restoration and Waste Management	DOE/RAS Implementing Arrangement 1
				nt #1 Under the Memore alogues, Migration and I				ted States Department of Energy and the Russian Academ ric Media	y of Sciences on Cooperation in Science and
Con	ment:								
590 Phenon	488 nena	5/16/2000	9/20/2002	Tertiary DOE		565	Secondary DOE	Environmental Restoration and Waste Management	Appendix D - Uranium Mass Transport
		Appendix D I Welded Tuffs	mplementing	Arrangement #1 of the	U.S. Depar	tment of	Energy/Russian Acad	demy of Sciences Memorandum of Understanding Uraniu	m Mass Transport Phenomena in Fractured
Con	ment:								
593 Fission	488	5/18/2000	9/30/2003	Tertiary DOE		565	Secondary DOE	Civilian Radioactive Waste Management	Appendix G - Interaction of Actinides and
									Products
		Appendix G I Environmenta		Arrangement #1 of the	U.S. Depar	tment of	Energy/Russian Acad	demy of Science Memorandum of Understanding The Inte	raction of Actinides and Fission Products with

Comment:

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
594	488	5/18/2000	9/30/2003	Tertiary DOE	<i>U.C.</i> D	565	Secondary DOE	Civilian Radioactive Waste Management lemy of sciences Memorandum of Understanding Actinide	Appendix H - Actinide Speciation
				positories and for the Re	•		0.	emy of sciences Memoranaum of Undersunding Acumae	Speciation in the Environment to Support Sajety
Com	ment:								
566	489	5/15/2000	3/24/2004	Secondary DOE		518	Primary DOE	Environmental Restoration and Waste Management	DOE/RAS Implementing Arrangement 2
							O .	ed States Department of Energy and the Russian Academy	of Sciences on Cooperation in Science and
~		Technology - I	Risk Assessm	ent and Advanced Mode	ling Regar	ding Geo	ologic Disposal		
Com	ment:								
589 in	489	6/2/2000	9/30/2003	Tertiary DOE		566	Secondary DOE	Civilian Radioactive Waste Management	Appendix C - Contaminant Transport Processes
111									Unsaturated Rocks
				Arrangement #2 of the conscribing and Modeling Cons				emy of Sciences Memorandum of Understanding Interdiscrated Rocks	ciplinary Fundamental Research to Further
Com	ment:								
591	489	5/31/2000	9/30/2002	Tertiary DOE		566	Secondary DOE	Environmental Restoration and Waste Management	Appendix D- Annex A - Chara. Of
Contam	iinated								Territories
	Title:	Annex A of A	ppendix D In	nplementing Arrangeme	nt #2 of the	U.S. De	partment of Energy/R	ussian Academy of Sciences Memorandum of Understand	
Territo		34 37				•	. ,	·	•
Com	ment:	Monitoring N	егwогк Орпт	ization, and Cost Minim	ization				
592 Assessi	489 nent	5/31/2000	9/30/2002	Tertiary DOE		566	Secondary DOE	Environmental Restoration and Waste Management	Appendix D - Annex B - Uncertainty
	Title:	Annex B of A	ppendix D In	nplementing Arrangeme	nt #2 unde	r the DO	E-RAS Memorandum	of Understanding Uncertainty Assessment Through Incorp	poration of Mathematical Geology in
Develop	oment	of Inverse Flo	ow and Trans	nort Models					
Com	ment:	oj inverse i u	on unu 11uns,	port 142oucis					
	500	4/25/2001	4/25/2004	Sacandary DOE		518	Brimary DOE	Saianas and Tashnalagy	Appendix V w/the Dussian Academy of
605 Science		4/23/2001	4/23/2004	Secondary DOE		310	Primary DOE	Science and Technology	Appendix K w/ the Russian Academy of
		Appendix K U Technology	Inder Implem	nenting Arrangement #1	of the Men	norandur	n of Understanding B	etween the U.S. Department of Energy and Russian Acade	my of Sciences on Cooperation in Science and
Con	ment:								
606	501	10/1/2000	10/1/2002	Secondary DOE		518	Primary DOE	Uranium Mass Transport Phenomena in Fractured	Appendix D of Implementing Arrangement
#1w/								Welded Tuffs	Russian Academy of Sciences MOU
		Appendix D I Welded Tuffs	mplementing	Arrangement #1 of The	U.S. Depa	rtment oj	f Energy/Russian Acad	demy of Sciences Memorandum of Understanding Uranium	•
~									

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
52	302	3/18/1992		Statement of Intent			None	Information and/or Personnel Exchange	Electric Power Technologies
	Title:	U.SRussia T	ask Force on	Cooperation in Electric	c Power Tec	chnologi	es Joint Statement of	Intent	
Cor	nment:	Exchange info	ormation on de	evelopments in the electr	ric power in	dustries	and encourage more ex	tensive contacts among experts in this field in both countrie	S.
537	481	7/24/1998	7/24/2003	Intergovernmental			None	Arms Control and Nonproliferation	Plutonium Management
1	Title:	Agreement be	tween the Go	vernment of the United	States of A	nerica a	nd the Government of	the Russian Federation on Scientific and Technical Coope	eration in the Management of Plutonium that
has		been withdraw	n from Nucl	ear Military Programs					
Cor	nment:	DOE is the Ex	ecutive Agen	t for the US. The agreer	nent establis	shes the	U.SRussian Joint Stee	ering Committee on Plutonium Management	
619 DOE a	514	6/30/2000	6/30/2005	Secondary DOE		607	Primary DOE	Civilian Radioactive Waste Management	Protocol extending the agreement between
DOL									Russia
				reement between the De ussian Nuclear Fuel Cyc				f America and the Federal Nuclear, and Radiation Safety	Authority of Russia for Cooperation on
Cor	nment:	Extending the	agreement m	ention above for five year	ars until Jun	e 30, 200	05.		
641 Radiat	536	6/26/200	6/30/2005	Secondary DOE		607	Primary DOE	Arms Control and Nonproliferation	Extension bet. DOE federal Nuclear and
									Safety Authority of Russia
				reement between the De counting of Nuclear Ma		f Eneryg	of the United States o	f America and the Federal Nuclear and Radiation Safety A	authority of Russia to Cooperate on National
Cor	nment:								
636 Dubna	531	4/23/2002		Statement of Intent			None	Science and Technology	Joint Statement of Intent between DOE and
	Title:	Joint Stateme	nt of Intent b	etween the Department	of Energy o	f the Un	nited States of America	and the Joint Institute for Nuclear Research at Dubna	
Cor	nment:								
658	553	5/8/2002		Primary DOE			None	*Other - Purchases of Pu-238 for Peaceful Purposes	Purchases of Pu-238 for Peaceful Purposes
	Title:	Joint Announ	cement by th	e United States Departm	ient of Enei	rgy and t	the Russian Federation	n Ministry for Atomic Energy Concerning Continued Purc	hases of Pu-238 for Peaceful Purposes
Cor	nment:								
659	554	7/16/2001	7/16/2006	Secondary DOE		210	Primary DOE	Civilian Radioactive Waste Management	Annex VI

Title: Annex VI to the Memorandum of Agreement between the Department of the United States of America and the International Science and Technology Center in the Russian Federation Concerning Implementation of Projects of the Office of Civilian Radioactive Waste Management

Comment:

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mutual consent.

Start End Legally Parent ID Date Subject **Brief Description** File# Date Agreement Type **Binding** ID Parent Type Country: Senegal 479 433 4/2/1998 Statement of Intent None Energy Research and Development SOI - Energy R&D Title: Memorandum of Understanding between the Republic of Senegal and the United States of America for Cooperation on Energy Policy, Science and Technology, and Research and Development **Comment:** 516 462 3/19/1999 3/19/2004 Primary DOE Energy Research and Development Energy Policy, S and T, and R and D None Title: Agreement between the Department of Energy and the Ministry of Energy, Mines and Industry of the Republic of Senegal on Cooperation in Energy Policy, Science and Technology, Research and Development **Comment:** The objective of this Agreement is to facilitate and establish cooperative activities by the Parties. Country: South Africa 12/4/1997 12/4/2022 Intergovernmental Peaceful Uses of Nuclear Energy None Nuclear Energy Title: Agreement for Cooperation between the United States of America and the Republic of South Africa Concerning Peaceful Uses of Nuclear Energy Comment: Cooperate in the development, use and control of peaceful uses of nuclear energy which must be undertaken with a view to protecting the international environment from radioactive, chemical and thermal contamination. Agreement was signed on 8/25/95 ratified by exchange of diplomatic notes on 12/4/97. 230 369 8/25/1995 Primary DOE Energy Research and Development Sustainable Energy Development Committee None Title: Terms of Reference on the Sustainable Energy Development Committee of the U.S. - South Africa Binational Commission **Comment:** 231 371 8/25/1995 Primary DOE None Energy Research and Development Sustainable Development Resource Center Title: Memorandum of Understanding between the World Wildlife Fund-South Africa, EarthKind International, U.S. Department of Energy and U.S. Agency for International Development on Creating the Sustainable Development Resource Center Comment: Cooperate on the creation of the Sustainable Development Resource enter to advance policies and programs on the use of renewable energy and energy efficiency technologies and participation by nongovernmental organization in the decision making process. Other signatories are EarthKind Intl (Jan Hartke) and USAID (Larry Byrne) 232 372 8/25/1995 Primary DOE Energy Efficiency and Renewable Energy Renewable and Energy Efficiency None Technologies Title: Memorandum of Understanding Comment: Promotion of renewable energy and energy efficient technologies as a cost-effective means of increasing access to energy of the majority of South Africa disadvantaged population (w/USAID as a partner). 233 374 8/25/1995 Primary DOE None Energy Efficiency and Renewable Energy Electrification of Rural Clinics (Cape Town) Title: Memorandum of Understanding between Sandia National Laboratories of Albuquerque New Mexico, USA and the Independent Development Trust Cape Town, Republic of South Africa

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Comment: Sandia National Lab, as signatory of this MOU, has agreed to co-fund the Independent Development Trust model clinic electrification program and to provide other technical assistance as agreed by

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
234	381	12/5/1995	12/5/2000	Primary DOE			None	Energy Research and Development	Energy Policy, S&T and Development
		Implementing Technology an	0		es Departm	ent of En	ergy and the Departm	nent of Mineral and Energy Affairs of South Africa on C	Collaboration on Energy, Policy, Science,
Con								ent and commercialization activities in such areas as: foss nologies; and private power project development	il energy, including clean coal; energy planning,
55	423	8/25/1995		Statement of Intent			None	Information and/or Personnel Exchange	Energy Information Exchange
		Joint Statement Information E	•	etween the Department	of Energy o	of the Un	ited States of America	an and the Department of Mineral and Energy Affairs o	f the Republic of South Africa on an Energy
Con	ment:								
56	370	8/25/1995		Statement of Intent			None	Energy Research and Development	Energy Policy, S&T and Development
			•	etween the Department nd Development	of Energy o	of the Un	ited States of America	an and the Department of Mineral and Energy Affairs of	f the Republic of South Africa on Energy Policy,
Con	ment:	Facilitate joint	activities rel	ated to energy policy, S&	kT, develop	ment and	l commercialization in	an environmentally and economically sound manner.	
57	373	8/25/1995		Statement of Intent			None	Energy Efficiency and Renewable Energy	Renewable Energy (Guguletu Township)
			, ,	or Integrated Industrial uletu RDP Forum	/Education	al Develo	opment in Guguletu T	ownship between the United States Department of Energ	gy, United States Department of Energy National
Con	ment:	Establishment	of a light ind	ustrial part in Guguletu	Γownship.				
58	375	8/25/1995		Statement of Intent			None	Energy Efficiency and Renewable Energy	Renewable Energy (The Csir, South Africa)
				newable Energy Technol Republic of South Africa		en the N	lational Renewable E	nergy Laboratory, U.S.A. and Sandia national Laborato	ries, U.S.A. and the CSIR (Council for Scientific
Con				g signatories of this State Witnessed by Secretary C		agreed to	exchange experience	and views on opportunities for the appropriate utilization	n of renewable energy technologies with The Csir,
59	383	12/5/1995		Statement of Intent			None	Fossil Energy	Mitigation of Greenhouse Gases
	Title:	Statement of I	ntent concer	ning Cooperation in Su	stainable E	nergy De	evelopment and the M	itigation of Greenhouse gases between the Republic of	South Africa and the United States of America
Con		sinks in an env	ironmentally		economicall	y equitab	ole fashion through dep	itional mitigation of climate change by addressing anthro ployment of greenhouse gas mitigation technologies; educ	
60	382	12/5/1995		Statement of Intent			None	Energy Research and Development	South Africa/Provincial Gov'ts Cooperation Agreement - Statement of Intent
	Title:	Cooperative A	greement bei	tween Provincial Govern	nments of t	he Repub	olic of South Africa on	n Regional Cooperation in Energy	

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Comment: Intention to cooperate in a manner which will facilitate joint activities related to energy development in an environmentally and economically sound way with the following provincial governments of

South Africa: Province of the Free State; Northern Cape Province; Eastern Cape Province

Start End Legally Parent

ID File# Date Date Agreement Type Binding ID Parent Type Subject Brief Description

Country: Spain

100 404 9/15/1997 9/15/2007 Primary DOE None Environmental Safety Health Research on Radiological Evaluations

Title: Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Industry and Energy of the Kingdom of Spain on Cooperation in Research on Radiological Evaluations

Comment:

307 404 9/15/1997 9/15/2007 Secondary DOE 100 Primary DOE Environmental Safety Health Annex 1

Title: Project Annex 1 - cooperation on research in radiological evaluations

Comment: Related to radioactive waste management.

5 171 12/12/198 Primary DOE None Science and Technology Science & Technology

Title: Agreement between the United States Department of Energy and the United States-Spain Joint Committee for Scientific and Technological Cooperation

Comment: Establish responsibilities, guidelines and procedures for evaluating, funding and coordinating research proposals, projects and related activities in the field of energy selected and funded by the

US-Spain Joint Committee for S&T Cooperation.

596 491 7/15/2000 7/15/2006 Primary DOE None Energy Research and Development MOU for Energy Cooperation

Title: Memorandum of Understanding Between The Ministry of Science and Technology of the Kingdom of Spain and The Department of Energy of the United States of America Concerning Cooperation

in Energy

Comment:

Country: Sweden

218 235 2/11/1988 Primary DOE None *Other - Classified Subject and Umbrella contents are classified

Title: Subject and Umbrella contents are classified

Comment: Description not available in History

580 442 10/23/199 10/23/200 Primary DOE None Civilian Radioactive Waste Management Radioactive Waste Management

Title: Agreement between the United States Department of Energy and the Swedish Nuclear Fuel and Waste Management Company Concerning a Cooperative Program in the Field of Radioactive waste

Management

Comment:

Country: Switzerland

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		Start	End		Legally	Parent			
ID	File#	Date	Date	Agreement Type	Binding	ID	Parent Type	Subject	Brief Description

225 418 12/23/199 12/23/200 Primary DOE None Civilian Radioactive Waste Management Radioactive Waste Management

Title: Agreement between the Department of Energy of the United States of America and the National Cooperative for the Disposal of Radioactive Waste in Switzerland in the Field of Radioactive Waste

Management

Comment: Auto extension for 5 yr. Periods.

Country: *Thailand*

227 400 3/20/1997 Primary DOE None Arms Control and Nonproliferation Lab-to-Lab arrangement

Title: Arrangement for the Exchange of Technical Information and for Cooperation in the Field of Peaceful Uses of Nuclear Energy between the Office of Atomic Energy for Peace of Thailand and the

United States Department of Energy

Comment: Open ended.

538 400 3/6/2000 Secondary DOE 227 Primary DOE Arms Control and Nonproliferation Action Sheet 1 - Preliminary Safety Anaysis

Report

Title: Action Sheet 1 between the Office of Atomic Energy for Peace of Thailand and the United States Department of Energy for Preliminary Safety Analysis Report Review

Comment:

Country: Turkey

624 519 3/20/2002 3/20/2007 Primary DOE None Science and Technology Cooperation in Energy Technology

Title: Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Energy and Natural Resources of the Republic of Turkey for Cooperation in Energy

Technology

Comment:

625 520 3/20/2002 3/20/2002 Secondary DOE 624 Primary DOE Science and Technology Annex 2 - Cooperation in the Field of Coal and Power Systems

Title: Annex 2 to the Implementing Arrangement between the Department of Energy of the United States of America and the Ministry of Energy and Natural Resources of the Republic of Turkey for Cooperation in the Field of Coal and Power Systems

Comment:

Country: *Ukraine*

507 454 4/26/1996 Intergovernmental None *Other - Radioactive Waste Chornobly Center

Title: Memorandum of Understanding on Participation In and Support of the Activities of the International Chornobyl Center on Nuclear Safety, Radioactive Waste and Radioecology

Comment:

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Comment:

ID	File#	Start Date	End Date	Agreement Type	Legally Binding	Parent ID	Parent Type	Subject	Brief Description
508	455	7/22/1998	7/22/2003	Intergovernmental			None	*Other - Radioactive Waste	Int'l Radioecology Lab
				vernment of the United waste and Radioecolo		merica a	nd the Government o	f Ukraine Concerning the International Radioecology La	boratory of the International Chornobly Center on
Con			,	e Executive Agent	8.9				
510	457	5/6/1998	5/4/2028	Intergovernmental			None	Nuclear Energy	US-Ukraine PNC
510				ě	ates of Ame	rica and		g Peaceful Uses of Nuclear Energy	ob chrame Tive
Con	nment:	3	•		3				
54	330	4/8/1994		Statement of Intent			None	Nuclear Energy	Shutdown Chernobyl Nuclear Power Plant
	Title:	Joint Statemen	nt About Pati	hs to the Soonest Possib	le Shutdow	n of the (Chernobyl Nuclear F	Power Plant	·
Con	nment:	Undertake nea	r-term joint a	nalysis of options for ea	rliest possib	le closur	e of the Chernobyl po	ower plant.	
Cou	ntry:	United K	<u> Kingdom</u>						
41	364	7/25/1995		Statement of Intent			None	Environmental Restoration and Waste Management	Nuclear Clean-Up
	Title:	Heads of Agre	ement for Co	poperation Between the	United Stat	es Depar	tment of Energy and	the United Kingdom Department of Trade and Industry of	on their Perspective Program for Nuclear Clean-
up		Coomenate thu	anah ahamina	of information on simil		oninted t	vith muslaan daaamm	issisming and alson up	
			ougn snaring	of information, on simil	ar issues ass	sociated v			
42 Manag	390 ement	9/5/1996		Statement of Intent			None	Environmental Restoration and Waste Management	Environmental Restoration and Waste
		Statement of 1	ntent betwee	n the United States Dep	artment of l	Energy a	nd the United Kingd	om Department of Trade and Industry	
Con	ment:	Establish fram	ework for co	operation in R&D of tech	hnologies fo	or the trea	tment, packaging, di	sposal of aluminum-based spent nuclear fuel.	
598	493	11/6/2000	11/6/2010	Primary DOE			None	Energy Research and Development	MOU on Energy Research and Development
		Memoruandu	m of Underst	anding Between The De	epartment o	f Energy	of the United States	of America and The Department of Trade and Industry of	f the United Kingdom of Great Britain and
Northe	Northern Ireland on Collaboration in Energy Research and Development								
Con	ıment:			-	-		e Energy and the was	ste-related management and the environment.	
634	529	11/17/200	•	Secondary DOE		598	Primary DOE	Environmental Management	AEA Technology plc
0.54	Title:	Implementing	Arrangemen	it between the Departme		gy of the	United States of Amo	erica and AEA Technology plc Under the Memorandum o dustry of the United Kingdom of Great Britain and Northo	f Understanding on Energy R&D between the

Comment:

	739 //	Start	End		Legally	Parent	D		D. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
ID	File#	Date	Date	Agreement Type	Binding	ID	Parent Type	Subject	Brief Description
611 Trade	506 and	9/17/2001	9/17/2006	Primary DOE			None	Nuclear Verification Technologies	MOU between DOE and the Department of
									Industry of the United Kingdom
	Title: Memorandum of Understanding between the Department of Energy of the United States of America and the Department of Trade and Industry of the United Kingdom of Great Britain and Northern Ireland Concerning the Development and Implementation of Nuclear Verification Technologies								
Cor	nment:								
637 Great	532	7/25/2002	7/25/2007	Primary DOE			None	Science and Technology	Implementing Agreement between DOE and
									Britain
for	Title:	Implementing	Arrangemen	it between the Departme	ent of Energ	gy of the l	United States of Ame	erica and the Secretary of State for Defence of the United K	ingdom of Great Britain and Northern Ireland
joi		Cooperation in	ı Research ar	nd Development of Cher	nical and H	Biological	Weapons Detection	and Protection-Related Technologies	
Cor	nment:								
638	533	7/3/2002	7/3/2007	Primary DOE			None	Science and Technology	Gov't to Gov't agreement between US and Great Britain
				vernment of the United Protection-Related Tech		merica an	nd the Government o	f the United Kingdom of Great Britain and Northern Irelan	nd for Cooperation in Research and Development
Cor	nment:								
652	547	3/10/2003	3/10/2008	Primary DOE			None	Fossil Energy	Cooperation in the Field of Fossil Energy
	Title: Implementing Arrangement between the Department of Energy of the United States of America and the Department of Trade and Industry of the United Kingdom of Great Britain and Northern Ireland to Cooperate in the Field of Fossil Energy Technology						ed Kingdom of Great Britain and Northern		
Cor	nment:								
143	278	6/11/1990	6/11/2000	Primary DOE			None	Energy Research and Development	Energy R&D
	Title: Memorandum of understanding between the U.S. Department of Energy and the Department of energy of the United Kingdom of Great Britain and Northern Ireland on collaboration in energy research and development								
Cor	nment:	To continue an	nd maximize	cooperation in energy re-	search and	developm	ent.		
Cou	Country: <u>Uzbekistan</u>								
628 Techno	523 ologies	3/12/2002		Primary DOE			None	Arms Control and Nonproliferation	Proliferation of Nuclear Materials and
				partment of Energy of t aterials and Technologi		States of A	merica and the Min	istry of Foreign Affairs of the Republic of Uzbekistan Conc	erning Cooperation in the area of Prevention of

End

Start

ID	File#	Date	Date	Agreement Type	Binding	ID	Parent Type	Subject	Brief Description
Cou	Country: <u>Venezuela</u>								
228	408	10/13/199	10/13/200	Primary DOE			None	Energy Research and Development	Energy Cooperation
	Title:	Agreement fo	r Energy Cod	pperation between the D	epartment o	f Energy	y of the United States	of America and the Ministry of Energy and Mines of	f the Republic of Venezuela
Con	ıment:	Supersedes the	e March 6, 19	980 Energy R&D agreem	nent				
443	73	7/10/1980	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Project Annex 1 - Crude Characterization
	Title:	Project Annex	x I between th	he Department of Energ	y of the Uni	ted State	es of America and the	Ministry of Energy and Mines of Venezuela for the	Joint Characterization of Heavy Crude Oils
Con	ment:	Exchange pub	lished technic	cal information and joint	ly modify or	r develop	new techniques for t	he characterization of heavy crude oil and heavy ends	
444	82	9/29/1980	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Project Annex 4 - Enhanced Oil Recovery
Therma	11								Processes
Th annu		Project Anne	x IV between	the Department of Ener	rgy of the U	nited Sta	tes of America and th	ne Ministry of Energy and Mines of the Republic of	Venezuela in the Area of Enhanced Oil Recovery
Therm		Process							
Con		Cooperate in toprocesses are of		n of additives to steam in	njection for t	he recov	ery of heavy oil there	by further efforts on the understanding of the thermal	processes and the reservoir and its fluids where these
445 Engine	137 ers	3/14/1984	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Project Annex 10 - Training of Petroleum
	Title:	Project Annex	x X between t	he Department of Energ	gy of the Un	ited Stat	es of America and th	e Ministry of Energy and Mines of the Republic of V	enezuela for On-Site Training of Petroleum Engineers
Con	ment:	Training of V	enezuelan pet	roleum engineers at Elks	s Hills Naval	l Petrole	um Facility.		
446	264	2/16/1989	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Project Annex 14 - Exchange of Energy-
Related	1								Personnel
	Title: Project Annex XIV between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Republic of Venezuela for the Exchange of Energy-Related								
Con	ment:	DOE and ME	MV shall coo	perate in using their goo	d offices and	d taking	all reasonable steps to	facilitate the exchange of energy-related personnel b	etween Venezuela and the U.S. in the areas of fossil
447 and	333	4/26/1994	10/13/200	Secondary DOE		228	Primary DOE	Fossil Energy	Project Annex 15 - Oil Recovery Information
									Tech. Transfer
				XV to the Memorandum Oil Recovery Informatio				ent of Energy of the United States of America and th	e Ministry of Energy and Mines of the Republic of

Legally Parent

Comment: Evaluate past and ongoing improved oil recovery projects in US and Venezuela; Data base compilation and exchange

ID	File#	Start Date	End Date	Agreement Type	Legally Par Binding II		Subject	Brief Description
499	448	8/15/1995	10/13/200	Secondary DOE	22	8 Primary DOE	Fossil Energy	Annex 16 - Oil and Petrochemical Ecology and Environmental Research
			, ,	XVI to the Memorandu il and Petrochemistry E		•	tment of Energy of the United States of America	and the Ministry of Energy and Mines of the Republic of
Cor	nment:	Information e	xchange, biot	echnology update and a	nalysis of industri	al and environmental t	rends.	
500	449	9/7/1995	10/13/200	Secondary DOE	22	8 Primary DOE	Fossil Energy	Annex 17 - Drilling Technology
			, ,	XVII to the Memorandi rilling Technology	um of Understand	ling between the Depa	rtment of Energy of the United States of America	a and the Ministry of Energy and Mines of the Republic of
Cor	nment:	Exchange info	ormation and	training of personnel on	drilling technolo	gies for more efficient	and cost-effective methods drilling.	
633 Techno	528 ologies	8/9/2001	8/9/2006	Secondary DOE	22	8 Primary DOE	Fossil Energy	Project Annex No. XVIII - Natural Gas

and

Title: Project Annex No. XVIII to the Agreement for Energy Cooperation between the Department of Energy of the United States of America and the Ministry of Energy and Mines of the Bolivarian Republic of Venezuela in the area of Natural Gas Technologies

Comment:

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United States Department of Energy Agreement Listing

Listing of Agreements Under the Aegis of: IEA

Exp Date	DOE Office	Agreement #	Title
1/2050	EE	000011	International Energy Agency Implementing Agreement on Solar Heating and Cooling Program
9/30/94	EE	000012	International Energy Agency Implementing Agreement on Solar Heating and Cooling Program - Annex 12: Building Energy Analysis and Design Tools for Solar Applications
8/31/94	EE	000013	International Energy Agency Solar Heating and Cooling Program - Annex 13: Advanced Low Energy Buildings
1/2050	EE	000018	International Energy Agency Hydrogen Agreement: Implementing Agreement for a Program of Research and Development on the Production and Utilization of Hydrogen
12/31/94	EE	000024	International Energy Agency Implementing Agreement on Solar Heating and Cooling Program
1/1/2050	EE	000025	International Energy Agency Annex 1: Improvement of Thermohydraulic Design and Performance in Heat Transfer Equipment
1/1/2050	EE	000026	International Energy Agency Implementing Agreement on Improved Structural Design and Reliability of Heat Transfer Equipment
1/1/2050	EE	000030	International Energy Agency Implementing Agreement for Cooperation in R&D of Wind Turbine Systems
1/1/2050	EE	000033	International Energy Agency Implementing Agreement - Annex 1: Combustion System Modeling and Diagnostics
1/1/2050	EE	000034	International Energy Agency Implementing Agreement - Annex 2: Optimal Design of Heat Exchanger Networks
1/1/94	EE	000039	International Energy Agency Implementing Agreement for a Program of R&D on Advanced Heat Pump Systems
1/1/2050	EE	000045	International Energy Agency Implementing Agreement on High Temperature Materials for Automotive Engines
1/1/2050	EE	000049	International Energy Agency Implementing Agreement for a Program of Research and Development on Energy

United States Department of Energy Agreement Listing

Listing of Agreements Under the Aegis of: IEA

Exp Date	DOE Office	Agreement #	Title
			Conservation in Buildings and Community Systems
1/1/2050	EE	000053	International Energy Agency Implementing Agreement for Pulp and Paper Industry
1/1/2050	EE	000055	International Energy Agency Alcohol and Alcohol Blends as Motor Fuel (Umbrella Agreement) including Annex 1: A Common Study
1/1/2050	EE	000058	International Energy Agency Implementing Agreement for Program on Bioenergy Research and Development
1/1/2050	ER	000107	International Energy Agency Implementing Agreement for a Program of Research and Development on Superconducting Magnets for Fusion Power
7/31/95	ER	000108	International Energy Agency Implementing Agreement on a Cooperative Fusion Program for the Investigation of Toroidal Physics in, and Plasma Technologies of, Tokomaks with Poloidal Divertors
7/31/95	ER	000109	International Energy Agency Implementing Agreement - Annex I: Joint Fusion Work on the Investigation of Toroidal Physics and Plasma Technologies in Asdex- Upgrade
12/31/97	ER	000110	International Energy Agency Implementing Agreement for Fusion Program of R&D on Plasma Wall Interaction in Textor
10/21/94	ER	000115	International Energy Agency Implementing Agreement for Program of R&D on Radiation Damage in Fusion Materials
10/21/95	ER	000116	International Energy Agency Implementing Agreement for Program of R&D on Radiation Damage on Fusion Materials - Annex 2: Experimentation on Radiation Damage in Fusion Materials
1/14/96	ER	000118	International Energy Agency Implementing Agreement on Fusion Cooperation Among the Three Large Tokomak Facilities (JET, JT-60, and TFTR)
4/2/2000	ER	000119	International Energy Agency Implementing Agreement - Annex 2: Joint Fusion Work on the Investigation of Plasma Confinement Physics and Technology in Reversed Field

United States Department of Energy Agreement Listing

Listing of Agreements Under the Aegis of: IEA

Exp Date	DOE Office	Agreement #	Title
			Pinches (RFP)
4/2/2000	ER	000123	International Energy Agency Implementing Agreement for a Fusion Program of R&D on Reversed Field Pinches (RFP)
4/2/2000	ER	000124	International Energy Agency Annex 1: Coordination of Fusion R&D Work on Research Field Pinches (RFP)
7/6/97	ER	000266	International Energy Agency Implementing Agreement on a Cooperative Program on Environmental Safety and Economic Aspects of Fusion Power
1/1/2050	FE	000154	International Energy Agency Coal Research Service Center Project
1/1/2050	FE	000159	International Energy Agency Implementing Agreement for Performance of Research, Development and Demonstration on Enhanced Recovery of Oil
1/1/2049	FE	000181	International Energy Agency Implementing Agreement for Program of Research on Coal Liquid Mixtures
6/21/90 6/20/95			International Energy Agency Implementing Agreement for Cooperative Programme for Assessing the Impacts of High- Temperature Superconductivity on the Electric Power Sector

Term of Agreement	Countries	Type of Agreement	Agreement Subject Area	DOE Record #
3/20/74 9/16/96	Australia, Austria, Belgium, Canada, Denmark, Commission of the Euratom, Finland, France, Germany (unified), Greece, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom	Umbrella	Nuclear data and computer programs	90
11/18/74 Indefinite	Australia, Austria, Belgium, Canada, Denmark, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Spain, Sweden, Switzerland, Turkey, United Kingdom	Umbrella/annex	Establishment of International Energy Program through implementation of an International Energy Agency	
1/1/75 Indefinite	Australia, Austria, Belgium, Canada, Denmark, Commission of the Euratom, Finland, Germany (unified), Italy, Japan, Netherlands, Spain, Sweden, United Kingdom	Implementing/ project	Coal research	154
7/28/75 Indefinite	Australia, Belgium, Canada, Denmark, Finland, Germany (unified), Greece, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, Turkey, United Kingdom	Implementing/ project	Energy conservation in buildings and community systems	49
11/20/75 Indefinite	Austria, Belgium, Germany, Italy, Netherlands, Spain, Sweden, Turkey, United Kingdom	Implementing/ project, annex	Establishment of the Coal Technical Information Service	154
12/31/75 Indefinite	Australia, Austria, Belgium, Canada, Denmark, Finland, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Spain, Sweden, United Kingdom (DOI/USGS, DOE and BLM)	Establishment of Coal Research Service	This Agreement incorporates four previous implementing agreements on: Mining Technology Clearinghouse (DOI BLM), Coal Economic Assessment Services (DOE), Coal Technical Information Services (DOE, DOI/ USGS), and World Coal Resources and Reserves Data Bank (DOI/USGS)	154
12/20/76 Indefinite	Australia, Austria, Belgium, Canada, Commission of the Euratom, Denmark, Germany (unified), Greece, Italy, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom	Implementing/ project, annexes	Solar heating and cooling systems	11
3/16/77 Indefinite	Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom	Implementing/ project, annex	Energy conservation/ emissions reduction in combustion	

Term of Agreement	Countries	Type of Agreement	Agreement Subject Area	DOE Record #
3/16/77 Indefinite	Austria, Germany, Sweden, Switzerland	Implementing/ project, annex	Energy conservation through energy cascading	
3/16/77 Indefinite	Canada, Germany (unified), Italy, Japan, Norway, Sweden, Switzerland, United Kingdom	Annex	Combustion system modeling and diagnostics	33
6/28/77 4/00/97	Germany, Netherlands, Norway, Sweden, Switzerland, United Kingdom	Implementing/ project, annex	Energy conservation in heat transfer and heat exchangers	26
10/6/77 12/31/96	Germany, Israel, Spain, Switzerland	Implementing/ project, annexes	Solar power and chemical energy systems	
10/6/77 12/31/97	Canada, Commission of the Euratom, Japan, Switzerland, Turkey	Implementing/ project, annex	Fusion energy, plasma wall interaction in Textor	110
10/6/77 Indefinite	Germany, Japan, Sweden, Switzerland, United Kingdom	Implementing/ project, annex	Man-made geothermal energy systems	
10/6/77 Indefinite	Austria, Canada, Denmark, Germany (unified), Italy, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, United Kingdom	Implementing/ project, annexes	Wind turbine systems	30
10/6/77 Indefinite	Germany (unified), Japan, Switzerland	Implementing/ project, annex	Superconducting magnets for fusion power	107
10/6/77 Indefinite	Belgium, Canada, EEC, Germany, Italy, Japan, Netherlands, Sweden, Switzerland	Implementing/ project, annexes	Production of hydrogen from water	18
4/00/78 Indefinite	Belgium, Canada, Ireland, Sweden	Implementing/ project, annex	Forestry energy	
4/13/78 Indefinite	Canada, Ireland, Japan, United Kingdom	Implementing/ project, annex	Wave power R&D	
5/24/78 Indefinite	Belgium, Ireland, Sweden, United Kingdom	Implementing/ project,	Biomass conversion technical information service	58
7/27/78 Indefinite	Germany, New Zealand, Sweden, United Kingdom	Implementing/ project, annex	Energy conservation in cement manufacture	
7/27/78 Indefinite	Austria, Belgium, Canada, Denmark, Germany (unified), Italy, Japan, Netherlands, Spain, Sweden, Switzerland, United Kingdom	Implementing/ project, annex	Advanced heat pump systems	39
9/22/78 Indefinite	Belgium, EEC, Denmark, Germany, Netherlands, Sweden, Switzerland	Implementing/ project, annexes	Energy conservation through energy	60

Term of Agreement	Countries	Type of Agreement	Agreement Subject Area	DOE Record #
			storage	
1/1/79 Indefinite	Canada, Venezuela	Other	Heavy crude and tar sands	160
5/22/79 6/30/97	Germany, Japan, Sweden	Implementing/ project, annexes	High temperature materials for automotive engines	
5/22/79 Indefinite	Australia, Austria, Canada, Denmark, Egypt, France, Germany, Japan, Norway, United Kingdom	Implementing/ project, annex	Enhanced recovery of oil	159
5/22/79 Indefinite	Italy, Mexico, New Zealand	Implementing/ project, annex	Geothermal equipment	
10/21/80 10/21/94	Canada, EEC, Japan, Switzerland	Ongoing Agreement	Radiation Damage in Fusion Materials	115
11/13/80 Indefinite	Australia, Belgium, Denmark, EEC, Germany, Italy, Norway, Sweden, Switzerland	Implementing/ project, annexes	Energy technology systems analysis	268
2/18/81 Indefinite	Belgium, Canada, Japan, Netherlands, Norway, Spain, Sweden, United Kingdom	Implementing/ project, annexes	Energy conservation in the pulp and paper industry	53
1/1/81 1/1/2049	Canada, Japan, Netherlands, Spain, Sweden, United Kingdom	Implementing/ project, annex	Coal/oil liquid mixtures	181
12/17/82 Indefinite	Commission of the Euratom	Letters of Cooperation: Information Exchange	Renewable energy sources	277
12/31/84 Indefinite	Belgium, Canada, Finland, France, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, United Kingdom	Implementing/ project, annexes	Alternative motor fuels	55
3/27/85 Indefinite	Australia, Canada, Denmark, Finland, Germany, Italy, Netherlands, Sweden, United Kingdom		Coal Combustion Sciences	136
12/15/86 12/15/96	Commission of the Euratom		Magnetic fusion power system	103
1/26/87 Indefinite	Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom		Energy technology data exchange	3
3/15/87 3/15/93	Agreement Mult		Fossil Fuel Multiphase Flow Sciences	174
3/18/88 3/18/98			Information Center for the Analysis and Dissemination of Demonstrated Energy Technologies	44

Term of Agreement	Countries	Type of Agreement	Agreement Subject Area (CADDET)	DOE Record #
1/1/89 Indefinite	Austria, Belgium, Canada, Denmark, Finland, Ireland, Italy, Japan, New Zealand, Norway, Sweden, United Kingdom	Implementing/ project, annex	Bioenergy research and development	58
4/3/90 4/2/00	Commission of the Euratom, Japan	Implementing/ project	Fusion Energy/ Reversed Field Pinches (RFP)	123
4/3/90 4/2/00	Commission of the Euratom, Japan	Annex 1	Fusion Energy/ Reversed Field Pinches (RFP)	124
4/3/90 4/2/00	Commission of the Euratom, Japan	Annex 2	Fusion Energy/ Reversed Field Pinches (RFP)	119
7/5/91 7/4/96	Russia, Former Soviet Union	MOU/MOC	Magnetic confinement fusion	91
10/1/91 10/1/96	France, Germany (unified), United Kingdom	Umbrella	Liquid metal cooled fast breeder reactors	200
10/22/91 10/22/96	Czech Republic, Slovak Republic	Science and Technology Agreement	Fusion energy	259
11/20/91 11/19/01	Canada, Denmark, Commission of the Euratom, Finland, Italy, Japan, Netherlands, Norway, Spain, Sweden, United Kingdom	Implementing/ project, annex	Greenhouse gases derived from fossil fuel use	231
7/6/92 7/6/97	Canada, Commission of the Euratom, Japan	Implementing/ project, annexes	Environmental safety and economic aspects of fusion power	232
7/6/92 7/6/97	Canada, Commission of the Euratom, Japan	Umbrella	Environmentally economic aspects of fusion power	266
7/21/92 7/20/98	EEC, Germany, Japan, the former Soviet Union		Controlled thermonuclear fusion	233
11/24/92 11/11/98	Austria, Canada, Denmark, EEC, Finland, France, Germany, Israel, Italy, Japan, Korea, Netherlands, Portugal, Sweden, Switzerland, Turkey, United Kingdom	Implementing/ project, annexes	Photovoltaic power systems	
6/13/94 6/13/99	Canada, Japan	Implementing/ project, annex	Nuclear technology of fusion reactors	
7/12/94 7/12/99	Austria, Canada, France, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom	Implementing/ project, annexes	Electric vehicle (EV) technologies	

Exp Date	DOE Office	Agreement #	Title
9/19/95	EM	000083	Memorandum of Cooperation in the Fields of Environmental Restoration and Waste Management between the United States of America and the Union of Soviet Socialist Republics
7/4/96	ER	000091	Memorandum of Cooperation in the Field of Magnetic Confinement Fusion Between U.S. Department of Energy and the Former Soviet Union Ministry of Atomic Power and Industry
7/4/96	ER	000126	Memorandum of Cooperation in the Field of Research on Fundamental Properties of Matter between the U.S. Department of Energy and the Ministry of Atomic Power and Industry of the Former Soviet Union
1/1/2050	FE	000160	U.S. Department of Energy, Canada and Venezuela Agreement for Unitar/UNDP Information Center for Heavy Crude and Tar Sands
10/1/96	NE	000200	U.S. Department of Energy, German Ministry of Research and Technology, Commission of Atomic Energy of France, and United Kingdom Atomic Energy Agency on Exchange of Information and Cooperation in Field of R&D of Liquid Metal Cooled Fast Breeder Reactors
	NE	000250	Proposed New Agreement - United States, Russian Federation and Ukraine Lisbon Initiative on the Review and Assessment of Russian Nuclear Reactor Design and Safety
10/22/96	РО	000259	U.S., Czech Republic and Slovak Republic Science and Technology Agreement

Section J Appendix K

ATTACHMENT J.11

APPENDIX K

KEY PERSONNEL

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

Section J Appendix K

KEY PERSONNEL

Laboratory Director

Deputy Director

Division Director for Science & Technology

Associate Director of Sponsored Research

Administration

Thomas Barton

Bruce Harmon

Alan Goldman

Debra Covey

Manager – Environment, Safety, Health and Assurance and Program Director

- Safeguards and Security

Thomas Wessels

Facilities Manager Budget Officer Legal Counsel Mark Grootveld Ila Haugen Paul Tanaka

Section J Appendix L

ATTACHMENT J.12

APPENDIX L PERFORMANCE GUARANTEE

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

Section J Appendix L

PERFORMANCE GUARANTEE AGREEMENT

For value received, and in consideration of, ar (the Government) to enter into Contract DE-Adoperation of AMES Laboratory (Contract dated	C02-07CH11358 for the management and
and between the Government and	, , ,
	Guarantor), a corporation incorporated in
the State of with its principal pla	ice of business at
hereby un	conditionally guarantees to the
Government (a) the full and prompt payment a	and performance of all obligations,
accrued and executory, which Contractor pres	ently or hereafter may have to the
Government under the Contract, and (b) the fu	all and prompt payment and performance
by Contractor of all other obligations and liabil	ities of Contractor to the Government,
fixed or contingent, due or to become due, dire	ect or indirect, now existing or hereafter
and howsoever arising or incurred under the C	Contract, and (c) Guarantor further agrees
to indemnify the Government against any loss	•
expenses it may incur as a result of the enforce	·
Government of any of its rights and remedies	•
default by Contractor thereunder, and/or as a	result of the enforcement or attempted
enforcement by the Government of any of its r	ights against Guarantor hereunder.

Guarantor has read and consents to the signing of the Contract. Guarantor further agrees that Contractor shall have the full right, without any notice to or consent from Guarantor, to make any and all modifications or amendments to the Contract without affecting, impairing, or discharging, in whole or in part, the liability of Guarantor hereunder.

Guarantor hereby expressly waives all defenses which might constitute a legal or equitable discharge of a surety or guarantor, and agrees that this Performance Guarantee Agreement shall be valid and unconditionally binding upon Guarantor regardless of (i) the reorganization, merger, or consolidation of Contractor into or with another entity, corporate or otherwise, or the liquidation or dissolution of Contractor, or the sale or other disposition of all or substantially all of the capital stock, business or assets of Contractor to any other person or party, or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against Contractor, or adjudication of Contractor as a bankrupt, or (iii) the assertion by the Government against Contractor of any of the Government's rights and remedies provided for under the Contract, including any modifications or amendments thereto, or under any other document(s) or instrument(s) executed by Contractor, or existing in the Government's favor in law, equity, or bankruptcy.

Guarantor further agrees that its liability under this Performance Guarantee Agreement shall be continuing, absolute, primary, and direct, and that the Government shall not be

Section J Appendix L

required to pursue any right or remedy it may have against Contractor or other Guarantors under the Contract, or any modifications or amendments thereto, or any other document(s) or instrument(s) executed by Contractor, or otherwise. Guarantor affirms that the Government shall not be required to first commence any action or obtain any judgment against Contractor before enforcing this Performance Guarantee Agreement against Guarantor, and that Guarantor will, upon demand, pay the Government any amount, the payment of which is guaranteed hereunder and the payment of which by Contractor is in default under the Contract or under any other document(s) or instrument(s) executed by Contractor as aforesaid, and that Guarantor will, upon demand, perform all other obligations of Contractor, the performance of which by Contractor is guaranteed hereunder.

Guarantor agrees to assure that it shall cause this Performance Guarantee Agreement to be unconditionally binding upon any successor(s) to its interests regardless of (i) the reorganization, merger, or consolidation of Guarantor into or with another entity, corporate or otherwise, or the liquidation or dissolution of Guarantor, or the sale or other disposition of all or substantially all of the capital stock, business, or assets of Guarantor to any other person or party, or (ii) the institution of any bankruptcy, reorganization, insolvency, debt agreement, or receivership proceedings by or against Guarantor, or adjudication of Guarantor as a bankrupt.

Guarantor further warrants and represents to the Government that the execution and delivery of this Performance Guarantee Agreement is not in contravention of Guarantor's Articles of Organization, Charter, by-laws, and applicable law; that the execution and delivery of this Performance Guarantee Agreement, and the performance thereof, has been duly authorized by the Guarantor's Board of Directors, Trustees, or any other management board which is required to participate in such decisions; and that the execution, delivery, and performance of this Performance Guarantee Agreement will not result in a breach of, or constitute a default under, any loan agreement, indenture, or contract to which Guarantor is a party or by or under which it is bound.

No express or implied provision, warranty, representation or term of this Performance Guarantee Agreement is intended, or is to be construed, to confer upon any third person(s) any rights or remedies whatsoever, except as expressly provided in this Performance Guarantee Agreement.

In witness thereof, Guarantor has caused this Performance Guarantee Agreement to be executed by its duly authorized officer, and its corporate seal to be affixed hereto on

NAME OF CORPORATION

NAME AND POSITION OF OFFICIAL

EXECUTING PERFORMANCE

Section J Appendix L

GUARANTEE AGREEMENT ON BEHALF OF GUARANTOR

ATTESTATION INCLUDING APPLICATION

OF SEAL BY AN OFFICIAL OF

GUARANTOR AUTHORIZED TO AFFIX

CORPORATE SEAL

Section J Appendix M

ATTACHMENT J.13

APPENDIX M

CONTRACT GUIDANCE FOR PREPARATION OF DIVERSITY PLAN

Applicable to the Operation of AMES Laboratory

Contract No. DE-AC02-07CH11358

Section J Appendix M

Contract Guidance for Preparation of Diversity Plan

This Guidance is to assist the Contractor in understanding the information being sought by the Department for each of the Diversity elements and where these issues may already be addressed in the contract. To the extent these issues are already addressed in the contract, the Contractor need only cross reference the location.

Contractor's Workforce

The Department's contracts contain clauses on Equal Employment Opportunity (EEO) and Affirmative Action (AA). The Plan may discuss how the contractor has or plans to establish and maintain result-oriented EEO and AA programs in accordance with the requirements of these clauses, and how the contractor's organization includes or plans to include elements/dimensions of diversity that might enhance such programs.

Community Involvement and Outreach

The Plan may discuss the contractor's strategies to foster relationships with Minority Educational Institutions and other institutions of higher learning (e.g., Historically Black Colleges and Universities, Hispanic serving institutions, and Native American institutions) to increase their participation in federally sponsored programs through subcontracting opportunities, research and development partnerships, and mentor-protégé relationships. The contractor's Plan may also discuss cooperative programs which encourage under represented students to pursue science, engineering, and technology careers.

Educational Outreach

The Plan may discuss the contractor's community relations activities in support of diverse elements of the local community, for example: support for science, mathematics, and engineering education; support for community service organizations; assistance to governmental and community service organizations and for equal opportunity activities; and community assistance in connection with work force reduction plans; strategic partnerships with professional and scientific organizations to enhance recruitment into all levels of the organization; and use of direct sponsorship or making individual employees available to work with a specific community activity.

<u>Subcontracting</u>

The contract contains FAR clause 52.219-9, entitled, "Small Business Subcontracting Plan," and other small business related clauses.

Section J Appendix M

The Plan may discuss outreach activities and achievements for enhancing subcontracting opportunities for small businesses, small disadvantaged businesses (e.g., small businesses owned and controlled by socially and economically disadvantaged individuals, tribes, Alaska Native Corporations, Native Hawaiian Organizations, or Community Development Corporations), small business firms located in historically underutilized business zones, woman-owned small businesses, and veteran-owned (including service-disabled veteran-owned) small businesses.

The Plan may also discuss actual or planned participation in the Department's Mentor-Protégé Program.

Economic Development (including technology transfer)

This contract includes terms and conditions dealing with technology transfer. Planning or activities developed under such clauses may apply to this element of the Diversity Plan. Additionally, subcontracting policies and activities undertaken or planned by the contractor with small, small disadvantaged, woman-owned, and service-disabled veteran small business concerns for the purpose of assisting the economic development of, or transferring technology to, such business concerns may be discussed.

Prevention of Profiling Based on Race or National Origin

Profiling pertains to those practices that scrutinize, target or treat employees or applicants for employment differently or single them out or select them for unjustified additional scrutiny, based on race or national origin. The Plan may discuss the contractor's approach to preventing prohibited profiling practices, including strategies for early detection of potential profiling in the contractor's business activities (e.g., personnel actions, security clearances).

The Plan may also discuss procedures intended to expedite timely resolution of adverse actions and methodologies for benchmarking, sharing best practices, or lessons learned in the prevention of prohibited profiling. Forums available to employees for expressing concerns or issues about prohibited profiling practices in the workplace.