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MANAGEMENT AND OPERATING CONTRACT FOR THE LOS ALAMOS NATIONAL LABORATORY

NATIONAL NUCLEAR SECURITY ADMINISTRATION

CONTRACT NO. DE-AC52-06NA25396

DECEMBER 21, 2005

SOLICITATION, OFFER AND AWARD	1. THIS CONTRACT IS NOT A RATED ORDER UNDER DPAS (15 CFR 350)	RATING DO E-2 and DO F-2	PAGE OF PAGES 1 / 1

2. CONTRACT NO.	3. SOLICITATION NO.	4. TYPE OF SOLICITATION	5. DATE ISSUED	6. REQUISITION/PURCHASE NO.
DE-AC52-06NA25396	DE-RP52-05NA25396	☐ SEALED BID (IFB) ☒ NEGOTIATED (RFP)	May 19, 2005	See Clause B-2

7. ISSUED BY CODE MOSD
U.S. DEPARTMENT OF ENERGY
NATIONAL NUCLEAR SECURITY ADMINISTRATION
NNSA SERVICE CENTER – ALBUQUERQUE
M&O CONTRACT SUPPORT DEPARTMENT
PO BOX 5400, ALBUQUERQUE, NM 87185-5400

8. ADDRESS OFFER TO *(If other than Item 7)*
U.S. DEPARTMENT OF ENERGY
NATIONAL NUCLEAR SECURITY ADMINISTRATION
NNSA SERVICE CENTER – ALBUQUERQUE
ATTN: MICHAEL G. LOERA
CONTRACTING OFFICER
MAIL STOP: MOSD
PO BOX 5400, ALBUQUERQUE, NM 87185-5400

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

SOLICITATION

9. Sealed offers in original and (number and kind of copies are specified in Section L) copies for furnishing the supplies and/or services in the Schedule will be received at the place specified in item 8, until **1400** hour local time on **July 19, 2005.**

10. FOR INFORMATION CALL:	A. NAME	B. TELEPHONE *(Include area code)* *(NO COLLECT CALLS)*	C. E-MAIL ADDRESS
	Michael Loera **Contracting Officer**	**(505) 845-5747**	**mloera@doeal.gov**

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OFFER *(Must be fully completed by offeror)*

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within See Section L Provision entitled "Offer Acceptance Period" calendar days *(60 calendar days unless a different period is inserted by the offeror)* from the date of receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT Not Applicable	10 CALENDAR DAYS %	20 CALENDAR DAYS %	30 CALENDAR DAYS %	CALENDAR DAYS %

14. ACKNOWLEDGEMENTS OF AMENDMENTS *(The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:*	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE
	001	June 15, 2005		
	002	July 12, 2005		

15A. NAME AND ADDRESS OF OFFEROR	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER *(Type or print)*
	Los Alamos National Security, LLC **50 Beale Street** **San Francisco, California 94105**		**Dr. Michael R. Anastasio** **President** **Los Alamos National Security, LLC**

15B. TELEPHONE NO. *(Include area code)*	15C. CHECK IF REMITTANCE ADDRESS	17. SIGNATURE	18. OFFER DATE
PHONE (925) 424-3951	☐ IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE.		**June 19, 2005**

AWARD *(To be completed by Government)*

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION See Clause B-2
22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: Not Applicable ☐ 10 U.S.C. 2304(c) ( ) ☐ 41 U.S.C. 253(c) ( )		23. SUBMIT INVOICES TO ADDRESS SHOWN IN *Not Applicable* — ITEM
24. ADMINISTERED BY *(If other than Item 7)* CODE See Section G Clause entitled "Government Contacts"		25. PAYMENT WILL BE MADE BY CODE See Section I Clause entitled "Payments and Advances"
26. NAME OF CONTRACTING OFFICER *(Type or print)* MICHAEL G. LOERA CONTRACTING OFFICER		27. UNITED STATES OF AMERICA *(Signature of Contracting Officer)* — 28. AWARD DATE DEC 21 2005

IMPORTANT - Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

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PREVIOUS EDITION IS UNUSABLE

33-134

STANDARD FORM 33 (REV. 9-97)
Prescribed by GSA FAR (48 CFR) 53.214(c)

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Part I - The Schedule

Section B - SUPPLIES OR SERVICES AND PRICES/COSTS

B-1 SERVICES BEING ACQUIRED

The Offeror (also referred to herein as "Contractor") shall, in accordance with the terms and conditions of this Contract, provide the personnel, equipment, materials, supplies, and services, (except as may be furnished by the Government) and otherwise do all things necessary for, or incident to providing its best efforts to effectively, efficiently and safely manage and operate the Los Alamos National Laboratory (hereinafter "the Laboratory" or "LANL") for the U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA).

B-2 CONTRACT TYPE AND VALUE **[Modified by: Change to Obligation of Funds Mods; NNSA letters and Mods incorporating Estimated Cost and Fee for Reimbursable Work (WFO); Mods for Performance Fee Awards; Mods M083, M139, M151, M155, M165 and M180.]**

(a) This Contract is a Cost-Reimbursement Management and Operating type contract that includes Fixed Fees and a Performance Incentive Fee for the Basic Term of the Contract and the Award Term earned periods. Fee is associated with the DOE/NNSA work and Reimbursable work. DOE/NNSA Work as used herein is the work performed by the Contractor that is funded out of the Laboratory's Table included in the President's annual budget request for LANL. Reimbursable work as used herein is the work performed by the Contractor that is not funded out of the Laboratory's Table included in the President's annual budget request for LANL.

(b) Total Estimated Cost for the Contract's Transition Term.

(1) The Total Estimated Cost for the Transition Term of the Contract is:

Transition Term of the Contract	Total Estimated Cost
01Dec05 – 31May06	$12,584,963.00

(2) The Transition Term effort shall be performed on a Cost-Reimbursement, no fee basis.

(c) Total Estimated Cost, including Fee, for the Contract's Basic Term related to the DOE/NNSA work effort, excluding Reimbursable work.

(1) The Total Estimated Cost, including fee, for the DOE/NNSA work effort, excluding Reimbursable work, for the Basic Term of the Contract is:

Basic Term of the Contract	Total Estimated Cost and Fee
01Jun06 – 30Sep06	$ 610,730,667
01Oct06 – 30Sep07	$1,817,120,982
01Oct07 – 30Sep08	$1,822,433,640
01Oct08 – 30Sep09	*$1,832,192,000
01Oct09 – 30Sep10	$1,832,192,000
01Oct10 – 30Sep11	**$1,832,192,000
01Oct11 – 30Sep12	**$1,832,192,000
01Oct12 – 30Sep13	$1,832,192,000

*Note: In FY2009 the total Congressional Appropriation was $2,223,805,465. This exceeded the Total Estimated Cost and Fee by more than 10%. As a result the Maximum Available Fee increased in FY2009 by $16,062,855. This amount was bilaterally agreed to be applied in FY2010 and FY2011 respectively.

**Note: In FY2011, the total Congressional Appropriation was $2,242,783,930. This exceeded the Total Estimated Cost and Fee by more than 10%. As a result the Maximum Available Fee increased in FY2011 by $15,395,584. It was bilaterally agreed to apply $13,000,000 to FY2011 per Contract Modification #173 and to add the remaining $2,395,584 to the FY2012 Maximum Available Fee pool.

(2) The Maximum Available Fee related to the DOE/NNSA work effort, excluding Reimbursable work, for the Basic Term of the Contract is:

Contract Period	**Maximum Available Fee**			**Earned Fee**		
	Fixed Fee	**At Risk Fee**	**Total Fee**	**Fixed Fee**	**At Risk Fee**	**Total Fee Earned ***
01Jun06 – 30Sep06			$17,788,272			$17,788,272
01Oct06 – 30Sep07	$21,984,000	$51,296,000	$73,280,000	$21,984,004	$36,224,982	$58,208,986
01Oct07 – 30Sep08	$21,984,000	$51,296,000	$73,280,000	$21,984,000	$41,537,640	$63,521,640
01Oct08 – 30Sep09	$21,984,000	$51,296,000	$73,280,000	$21,984,000	$43,263,531	$65,247,531
01Oct09 – 30Sep10	$23,329,285	$54,435,000	*$77,764,285	$23,329,285	$44,262,497	$67,591,782
01Oct10 – 30Sep11	$26,009,570	$60,688,999	**$86,698,569	$26,009,570	$50,140,626	$76,150,196
01Oct11 – 30Sep12	$19,954,675	$46,560,909	***$66,515,584			
01Oct12 – 30Sep13			$59,540,000			

*Note: This amount is the sum of the original FY 10 fee ($68,700,000), plus $9,064,285 due to increase in Total Estimated Cost and Fee during FY 09.

**Note: This amount is the sum of the original FY 11 fee ($68,700,000), plus $6,998,570 due to increase in Total Estimated Cost and Fee during FY 09. Also note that the MAF was bilaterally reduced by $2,000,000, for a future project resulting in $73,698,570 MAF at the beginning of FY11. Contract Modification #173 added $13,000,000 to the MAF due to an increase in Total Estimated Cost and Fee during FY11. It was bilaterally agreed that any additional FY11 fee adjustment ($2,395,587) would be applied to the FY12 MAF in a future modification.

***Note: This amount is the sum of the original FY12 Fee ($64,120,000), plus $2,395,584, the final FY11 incremental fee greater than $13,000,000, resulting in $66,515,584 of Total Fee for FY2012.

(3) Since the Maximum Available Fee has been established, there will be no

annual negotiation of the Maximum Available Fee. However, in the event the Congressional appropriation for a particular fiscal year deviates by more than (plus or minus) 10% from the Total Estimated Cost and Fee, the Contracting Officer shall unilaterally modify the Contract to adjust the Maximum Available Fee for DOE/NNSA related work amounts, except for Reimbursable work, utilizing the calculation method described below:

$$\frac{\text{Annual Appropriation}}{\text{Estimated Fee Base}} \times \text{Maximum Available Fee} = \text{Adjusted Maximum Available Fee for that Year.}$$

(4) For the Fiscal Year (FY) 2006 period, the Maximum Available Fee shall be Fixed Fee. For FY 2007 through FY 2013, 30% of the Maximum Available Fee will be applied to Fixed Fee and 70% of the Maximum Available Fee will be applied to Performance Incentive Fee.

(5) The Contractor shall review, near the end of every FY Quarter, the relevant Congressional appropriation and funds applied to this Contract for purposes of paragraphs (c)(3) and (d)(4) of this clause. The Contractor shall notify the Contracting Officer in writing within 10 business days following the end of each FY Quarter if the 10% threshold has been reached and adjustment in fee(s) is warranted.

(i) Upon Contracting Officer review and approval of the Contractor's written notification that the 10% threshold has been reached (plus or minus), the adjustment to fee(s) will be calculated by the Contracting Officer in accordance with the method described in either paragraph (c)(3) or paragraph (d)(4), as appropriate. The resultant calculation will be documented by an appropriate modification to the Contract.

(ii) If the total funding is expected to continue changing either positively or negatively, the parties may agree to defer calculation of the incremental fee change amount, but no beyond ten (10) business days following the close of the fiscal year. For (c)(3) only, any calculation delayed to the last quarter of the fiscal year may result in modification of the fee in accordance with paragraph (c)(6) below. Once the amount is calculated and the amount fixed in dollars, the parties will negotiate how to apply the change to either the current or future Performance Evaluation Plan(s) (PEP), as appropriate, though the Government retains the right, specified elsewhere in the Contract, to unilaterally modify the PEP, if required.

(6) For any adjustment of the Maximum Available Fee made per paragraph (c)(3), the parties may mutually agree to defer the adjustment of the

Maximum Available Fee, in part, or in whole, to a future year(s) in order to more readily align to the sequence of the funded work, avoid disruption of the indirect rate late in the fiscal year, or any other reason deemed by the parties to be reasonable and in concert with the effective execution of this Contract.

(d) The Maximum Available Fee related to the DOE/NNSA work effort, excluding Reimbursable work, for the Contract's Award Term period earned by the Contractor is:

(1) For the Award Term period specified in (d)(2) below, 30% of the Maximum Available Performance Incentive Fee will be applied to Fixed Fee and 70% of the Maximum Available Performance Incentive Fee will be applied to Performance Incentive Fee.

(2) The Fixed Fee for each Award Term period earned by the Contractor related to the DOE/NNSA work effort, excluding for Reimbursable work, is 0.90% of the Total Estimated Cost. The Total Estimated Cost is the Laboratory Table amount included in the President's Budget request to Congress, divided by 1.03.

Contract Period	Total Estimated Cost	Fixed Fee
01Oct13 – 30Sep14	$ *	$ *

*To be completed by the Contracting Officer prior to the applicable award term period.

(3) The Maximum Available Performance Incentive Fee for each Award Term period earned by the Contractor related to the DOE/NNSA work effort, excluding Reimbursable work, is 2.1% of the Total Estimated Cost. The Total Estimated Cost is the Laboratory Table amount included in the President's Budget request to Congress, divided by 1.03. (FY07 fee can be found in Mod. M040).

Contract Period	Total Estimated Cost	Maximum Available Performance Incentive Fee
01Oct13 – 30Sep14	$ *	$ *

*To be completed by the Contracting Officer prior to the applicable award term period.

The sum of the Total Estimated Cost plus the Fixed Fee and Maximum Available Performance Incentive Fee is the total Laboratory Table amount.

(4) In the event Congressional appropriation deviates by more than (plus or minus) 10% from the applicable fiscal year Laboratory Table in the

President's Budget annual requests, the Contracting Officer shall unilaterally modify the Contract to adjust the Fixed Fee and Maximum Available Performance Incentive Fee for DOE/NNSA related work, except for Reimbursable work. The fee will be adjusted in proportion to the change between the President's Budget and the Congressional appropriation.

(e) Estimated Cost and Fee for Reimbursable Work.

(1) The Fixed Fee for FY 2006 and each subsequent fiscal year during the Basic Term of the Contract and for each Award Term period earned by the Contractor, will be established by NNSA prior to the commencement of the applicable fiscal year and will be incorporated into paragraph (e)(2) below. The Fixed Fee for each fiscal year shall be 2.5% of the Estimated Cost of NNSA's total estimated budget for Reimbursable work.

(2) The Estimated Cost and Fixed Fee related to the Reimbursable work effort for the specified period is:

Contract Period	Estimated Cost	Fixed Fee	Total Cost Plus Fixed Fee
01Jun06 – 30Sep06	$ 88,310,784	$2,207,770	$ 90,518,554
01Oct06 – 30Sep07	$295,723,911	$7,393,098	$303,117,009
01Oct07 – 30Sep08	$292,171,316	$7,304,283	$299,475,599
01Oct08 – 30Sep09	$275,434,538	$6,885,864	$282,320,402
01Oct09 – 30Sep10	$263,682,551	$6,592,064	$270,274,615
01Oct10 – 30Sep11	$303,019,246	$7,575,481	$310,594,727
01Oct11 – 30Sep12	$319,796,393	$7,994,910	$327,791,303
01Oct12 – 30Sep13			

(f) Provisional Payment of Fee.

(1) For the DOE/NNSA related work, except for Reimbursable work, the Fixed Fee for FY 2006 for non-transition period related work performance shall be paid in equal monthly increments for the actual performance period where the Contractor is managing and operating the Laboratory. The Fixed Fee for FY 2007 and each subsequent fiscal year shall be paid monthly at the rate of one-twelfth (1/12) of the annual amount per month. Such payment amounts are to be drawn down by the Contractor from the Contract's special financial institution account in monthly installments on the last day of each month.

(2) (i) The Performance Incentive Fee for DOE/NNSA related work, except for Reimbursable work, is authorized for draw down by the Contractor from the Contract's special financial institution account as follows:

(I) in monthly provisional fee payments equivalent to 3% of the Maximum Available Performance Incentive Fee, and

(II) the balance, if any, upon issuance of the Contracting Officer's notification in accordance with the Section H Clause entitled "Performance Incentives."

(ii) If the provisional payments made in (2)(i) above exceed the Performance Incentive Fee earned determination, the Contractor shall remit any balance due payable to the Government in accordance with directions to be provided by the Contracting Officer.

(3) The Fixed Fee for Reimbursable work for FY2011 and each subsequent fiscal year shall be paid in equal monthly increments at the rate of one-twelfth (1/12) of the annual amount per month.

(g) Except for the condition identified in (c)(3) and (d)(4) above, there shall be no adjustment in the amount of the Contractor's fee by reason of differences between any estimate of cost for performance of the work under this Contract and the actual cost of performance of that work.

(h) Pursuant to the Contract's Section I Clause entitled "Obligation of Funds," the total amount obligated by the Government is identified in the latest funding modification.

(i) (1) If the Contractor is part of a teaming arrangement as described in Federal Acquisition Regulation (FAR) 9.601, the team shall share in the Fixed Fee and Performance Fee structure in paragraphs (c), (d) and (e) of this clause. Separate additional subcontractor fees for individual team members will not be considered an allowable cost under the Contract.

(2) If a subcontractor, supplier, or lower-tier subcontractor is a wholly owned, majority owned, or affiliate of any team member, any fee or profit paid to such entity will not be considered an allowable cost under this Contract unless otherwise approved by the Contracting Officer.

B-3 American Recovery and Reinvestment Act Work Values [Modified by Mod No M068]

Total funds authorized including maximum available performance fee, if any, for work funded under the American Recovery and Reinvestment Act (Recovery Act).

Year	Total Funds Authorized
2009	Work Authorization RA-09-001: TBD*
2009	Work Authorization RA-09-002: TBD*
2009	Work Authorization RA-09-003; TBD*

*(*Amount will be identified upon definitization of the Work Authorization)*

The Contractor shall not start work funded under the Recovery Act until the Contractor receives a Work Authorization and funds are placed into the Work Authorization. The contractor is authorized to incur costs not to exceed the amount as stipulated under each Work Authorization, consistent with the other Contract terms and conditions, including the Work Authorization(s). Additional fee, if any, for the performance of work under the Recovery Act shall be determined by NNSA in accordance with Section B-2 and applicable NNSA policy.

Section C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

C-1 STATEMENT OF WORK

The work to be performed is set forth in the Contract's Section J Appendix entitled "Statement of Work."

Section D - PACKAGING AND MARKING - Reserved

Section E - INSPECTION AND ACCEPTANCE

E-1 FAR 52.246-5 INSPECTION OF SERVICES – COST-REIMBURSEMENT (APR 1984)

(a) *Definition.* "Services," as used in this clause, includes services performed, workmanship, and material furnished or used in performing services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all places and times during the term of the

contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If any of the services performed do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, for no additional fee. When the defects in services cannot be corrected by reperformance, the Government may-
   (1) Require the Contractor to take necessary action to ensure that future performance conforms to contract requirements; and
   (2) Reduce any fee payable under the contract to reflect the reduced value of the services performed.

(e) If the Contractor fails to promptly perform the services again or take the action necessary to ensure future performance in conformity with contract requirements, the Government may-
   (1) By contract or otherwise, perform the services and reduce any fee payable by an amount that is equitable under the circumstances; or
   (2) Terminate the contract for default.

E-2 FAR 52.246-9 INSPECTION of RESEARCH and DEVELOPMENT (Short Form) (APR 1984)

The Government has the right to inspect and evaluate the work performed or being performed under the Contract, and the premises where the work is being performed, at all reasonable times, and in a manner that will not unduly delay or disrupt the work. If the Government performs inspection or evaluation on the premises of the Contractor or a subcontractor, the Contractor shall furnish and shall require subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

E-3 INSPECTION AND ACCEPTANCE

The Contracting Officer or any other duly authorized representative shall accomplish inspection of all activities and acceptance for all work and effort under this Contract.

Section F - DELIVERIES OR PERFORMANCE

F-1 PLACE OF PERFORMANCE

The work under this Contract is to be carried out at a variety of locations within and outside the United States, but the principal place of performance will be at the Laboratory in Los Alamos County, New Mexico.

F-2 PERIOD OF PERFORMANCE **[Modified by Modification Nos. M064, M151, M155 and M180]**

(a) The Contract's period of performance includes, unless sooner reduced, terminated, or extended, in accordance with the provisions of this Contract:

(1) a Transition Term (01Dec05 through 31May06);

(2) a Basic Term (01Jun06 through 30Sep13);

(3) 4 Award Terms earned (01Oct13 through 30Sep17); and

(4) Award Terms, if earned (01 Oct17 through 30Sep26).

(b) The Contract's maximum period of performance, if extended beyond the Basic Term of the Contract, shall not exceed twenty (20) years, ten (10) months.

(c) The Transition Term shall be for the transition activities identified in the Contract Section J Appendix entitled "Contractor's Transition Plan." The Contractor's responsibility for management and operation of the Laboratory against the Statement of Work shall commence with the Basic Term. The Award Term conditions are set forth in the Contract's Section H Clause entitled "Award Term."

F-3 FAR 52.242-15 STOP-WORK ORDER (AUG 1989) ALTERNATE I (APR 1984)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this Contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of

work stoppage. Within a period for 90 days after a stop-work order is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Contract's Section I Clause entitled "Termination (Cost Reimbursement)."

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule, the estimated cost, the fee, or a combination thereof and in any other terms of the contract that may be affected, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

Section G - CONTRACT ADMINISTRATION DATA

G-1 GOVERNMENT CONTACTS [Modified by Modification No.A027, No.M048]

The NNSA Manager, Los Alamos Site Office is the Contractor's primary point of contract for all technical and administrative matters, except as identified in (b) below, regarding performance of this contact. The LASO Administrative Contracting Officer is the Contractor's primary point of contact for all contractual matters. The LASO Manager and LASO Administrative Contracting Officer can be reached at:

U.S. Department of Energy

National Nuclear Security Administration
Contracting Officer, Los Alamos Site Office
3747 West Jemez Road
Building 1410 TA 43
Los Alamos, NM 87544

(b) The Patent Counsel, Office of Chief Counsel, NNSA Service Center, is the Contractor's focal point for items concerning patent, intellectual property, technology transfer, copyright, open source, licenses and technical data issues. The Patent Counsel can be reached at DOE/NNSA Service Center, Office of Chief Counsel, P.O. Box 5400, Albuquerque, New Mexico, 87185-5400; Telephone: (505) 845-5172.

(c) Correspondence. To promote timely and effective administration, correspondence submitted under this Contract shall contain a subject line commencing with the Contract Number, as illustrated below:

"SUBJECT: Contract No. DE-AC52-06AL25396, Request For Subcontract Placement Approval."

G-2 CONTRACTOR CONTACT

The Contractor's Laboratory Director is responsible for all matters regarding this Contract, except for the Contractor's Parent Organization's involvement under the Contract. Parent Organization's costs, incurred under this Contract, have the same meaning as Home Office Expenses in DOE Acquisition Regulation subpart DEAR 970.3102-3-70 "Home office expenses".

Section H - SPECIAL CONTRACT REQUIREMENTS

H-1 REDEFINING THE FEDERAL/CONTRACTOR RELATIONSHIP TO IMPROVE MANAGEMENT AND PERFORMANCE

(a) General

This clause sets forth an overview of NNSA's approach to improving the effectiveness and efficiency of the Nuclear Weapons Complex without compromising Integrated Safety Management (ISM) and Integrated Safeguards and Security Management (ISSM). The principles of ISM and ISSM shall serve as the foundation of the implementing mechanisms at the Laboratory.

(b) Clarifying the Contract Relationship

NNSA will establish the work to be accomplished by the Contractor, set applicable requirements to be met by the Contractor and provide performance direction to the Contractor regarding what NNSA wants in each of its programs. NNSA will issue performance direction to the Contractor only through a warranted Contracting Officer or a designated Contracting Officer's Representative. All other Federal staff and oversight components are therefore precluded from tasking contractor personnel. The Contractor shall utilize its expertise and ingenuity in determining how to perform the work, implement NNSA requirements, and to comply with NNSA performance direction. The Contractor is accountable for assuring safe, secure, effective and efficient operations in accordance with the terms and conditions of this Contract.

(c) Approach to Oversight

NNSA will increase Contractor accountability as a result of implementation of the Contractor's Assurance System to achieve improved Contractor performance in all aspects of the Contract. Parent oversight of the Contractor's implementation of the Assurance System is key to achieving performance improvements. NNSA will assess Contractor progress in improvement of its performance resulting from implementation of the Assurance System. At all times during the term of the Contract, NNSA will continue, preserve and maintain the right to determine the level of NNSA oversight of all Contractor activities under this Contract. NNSA's oversight program will ensure that the Contractor's activities provide adequate protection to the health and safety of workers and the public.

(d) Empowering Contractor Expertise

The Contractor is encouraged to identify and evaluate best commercial standards and best business practices and to continuously pursue improvements in all aspects of Contract performance where cost effective and efficient improvements can be achieved without compromising ISM and ISSM. The Contractor is also encouraged

to use the private-sector expertise of its Parent Organization to improve Contract performance as appropriate.

(e) Results-Oriented, Streamlined Performance Appraisal

Performance objectives that focus on those areas of greatest strategic value to NNSA, and systems-based measures and targets will be used in a results-oriented, streamlined performance appraisal process.

(f) Reward for Achieving Cost Efficiencies

The Contractor will be rewarded for the achievement of cost efficiencies through investment of cost savings at the Laboratory and through Contractor Directed Research and Development and the opportunity to earn additional Contract term.

H-2 PERFORMANCE DIRECTION

(a) The Contractor is responsible for the management and operation of the site in accordance with the Terms and Conditions of the Contract, duly issued Work Authorizations (WAs), and written direction and guidance provided by the Contracting Officer and the Contracting Officer's Representative (COR). NNSA is responsible for establishing the work to be accomplished, the applicable requirements to be met, and overseeing the performance of work of the Contractor. The Contractor will use its expertise and ingenuity in Contract performance and in making choices among acceptable alternatives to most effectively, efficiently and safely accomplish the work called for by this Contract. If the Contractor fails to comply with NNSA requirements, NNSA may direct the Contractor in how to complete the work.

(b) Only the Contracting Officer may issue, modify, and priority rank WAs.

(c) (1) The Contracting Officer and the NNSA Administrator will appoint, in writing, specific NNSA employees as CORs with the authority to issue Performance Direction to the Contractor. CORs are authorized to act within the limits of their delegation letter. A copy of each letter will be provided to the Contractor. COR functions include technical monitoring, inspection, and other functions of a technical nature not involving a change in the scope, cost, or terms and conditions of the Contract. The COR is authorized to review and approve technical reports, drawings, specifications, and technical information delivered by the Contractor.

(2) The Contractor must comply with written Performance Directions that are signed by the COR and:

(i) Redirect the Contract effort, shift work emphasis within a work area or a WA, require pursuit of certain lines of inquiry, further define or otherwise serve to accomplish the Statement of Work (SOW), or

(ii) Provide information that assists in the interpretation of drawings, specifications, or technical portions of the work description.

(3) Performance Direction does not:

(i) authorize the Contractor to exceed the funds obligated on the Contract;

(ii) authorize any increased cost or delay in delivery in a WA;

(iii) entitle the Contractor to an increase in fee; or

(iv) change any of the terms or conditions of the Contract.

(d) The Contractor shall accept only Performance Direction that is provided in writing by a COR and that is within the SOW and a WA.

(e) (1) The Contractor shall promptly comply with each duly issued Performance Direction unless the Contractor reasonably believes that the Performance Direction violates this clause. If the Contractor believes the Performance Direction violates this clause, the Contractor shall suspend implementation of the Performance Direction and promptly notify the Contracting Officer of its reasons for believing that the Performance Direction violates this clause. Oral notification to the Contracting Officer shall be confirmed in writing within ten days of the oral notification.

(2) The Contracting Officer will determine if the Performance Direction is within the SOW and WA. This determination will be issued in writing and the Contractor shall promptly comply with the Contracting Officer's direction. If it is not within the SOW or WA, the Contracting Officer may issue a change order pursuant to the Contract's Section I Clause entitled "Changes."

(f) The Parties agree to maintain full and open communication at all times, and on all issues affecting Contract performance, during the term of this Contract.

H-3 CONTRACTOR MULTI-YEAR STRATEGY FOR PERFORMANCE IMPROVEMENT

The Contractor shall develop a multi-year strategy that details (1) its planned efforts and expected accomplishments by year, to continuously improve its management and performance at the Laboratory, and (2) the planned efforts and contributions of its Parent Organization. The multi-year strategy shall also address planned efforts to (1) enhance Contractor communications, cooperation and integration with the NNSA Weapon Complex, with emphasis on Lawrence Livermore National Laboratory; and, (2) contribute to overall NNSA Weapon Complex improvements in performance. The listing of the Contractor's planned efforts and expected accomplishments from its Offer in response to Solicitation No. DE-RP52-05NA25396 for FY 2006 (June 1, 2006 – September 30, 2006, partial year) and FY 2007 shall be addressed in the initial multi-year strategy. Subsequent annual updates shall be submitted to the Contracting Officer no later than May 15th of each year. Performance measures for these planned efforts and expected accomplishments may be considered for inclusion in the Contract's Performance Evaluation Plan.

H-4 CONTRACTOR ASSURANCE SYSTEM

The Contractor shall develop a Contractor Assurance System to improve management and performance. The Contractor Assurance System shall be approved and monitored by the Contractor's Parent Organization. The Contractor's Assurance System, at a minimum, shall have the following key attributes:

(a) A comprehensive description of the Contractor Assurance System with risks, key activities and accountabilities clearly identified.

(b) A process for notifying the Contracting Officer of significant Assurance System changes.
(c) Incorporates the principles of the Contractor's quality assurance program to assure that products or services meet or exceed customer expectations.
(d) Rigorous, risk, performance and behavior based credible self-assessments, and feedback and improvement activities including utilization of nationally recognized experts, and other independent reviews to assess and improve its work process and to carry out independent risk and vulnerability studies. The Contractor is encouraged to seek third party certifications (such as Voluntary Protection Program and International Standards Organization (ISO) 9001 or ISO 14001), audits, peer reviews and independent assessments with external certification or validation.
(e) Incorporates the principles of the Contractor's performance measurement program that ensures comprehensive gathering of operational and other appropriate data, adequate causal analysis, risk analysis, trending, comparison to metrics, includes leading and lagging indicators, dissemination of operational data, measures both worker and subcontractor performance and identifies and corrects negative performance/compliance, including ISM/ISSM, trends before they become significant issues.
(f) Incorporates the principles of the Contractor's Issues Management Program that ensure review by senior management, decision making, tracking, setting of expectations and organization, worker and management accountability to achieve continuous improvement.
(g) Incorporates the principles of the Contractor's Occurrence/Event Investigation Program that ensures root cause analysis is performed and includes a corrective actions process that identifies any systemic problems at the Laboratory, and utilizes a Lessons Learned program to implement improvements to Laboratory operations.
(h) A method for validating assurance processes.
(i) Integrated with the Contractor's management systems, including ISM and ISSM.
(j) A process for development of performance metrics and performance targets to assess programmatic and operational performance, including benchmarking of key functional areas with other NNSA/DOE contractors and industry and research institutions to enhance processes, that will result in achievement of best in class/industry performance where efficient, cost effective and does not compromise ISM and ISSM.
(k) Continuous ISM and ISSM feedback and performance improvement.
(l) An implementation plan that defines a transition period for the implementation of the Contractor Assurance System.
(m) A process for timely and appropriate communication to the Contracting Officer, including electronic access, of all assurance related information.

H-5 NNSA OVERSIGHT

At all times during the term of this Contract, NNSA will continue, preserve and maintain the right to determine the level of NNSA oversight of all Contractor activities under this Contract. In addition to the rights and remedies provided to the Government under other provisions of this Contract, the Contractor shall fully cooperate with NNSA oversight personnel, NNSA Facility Representatives, and subject matter experts in the performance of their assigned oversight functions and shall provide complete access to facilities, information, and Contractor personnel. NNSA's oversight program will ensure that the Contractor's activities provide adequate protection to the health and safety of workers and the public.

H-6 PARENT ORGANIZATION'S OVERSIGHT PLAN **[Modified by Modification Nos. M045, M060, M109, M156 and M182]**

(a) On an annual basis, the Contractor shall provide a Parent Organization's Oversight Plan that details the Parent Organization's planned activities to monitor the Contractor's performance of statement of work activities including ISM and ISSM performance, and to assist the Contractor in meeting Laboratory mission and operational requirements. Elements of the Plan may be incorporated into the Laboratory's Performance Evaluation Plan. The Parent Organization's Oversight Plan for the FY 2006 (June 1, 2006 – September 30, 2006, partial year) and FY 2007 time period is set forth as an appendix to the Contract's Section J. The Oversight Plan shall identify the Parent Organization's responsible official for administration of the plan.

(b) The annual Parent Organization's Oversight Plan update shall be submitted to the Contracting Officer six months prior to the forthcoming fiscal year for Contracting Officer review and approval.

(c) The estimated cost for the Parent Organization's Oversight Plan for FY12 (October 1, 2011 - September 30, 2012) is NTE $2,547,836.00. Costs associated with subsequent annual Plan updates for the remainder of the Contract term will be incorporated into this clause via supplemental agreement modification. Costs shall only include: the actual direct labor costs of the persons performing such services; a percentage factor of direct labor costs to cover fringe benefits and payroll taxes; travel; and other direct costs. The percentage factor of direct labor costs to cover fringe benefits and payroll taxes will be applied in accordance with the Contractor's Parent Organization's disclosed accounting practices, or, if applicable, Cost Accounting Standards Disclosure Statement. No other costs or a separate fee are allowable. The Contractor shall charge to the account of the Government using the special financial institution account as provided in the Contract's Section I Clause entitled "Payments and Advances," or as otherwise directed by the Contracting Officer.

(d) The Contractor shall provide periodic reports of Parent activities and costs incurred as required by the Contracting Officer.

(e) Cost limitations set forth in paragraph (c) above shall not be exceeded without prior Contracting Officer approval. The Parties agree that the costs may be reviewed further for appropriateness and scope. In addition, the Parties agree that a tracking process, acceptable to the Contracting Officer, providing sufficient detail for reasonable accountability, shall be implemented. The Parties agree to negotiate in good faith any adjustments to these amounts as a result of empirical information from any such tracking system or reviews.

H-7 ACCOUNTABILITY

The Contractor is responsible for the quality of its products and services and for ensuring that ISM and ISSM are integrated into its operations. The Contractor is also responsible for assessing its operations, programs, projects and business systems, identifying deficiencies and implementing needed improvements in accordance with the Contract's terms and conditions. Where NNSA oversight has evaluated the Contractor's performance in meeting its obligations under this Contract, the Contractor shall not rely upon NNSA's assessment but is accountable for performing its own assessment of these areas.

H-8 UTILIZATION OF PARENT ORGANIZATION SUPPORT [Modified by Modification No. A004]

(a) Parent Organization Systems

(1) The Parties agree that applying the Contractor's Parent Organization systems to site operations for the purpose of streamlining the Laboratory's operational, administrative and business systems, and Parent Organization services provided for that purpose, are allowable costs. The use of the Contractor's Parent Organization systems is encouraged provided that such systems are more efficient and represent an overall cost savings to the Government versus existing site systems, and data is readily transferable to a successor contractor. The Contracting Officer must approve the Contractor's proposed plan to use its Parent Organization systems. Such system and related support services are not considered a "Subcontract" as contemplated by the Contract's Section I Clause entitled "DEAR 970.5244-1 Contractor Purchasing System."

(2) If the Contractor's proposed plan is approved by the Contracting Officer, the Contractor may incur amounts for the approved systems and related support services and shall charge to the account of the Government using the special financial institution account as provided in the Contract's Section I Clause entitled "Payments and Advances," or as otherwise directed by the Contracting Officer. Costs shall only include: the actual direct labor costs of the persons performing such services; materials; subcontracts; travel; other direct costs; and applicable indirect costs applied in accordance with the Contractor's Parent Organization's

disclosed accounting practices, or, if applicable, Cost Accounting Standards Disclosure Statement. A separate fee for use of such systems and associated services is unallowable.

(3) The Contractor shall provide periodic reports of activities and costs incurred as required by the Contracting Officer.

(4) Rights in software and systems. The Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license by or for the Government, in any Contractor-owned software and systems brought in and used under this Clause. Said license shall be limited to the continued operations of the Los Alamos National Laboratory by successor contractors.

(b) Parent Organization Experts

(1) The utilization of Parent Organization experts, which are defined herein as employees of the Parent Organization, for the purpose of achieving improvement in management and performance either to resolve deficiencies identified through Parent Organization oversight or in accordance with the Section H clause entitled "Contractor Multi-Year Strategy For Performance Improvement" are allowable costs subject to the conditions contained herein. The total estimated cost for Parent Organization experts' services is not to exceed $1,521,370.00 for the period June 1, 2006–May 31, 2007 (to be determined during the Transition Period, and annually thereafter, and added via supplemental agreement contract modification). Such Parent Organization experts' services are not considered a "Subcontract" as contemplated by the Contract's Section I Clause entitled "DEAR 970.5244-1 Contractor Purchasing System."

(2) The Contractor may incur costs for its Parent Organization experts and shall charge to the account of the Government using the special financial institution account as provided in the Contract's Section I Clause entitled "Payments and Advances," or as otherwise directed by the Contracting Officer. Costs shall only include: the actual direct labor costs of the persons performing such services; a percentage factor of direct labor costs to cover fringe benefits and payroll taxes; travel; and other direct costs. The percentage factor of direct labor costs to cover fringe benefits and payroll taxes will be applied in accordance with the Contractor's Parent Organization Cost Accounting Standards Disclosure Statement. No other costs or a separate fee are allowable.

(3) The Contractor shall provide periodic reports of activities and costs incurred as required by the Contracting Officer.

H-9 TRANSITION

Contract Clauses H-2 through H-10 provide a mechanism for the Contractor to improve its management and performance. The Laboratory's management systems that exist on the date of Contract award will continue until the Contractor addresses the applicable requirements contained in Contract Clauses H-2 through H-10. For changes that do require NNSA approval, the Contractor will not implement a change until it is formally approved by the Contracting Officer.

H-10 BENCHMARKING AND STANDARDS MANAGEMENT

(a) Benchmark with Industry. The Contractor shall regularly benchmark with industry to identify best commercial standards and best business practices that will improve site operations with the goal of improving performance where effective and efficient without compromising ISM and ISSM.

(b) Proposal of Alternative. Where best commercial standards or best business practices are identified that will improve site operations consistent with paragraph (a) above, the Contractor may, at any time during performance of this Contract, propose an alternative procedure, standard, or assessment mechanism (collectively referred to herein as "alternative") in a Directive or DOE/NNSA requirement by submitting to the Contracting Officer a signed proposal(s) that describes (1) the nature and scope of the alternative and Contractor system of oversight, (2) the anticipated benefits, including any cost benefits, to be realized in performance under the Contract, (3) a schedule for implementation of the alternative, (4) a detailed evaluation and a statement that the revised alternative is an effective, efficient means to meet the Directive without compromising ISM and ISSM, and (5) any additional information required by NNSA. NNSA will evaluate the Contractor's proposal, and the Contractor will not implement a proposed change until it is formally approved by the NNSA and communicated to the Contractor by the Contracting Officer.

(c) Deficiency and Remedial Action. If, during performance of this Contract, NNSA determines that a previously approved alternative is not satisfactory, the Contracting Officer will require the Contractor to prepare a corrective action plan for NNSA approval. If NNSA is not satisfied with the corrective action taken, the Contracting Officer may direct corrective action to remedy the deficiency, including, if appropriate, the reinstatement of the Directive or DOE/NNSA requirement.

(d) Laws and Regulations Excepted. The process described in this clause shall not affect the application of otherwise applicable laws and regulations of the United States, including DOE regulations.

H-11 COST REDUCTION (Class deviation – March 2011) [Modified by Modification No. M182]

(a) General. It is the Department of Energy's (DOE's) / National Nuclear Security Administration's (NNSA) intent to have its facilities and laboratories operated in an efficient and effective manner. To this end, the Contractor shall assess its operations and identify areas where cost reductions would bring cost efficiency to operations without adversely affecting the level of performance required by the contract. The Contractor, to the maximum extent practical, shall identify areas where cost reductions may be effected, and develop and submit Cost Reduction Proposals (CRPs) to the Contracting Officer. If accepted, the Contractor may share in any shared net savings from accepted CRPs in accordance with paragraph (h) of this clause.

(b) Definitions.
Administrative cost is the Contractor cost of developing and administering the CRP.
Development cost is the Contractor cost of up-front planning, engineering, prototyping, and testing of a design, process, or method.
DOE/NNSA cost is the Government cost incurred implementing and validating the CRP.

Implementation cost is the Contractor cost of tooling, facilities, documentation, etc., required to effect a design, process, or method change once it has been tested and approved.

Hard savings means savings that directly reduce the overall cost of operations for the negotiated period of savings. Examples of hard savings include:

i) Permanently eliminating or reducing recurring costs through innovative product designs, or process improvements;

ii) Supply chain management activities resulting in actual savings (as opposed to potential or sourcing savings);

iii) Integration of life cycle approaches for the design and development of systems that minimize costs (e.g. experimental, maintenance and operations);

iv) Reducing direct or indirect material or labor costs;

v) Reducing inventory levels of product or material, or reducing the cost of carrying the same levels;

vi) Reducing utility or natural resource consumption; or

vii) Reducing or eliminating scrap dollars/rates.

Net Savings means the difference between the estimated cost of performing an effort as originally planned and the actual allowable cost of performing that same effort when implementing a Government approved CRP along with any Contractor development costs, DOE/NNSA cost, implementation costs, and administrative costs associated with the CRP.

Soft Savings means:

i) savings that cannot be demonstrated to reduce the bottom line operating costs including, for example, labor efficiency improvements that increase productivity but do not reduce total hours worked;

ii) savings that are intangible and consequently difficult to measure, for example, a wellness plan that is intended to reduce absenteeism, turnover or insurance costs; or

iii) cost avoidances that cannot be demonstrated to lower cost of products/services based on a comparison against historical results, for example, slowing the rate of a cost increase.

(c) Consideration on Hard Savings

The Government's share of savings shall represent "hard savings" available for reprioritization by the DOE/NNSA. Proposed savings that will not be considered creditable by the Contracting Officer will include:

(1) Savings resulting from formal or informal NNSA direction or changes in mission, work scope, or routine Contractor adjustments due to budget changes;

(2) Underruns resulting from anything other than a Contractor efficiency improvement, including but not limited to additional NNSA funding, shifting of work scope to a future fiscal year, (e.g. moving upgrades to facilities or infrastructure to out years with no evidence of savings or computer buys that are routinely purchased on a 3 year bases are deferred for an additional two years) deferred maintenance, re-categorizing direct/indirect costs, or increases in the direct allocation bases;

(3) Site office initiatives, direction, work scope changes, mission changes, or reorganization, unless the Contractor can demonstrate a significant role in achieving savings resulting from the site office actions;

(4) Savings that have a negative impact on any existing Contract requirements such as scope, safety, or security;

(5) Soft savings; and

(6) Savings that have been credited elsewhere under this contract.

(d) Procedure for submission of CRPs.

CRPs submitted by the Contractor shall contain, at a minimum, the following:

(1) Current Method (Baseline)-A verifiable description of the current scope of work, cost, and schedule to be impacted by the initiative, and supporting documentation.

(2) New Method (New Proposed Baseline)-A verifiable description of the new scope of work, cost, and schedule, how the initiative will be accomplished, and supporting documentation.

(3) Feasibility Assessment-A description and evaluation of the proposed initiative and benefits, risks, and impacts of implementation. This evaluation shall include an assessment of the difference between the current method (baseline) and proposed new method including all related costs.

(e) Evaluation and Decision. All CRPs must be submitted to and approved by the Contracting Officer. Included in the information provided by the CRP must be a discussion of the extent the proposed cost reduction effort may—

(1) Pose a risk to the health and safety of workers, the community, or to the environment;

(2) Result in a waiver or deviation from DOE requirements, such as DOE Orders and joint oversight agreements;

(3) Require a change in other contractual agreements;

(4) Result in significant organizational and personnel impacts;

(5) Create a negative impact on the cost, schedule, or scope of work in another area;

(6) Pose a potential negative impact on the credibility of the Contractor or the DOE; and

(7) Impact successful and timely completion of any of the work in the cost, technical, and schedule baseline.

(8) Significantly impact internal controls.

(f) Acceptance or Rejection of CRPs. Acceptance or rejection of a CRP is a unilateral determination made by the Contracting Officer based on but not limited to the evaluation criteria established in paragraph (c) and (e). The Contracting Officer will

notify the Contractor that a CRP has been accepted, rejected, or deferred within (Insert Number) days of receipt. The only CRPs that will be considered for acceptance are those which the Contractor can demonstrate, at a minimum, will—

(1) Result in net savings (in the sharing period if a design, process, or method change);

(2) Not reappear as costs in subsequent periods; and

(3) Not result in any impairment of essential functions (e.g. safety and security).

(g) The failure of the Contracting Officer to notify the Contractor of the acceptance, rejection, or deferral of a CRP within the specified time shall not be construed as approval.

(h) Sharing Arrangement. If a CRP is accepted, the Contractor may share in the shared net savings. The sharing arrangement shall be as follows:

(1) 50% of the net savings shall be the Government's share of savings,

(2) 10% of the net savings shall be share of savings fee payable to the Contractor,

(3) 40% of the shared savings shall remain at the DOE/NNSA site and may be negotiated under the CRP for the following contract activities consistent with the other terms and conditions of this contract:

i) Program, project, or indirect cost activities to finance additional mission work that has been approved by the HQ office;

ii) Projects that serve the M&O site as a whole, such as a parking structure, an office building or building a cafeteria that doesn't serve a discrete program and could be built with institutional general plant project funds;

iii) Employee compensation for non-key personnel in accordance with Appendix A. For the purposes of this clause, "employee compensation" means a one–time non-base lump sum payment which does not count towards the employee's pensionable earnings.

The specific percentage and sharing period shall be pre-negotiated and set forth in the contractual document and may span multiple years, however, cost sharing in future years will be contingent upon availability of funds and the Contracting Officer certifying each year that the savings have been sustained.

(i) Validation of Shared Net Savings. Each year the Contractor shall certify the amount of savings achieved that year and that the Government's share of savings is available for redirection. The Contracting Officer shall validate actual shared net savings. If actual shared net savings cannot be validated, the Contractor will not be entitled to a

share of savings. If the savings are validated, the Government will decide how to redirect its share of the funds.

(j) Relationship to Other Incentives. Only those benefits of an accepted CRP not awardable under other clauses of this contract shall be considered under this clause.

(k) Subcontracts. The Contractor may include a clause similar to this clause in any subcontract. In calculating any estimated shared net savings in a CRP under this contract, the Contractor's administration, development, and implementation costs shall include any subcontractor's allowable costs, and any CRP incentive payments to a subcontractor resulting from the acceptance of such CRP. The Contractor may choose any arrangement for subcontractor CRP incentive payments, provided that the payments not reduce the DOE's share of shared net savings.

H-12 PERFORMANCE BASED MANAGEMENT [Modified by Modification No. M053]

(a) Performance-Based Management System. This Contract is a management and operating contract, which holds the Contractor accountable for performance. This Contract uses clearly defined standards of performance consisting of performance objectives and performance incentives as described in the Contract's Section H Clause entitled "Performance Incentives," and award term incentives as indicated in Contract's Section H Clause entitled "Award Term" with measures and targets for each area established on a fiscal year basis and incorporated into the Performance Evaluation Plan.

(b) Performance Appraisal Process.

(1) Performance Evaluation Plan.

(i) A Performance Evaluation Plan shall be developed and finalized by the Contracting Officer, with Contractor input, prior to the scheduled start date of the appraisal period. The Performance Evaluation Plan shall document the process and associated performance objectives, performance incentives, award term incentives and associated measures and targets by which the Contractor's performance will be evaluated. The Parties will attempt to reach mutual agreement on performance objectives, performance incentives, award term incentives and associated measures and targets that reflect expected business, operational and technical performance tied to key end products and NNSA/DOE strategic goals and objectives. The NNSA Los Alamos Site Office Manager reserves the unilateral right to make the final decision on all performance objectives and performance incentives (including the associated measures and targets) used to evaluate Contractor performance. The NNSA Administrator reserves the unilateral right to make the final decision on all award term incentives (including the associated measures and targets) used to evaluate Contractor performance.

(ii) Only the Contracting Officer may revise the Performance Evaluation Plan, consistent with the Contract's Statement of Work, during the appraisal period of performance. The Contracting Officer shall notify the Contractor:

(I) Of such bilateral changes at least sixty calendar days prior to the end of the affected appraisal period;

(II) Of such unilateral changes at least ninety calendar days prior to the end of the affected appraisal period and at least thirty calendar days prior to the effective date of the change; or

(III) If such change, whether unilateral or bilateral, is urgent and high priority, at least thirty calendar days prior to the end of the appraisal period.

(2) Contractor Self-Assessment. An annual self-assessment will be prepared by the Contractor of its performance against each of the performance objectives and incentives contained in the Performance Evaluation Plan. The annual self assessment shall be submitted within ten-working days after the end of the appraisal period. The Contracting Officer will identify the structure and medium to be used by the Contractor in delivering its annual self-assessment.

H-13 AWARD TERM [Modified by Modification No. M052]

(a) Commencing in Fiscal Year 2008, the Contract's term as set forth in the Contract's Section F Clause entitled "Period of Performance" will be extended if, in its annual NNSA Performance Evaluation Report, the Contractor both: (1) obtains the required rating on the Performance Incentive Fee Sections' objectives contained in the Performance Evaluation Plan (PEP); and (2) meets the Award Term Incentives set forth in the Award Term Section of the PEP. If the Contractor does not receive the required rating in (1) above, this Award Term clause becomes inoperable for the associated evaluation period.

(b) The NNSA Los Alamos Site Office Manager will make an award term recommendation to the NNSA Fee Determination Official (FDO) based upon his/her evaluation in accordance with paragraph (a) above. The decision whether to award additional term will be made by the FDO if the conditions in paragraph (a) above are met in conjunction with the annual performance evaluation determination.

(c) The award term decision is a unilateral determination of the FDO.

(d) If the FDO's determination is to award additional term, the Contract shall be modified unilaterally by the Contracting Officer to extend the term of the Contract by one year.

(e) The Contract's maximum term, including all earned award term, shall not exceed the term identified in the Contract Section F Clause entitled "Period of Performance."

(f) If the Contractor fails 4 times to earn award term, the operation of this Award Term clause will cease.

(g) A significant failure as determined by the Contracting Officer of the Contractor's management controls, as defined in the Contract's Section I Clause entitled "Management Controls," or a performance failure, as utilized in the Contract's Section I Clause entitled "Conditional Payment Of Fee, Profit, Or Incentives – Facilities Management Contracts," by the Contractor may result in the forfeiture the current year Award Term and up to 4-years of previously earned award term, in addition to any other remedies provided for in the contract. Such reduction in Contract term, if exercised by the Government, does not constitute a termination action pursuant to the Contract's Section I Clause entitled "Termination (Cost Reimbursement) (May 2004) as modified by DEAR 970.4905-1(b)."

(h) The rights and remedies of the Government specified herein in this Award Term clause are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this Contract. This Award Term clause does not confer any other rights or remedies to the Contractor other than those specified in this Award Term clause.

H-14 PERFORMANCE INCENTIVES **[Modified by Modification No. M040]**

(a) The NNSA shall, at the conclusion of each specified appraisal period, evaluate the Contractor's performance for all Performance Incentive requirements.

(b) The Performance Incentive Fee determination will be made in accordance with the Performance Evaluation Plan. The determination as to the amount of Performance Incentive Fee earned is a unilateral determination made by the Fee Determining Official.

(c) The Contracting Officer will issue the Fee Determination Official's final total Performance Incentive Fee amount earned determination, and the basis of the Performance Incentive Fee determination, in accordance with: the schedule set forth in the Performance Evaluation Plan; or as otherwise set forth in this Contract. However, a determination must be made within sixty calendar days after the receipt by the Contracting Officer of the Contractor's self-assessment report or a longer period if the Contractor and Contracting Officer agree. If the Contracting Officer evaluates the Contractor's performance of specific requirements on their completion, the payment of any earned fee amount must be made within seventy calendar days (or such other time period as mutually agreed to between the Contracting Officer and the Contractor) after such completion. If the determination is delayed beyond that date, the Contractor shall be entitled to interest on the determined total available fee

amount earned at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the payment date. This rate is referred to as the "Renegotiation Board Interest Rate," and is published in the Federal Register semiannually on or about January 1 and July 1. The interest on any late total available fee amount earned determination will accrue daily and be compounded in 30-day increments inclusive from the first day after the schedule determination date through the actual date the determination is issued. That is, interest accrued at the end of any 30-day period will be added to the determined amount of fee earned and be subject to interest if not paid in the succeeding 30-day period.

(d) Performance Incentive Fee not earned during the evaluation period shall not be allocated to future evaluation periods.

(Note 04/04/08, Mod M040 provided the following: "The Los Alamos Site Office has completed its assessment of the Contractor's effectiveness in meeting performance expectations as reflected in the current Performance Evaluation Plan for the period October 1,2006 through September 30, 2007.

The Fee Determining Official has directed the award of $36,224,982 in performance fee, which is 71% of the FY 2007 incentive fee pool of $51,295,996.")

H-15 ENTERPRISE PURCHASING

(a) Enterprise purchasing involves the complex-wide assessment of commodity and service requirements and formulation of enterprise-wide contract mechanisms used by members of the enterprise to acquire those commodities and services. Enterprise purchasing can result in better pricing, better products, more timely delivery, reduced administrative costs and lead times for both the Contractor and the NNSA, greater standardization and interchangeability across the NNSA complex, and increased awards to small business entities.

(b) The Contractor shall cooperate with NNSA and other NNSA contractors in identifying requirements under this Contract that are suitable for enterprise purchasing and shall facilitate the identification of work to be directly acquired by NNSA to support the objectives discussed below. The Contractor shall use the contracting mechanisms identified by the NNSA as enterprise purchases and those awarded by the Integrated Contractor Purchasing Team (ICPT) to meet all suitable requirements under this Contract unless the cost of using such contracting mechanisms is shown to be excessive, does not provide the best value and or impacts the Contractor's schedule. The Contractor may propose alternative acquisition strategies to the Contracting Officer.

H-16 NNSA DIRECT CONTRACTS

(a) The Contracting Officer may identify any of the work identified or in support of the Contract's Section J Appendix entitled "Statement of Work" to be performed either by another contractor directly contracted by the NNSA or by Government employees. The Contractor agrees to fully cooperate with such other contractors and Government employees, carefully fit its own work to such other work as may be directed by the Contracting Officer, and provide reasonable support as required. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or by Government employees. For work identified for performance by another contractor directly contracted by the NNSA:

(1) The Government and the Contractor will confer in advance on the strategy for changing responsibility for the work and will do so with the objective of minimum disruption to the site operations.

(2) The Government may designate the Contractor as the Technical Monitor for such contracts that are directly related to the scope of this Contract. The Contractor agrees to perform such monitoring duties as shall be more further described in the designation for each such contract. No designation shall include, and the Contactor shall not perform, the following duties:

(i) Award, modification, change, or termination of the contract.
(ii) Receipt, processing or adjudication of any claims, invoices, or demands for payment of any form.
(iii) Any function determined to be inherently governmental.

(3) The Technical Monitor shall report to the Contracting Officer, or the Contracting Officer's Representative, any performance of a designated contract that may not be in compliance with its terms and conditions but is not authorized to take any other action regarding such noncompliance.

(4) Additionally, the NNSA may insert provisions in such contracts substantially as follows:

H-___. TECHNICAL MONITOR

The Government may designate the Los Alamos National Laboratory Management and Operating Contractor as Technical Monitor for any right, duty or interest in this contract. In that event, the contractor further agrees to fully cooperate with the Los Alamos National Laboratory Management and Operating Contractor for all matters under the terms of the designation.

(b) Appropriate adjustments shall be made to the Contractor's Subcontracting Plan to recognize the changes to the subcontracting base and goals.

H-17 CONTRACTOR EMPLOYEES

In carrying out the work under this Contract, the Contractor shall be responsible for the employment of all professional, technical, skilled, and unskilled personnel engaged by the Contractor in the work hereunder, and for the training of personnel. Persons employed by the Contractor shall be and remain employees of the Contractor and shall not be deemed employees of the NNSA or the Government; however, nothing herein shall require the establishment of any employer-employee relationship between the Contractor and consultants or others whose services are utilized by the Contractor for the work hereunder.

H-18 REPRESENTATIONS AND CERTIFICATIONS

The Representations, Certifications, and Other Statements of Offeror as completed by the Contractor are hereby incorporated in this Contract by reference.

H-19 MODIFICATION AUTHORITY

Notwithstanding any of the other provisions of this Contract, a Contracting Officer shall be the only individual on behalf of the Government to:

(a) Accept nonconforming work;

(b) Waive any requirement of this Contract; or

(c) Modify any term or condition of this Contract.

H-20 PRIVACY ACT SYSTEMS OF RECORDS

The Contractor shall design, develop, or operate the following systems of records on individuals to accomplish an agency function pursuant to the Contract's Section I Clause entitled "Privacy Act."

DOE System No.	Title
DOE-33	Personnel Medical Records
DOE-35	Personnel Radiation Exposure Records

The above list shall be revised from time to time by mutual agreement between the Contractor and the Contracting Officer as may be necessary to keep it current. Such changes need not be formally incorporated before the annual Contract update modification, but shall have the same effect as if actually listed above for the purpose of satisfying the listing requirement contained in Paragraph (a)(1) of the Contract's Section I Clause entitled "Privacy Act."

H-21 FLOWDOWN OF RIGHTS TO PROPOSAL DATA

The Contractor shall include the clause of 48 CFR 52.227-23 "Rights to Proposal Data (Technical)" in any subcontract awarded based on consideration of a technical proposal.

H-22 CONTINUATION OF PREDECESSOR CONTRACTOR'S OBLIGATIONS

On June 1, 2006, the Contractor shall assume responsibility and will continue to perform any existing agreements and regulatory obligations entered into under Contract No.W-7405-ENG-36 by the predecessor contractor. These agreements and regulatory obligations include all (a) subcontracts and purchase orders; (b) agreements with domestic and foreign research organizations; (c) agreements with universities and colleges; (d) agreements with Federal, Tribal, municipalities and state regulatory agencies; (e) operating permits and licenses; and (f) any other agreements in effect prior to June 1, 2006.

H-23 SEPARATE CORPORATE ENTITY AND PERFORMANCE GUARANTEE

(a) The work performed under this Contract by the Contractor shall be conducted by a separate corporate entity from its Parent Organization(s). The separate corporate entity must be set up solely to perform this Contract and shall be totally responsible for all Contract activities.

(b) The Contractor's Parent Organization(s) shall guarantee performance of the Contract as evidenced by a performance guarantee. The performance guarantee is set forth in the Contract's Section J Appendix entitled "Performance Guarantee."

(c) In the event any of the signatories to the performance guarantee enters into proceedings related to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish written notification of the bankruptcy to the Contracting Officer.

H-24 NNSA AND CONTRACTOR COMMUNITY COMMITMENTS

(a) The Contractor shall perform the activities described in the Contract's Section J Appendices entitled "Regional Initiatives", "Regional Purchasing Program" and "Technology Commercialization", which sets forth the NNSA's commitments to support the community. Costs (direct or indirect) incurred by the Contractor in performing these activities are allowable and reimbursable, to the extent authorized under the Contract.

(b) The Contract's Section J Appendix entitled "Contractor and Parent Organization Commitments, Agreements, and Understandings" sets forth the Contractor's Community Commitment plan that describes its planned activities as to how the Contractor will be a constructive partner to the communities in northern New Mexico, the eight northern pueblos, and to citizens of the State of New Mexico who

should all benefit from the Contractor's management and operation of Los Alamos National Laboratory. All costs (direct or indirect) to be incurred by the Contractor and/or its Parent Organizations in providing the "Contractor and Parent Organization Commitments, Agreements, and Understandings" are expressly unallowable and non-reimbursable under this Contract.

H-25 SPECIAL HAZARDS

(a) The performance of the Contractor's operations hereunder may, in extraordinary circumstances, subject workers to special hazards for which workers' compensation laws, other statutes, the Contractor's welfare plan and policies, or the worker's private insurance may not provide adequate financial protection to the worker in the event of disability, or to the worker's estate in the event of death.

(b) Definitions.

(1) "Worker" as used in this clause shall mean any person who is or has been employed by the Contractor or any subcontractor, or who is or has been engaged as a consultant or borrowed personnel by the Contractor or any subcontractor.

(2) "Within the course and scope of employment" as used in this clause shall mean that the worker was performing duties as assigned, in conformance with the direction of the Contractor or a subcontractor or an agreement with the Contractor, and in furtherance of the work under this Contract.

(c) The Contractor is authorized to pay to a worker, or in the event of the worker's death, the worker's estate, a sum in an amount which the Contractor determines appropriate, not to exceed the worker's annual salary, whenever–

(1) The Contractor believes that a worker has become disabled or has died as a result of any special hazard listed in paragraph (d) below to which the worker has been exposed within the course and scope of employment;

(2) The Contractor believes that Workers' Compensation laws, other statutes, the Contractor's welfare plan and policies, or the worker's private insurance does not provide adequate financial protection under the particular circumstances of the worker's disability or death; and

(3) The Contracting Officer approves the payment.

(d) The special hazards referred to in paragraphs (a) and (c) above are:

(1) Exposure to radiant energy or emitted particles from radioactive materials or from high voltage sources or machines, including ingestion, inhalation or other bodily uptake of radioactive materials.

(2) Exposure to explosions due to atomic disintegrations or to explosions in the course of experimental work with or using high explosives or propellants, or to explosions arising in the course of field experimentation with nuclear propulsion systems.

(3) Exposure to toxic materials comprising polonium, uranium, plutonium, tritium, fluorine, barium, cadmium, beryllium, any compounds of these, phosgene, or any other material in use in the course of authorized work which may be shown to have toxic effects.

(4) Work assignments not specifically covered in this clause and of such a nature as will invalidate the worker's personal insurance otherwise applicable to the injury or death and in effect at the time of performance of the assigned duties.

(5) Exposure to hazards incident to flights in military aircraft in the course of which necessary experimental work is conducted. Where a release of liability has been signed, such release will in no way bar the worker from receiving any payment under this clause.

(6) Exposure due to hazards from the fall of bombs or mockups from planes as opposed to hazards due to explosion.

(7) Exposure in the course of employment incident to flights in chartered or military aircraft or transportation on military vessels. Where a release of liability has been signed, such release will in no way bar the worker from receiving any payment under this clause.

(8) Exposure peculiar to and as the result of work assignment required to be conducted outside the continental United States.

(9) Such other exposures not now known but which may later be discovered and which by the nature thereof are similar to the exposure or hazards set forth above. Such other exposures as may from time to time be agreed upon in writing by the Contractor and the Contracting Officer as a basis for payment.

(e) The total sum authorized to be paid under this clause to a worker or a worker’s estate shall not exceed the worker’s annual salary even where (1) a payment has been made to a worker on account of a disability and who thereafter dies as a result of the disabling injury or (2) a worker is disabled by one injury compensable under this clause and dies of a separate injury compensable under this clause. The Contractor assumes no obligation hereunder to make any payment from the Contractor's own funds. A release may be required from the payee if the Contracting Officer and the Contractor deem it necessary or appropriate.

(f) Whenever there is an injury or death which is compensable in accordance with paragraph (c) above, the Contractor may also, with Contracting Officer approval, pay

for the cost of transportation (including hotel, subsistence and other incidental expenses) of the spouse and one or more of next of kin of such injured or dead worker from their respective homes to the place where such injured or dead worker shall be situated and their return.

H-26 DEFENSE AND INDEMNIFICATION OF EMPLOYEES

(a) The Parties recognize that the Contractor could be required to defend and indemnify its officers and employees from and against civil actions and other claims which arise out of the performance of work under this Contract. Except for defense costs made unallowable by the Contract's Section I Clause entitled "Payments and Advances", or the Major Fraud Act (41 U.S.C. §256(k)), the costs and expenses, including judgments, resulting from the defense and indemnification of employees from and against such civil actions and claims shall be allowable costs under this contract if incurred pursuant to the terms of the Contract's Section I Clause entitled "Insurance–Litigation and Claims".

(b) Costs and expenses, including judgments, resulting from the defense and indemnification of employees from civil fraud actions filed in federal court by the Government will be unallowable where the employee pleads nolo contendere or the action results in a judgment against the defendant.

(c) Where the Contractor determines under applicable law it must defend an employee in a criminal action which arise out of the performance of work under this Contract, NNSA will consider in good faith, on a case-by-case basis, whether the Contractor has such an obligation. If NNSA concurs, the costs and expenses, including judgments, resulting from the defense and indemnification of employees shall be allowable.

(d) The Contractor shall immediately furnish the Contracting Officer written notice of any such claim or civil action filed against any employee of the Contractor arising out of the work under this contract together with copies of all pleadings filed. The Contractor shall furnish to the Contracting Officer a written determination by the Contractor's counsel that the defense or indemnity of the employee is required because the employee was acting within the course and scope of employment at the time of the acts or omissions which gave rise to the claim or civil action, and that any exclusions for fraud, corruption, or malice on the part of the employee do not apply. A copy of any Contractor letter asserting a reservation of rights with respect to the defense or indemnification of such employee shall also be provided to the Contracting Officer. The costs associated with the settlement of any such claim or civil action shall not be treated as an allowable cost unless approved in writing by the Contracting Officer.

H-27 PERFORMANCE OF WORK AT FACILITIES AND SITES OTHER THAN LOS ALAMOS NATIONAL LABORATORY

In performance of the Contract's work at DOE or NNSA facilities and sites other than LANL, the Contractor shall comply with applicable requirements set forth in this Contract's Appendix entitled "List of Applicable Directives," and any additional directives which have been established for the DOE/NNSA Prime Contractor at that DOE/NNSA facility/site that are applicable to the Contractor's work being performed and that are applicable to the associated hazards at the particular facility or site.

H-28 OPEN COMPETITION AND LABOR RELATIONS UNDER MANAGEMENT AND OPERATING AND OTHER MAJOR FACILITIES CONTRACTS

"Labor organization," as used in this clause, shall have the same meaning it has in 42 U.S.C. 2000e(d).

(a) Unless acting in the capacity of a constructor on a particular project, the Contractor shall not -

(1) Require bidders, offerors, contractors, or subcontractors to enter into or adhere to nor prohibit those parties from entering into or adhering to agreements with one or more labor organizations, i.e., project labor agreements, that apply to construction project(s) relating to this Contract; or

(2) Otherwise discriminate against bidders, offerors, contractors, or subcontractors for refusing to become or to remain signatories or to otherwise adhere to project labor agreements for construction project(s) relating to this Contract.

(b) When the Contractor is acting in the capacity of a constructor, i.e., performing a substantial portion of the construction with its own forces, it may use its discretion to require bidders, offerors, contractors, or subcontractors to enter into a project labor agreement that the Contractor has negotiated for that individual project.

(c) Nothing in this clause shall limit the right of bidders, offerors, contractors, or subcontractors to voluntarily enter into a project labor agreements.

H-29 THIRD PARTIES

Nothing contained in this Contract or its modifications shall be construed to grant, vest, or create any rights in any person not a party to this Contract. This clause is not intended to limit or impair the rights which any person may have under applicable Federal Statutes.

H-30 ADVANCE UNDERSTANDING REGARDING ADDITIONAL ITEMS OF ALLOWABLE AND UNALLOWABLE COSTS AND OTHER MATTERS

Allowable costs under this Contract shall be determined according to the requirements of the Contract's Section I clause entitled "Payments and Advances." For purposes of effective Contract implementation, certain items of cost are being specifically identified below as allowable and/or unallowable under this Contract to the extent indicated:

(a) ITEMS OF ALLOWABLE COSTS:

(1) Personnel costs in accordance with Appendix A attached to this Contract.

(2) Expenditures by the Contractor to reimburse other employers for payments (including, but not limited to, salaries) to or for the benefit of their employees loaned to the Contractor for and engaged in the performance of the Contractor's undertaking hereunder.

(3) Costs incurred or expenditures made by the Contractor, as directed, approved or ratified by the Contracting Officer and not unallowable under any other provisions of this Contract.

(b) ITEMS OF UNALLOWABLE COSTS:

(1) Premium Pay for wearing radiation-measuring devices for Laboratory and all-tier cost-type subcontract employees.

(2) Home office expenses, whether direct or indirect, relating to activities of the Contractor, except as otherwise specifically provided in the Contract or specifically agreed to in writing by the Contracting Officer.

(3) Facilities capital cost of money.

H-31 SERVICE CONTRACT ACT OF 1965 (41 U.S.C. 351) SUPPORT [Modified by Modification No. M156]

The Service Contract Act of 1965 is not applicable to this contract. However, in accordance with the Section I Clause DEAR 970.5244-1, entitled "Contractor Purchasing System," subcontracts awarded by the Contractor are subject to the Act to the same extent and under the same conditions as contracts awarded by NNSA. The Contractor's Purchasing System must implement the requirements of the Service Contract Act clauses found at 48 CFR 22.1006.

H-32 WALSH-HEALY PUBLIC CONTRACTS ACT

Except as otherwise may be approved in writing by the Contracting Officer, the Contractor agrees to insert the following provision in noncommercial Purchase Orders and subcontracts under this Contract.

"If this contract is for the manufacture or furnishing of materials, supplies, articles, or equipment in an amount which exceeds or may exceed $10,000.00 and is otherwise subject to the Walsh-Healy Public Contracts Act, as amended (41 U.S.C. 35), there are hereby incorporated by reference all representations and stipulations required by said Act and regulations issued thereunder by the Secretary of Labor, such representations and stipulations being subject to all applicable rulings and interpretations of the Secretary of Labor which are now or may hereafter be in effect."

H-33 CONTRACTOR ACCEPTANCE OF NOTICES OF VIOLATIONS OR ALLEGED VIOLATIONS, FINES, AND PENALTIES

(a) The Contractor shall accept, in its own name, service of notices of violations or alleged violations (NOVs/NOAVs) issued by Federal or State regulators to the Contractor resulting from the Contractor's performance of work under this contract, without regard to liability. The allowability of the costs associated with fines and penalties shall be subject to the other provisions of this Contract.

(b) The Contractor shall notify the Contracting Officer promptly when it receives service from the regulators of NOVs/NOAVs and fines and penalties.

H-34 WORKERS' COMPENSATION

(a) The Contractor shall maintain workers compensation insurance coverage pursuant to the requirements of FAR 28.307-2, FAR 28.308 and DEAR 970.2803-1. The insurance program must be approved by the Contracting Officer and cover all eligible employees of the Contractor and comply with applicable Federal and State workers' compensation and occupational disease statutes.

(b) The Contractor shall obtain a service-type insurance policy that endorses the Department of Energy Incurred Loss Retrospective Rating Insurance Plan unless the Contracting Officer approves a different arrangement.

(c) The Contractor shall submit to the Contracting Officer an annual evaluation and analysis of workers' compensation cost as a percent of payroll in comparison with the percentage of payroll cost reported by a nationally recognized Cost of Risk Survey that has been pre-approved by the Contracting Officer. The Contractor's self evaluation shall discuss:

(1) periodic audits of claims servicing units; and,

(2) the reasonableness of self-insurance reserves and methods and assumptions used to closeout claims or losses to present value.

(d) The Contractor shall obtain approval from the Contracting Officer before making any significant change to its workers compensation coverage and will furnish reports as may be required from time to time by the Contracting Officer.

H-35 ADDITIONAL LABOR REQUIREMENTS **[Modified by Modification No. M055]**

(a) The Contractor and the Contracting Officer will develop a procedure whereby NNSA will determine if the Davis Bacon Act is applicable to particular subcontracts. The Contractor shall conduct payroll and job-site audits and conduct investigations of complaints as authorized by NNSA on all Davis Bacon activity, including any subcontracts, as may be necessary to determine compliance with the Davis-Bacon Act. Where violations are found, the Contractor shall report them to the Contracting Officer. The Contracting Officer may require that the Contractor assist in the determination of the amount of restitution and withholding of funds from a subcontractor so that sufficient funds are withheld to provide restitution for back wages due for workers inappropriately classified and paid, fringe benefits owed, overtime payments due, and liquidated damages assessed. The Contractor shall furnish a Davis-Bacon Semi-Annual Enforcement Report to NNSA by April 21st and October 21st each year.

(b) The Contractor shall notify the Contracting Officer of any complaints and significant labor standards violations whether caused by the Contractor or subcontractors. The Contractor shall assist NNSA and or/the Department of Labor in the investigation of any alleged violations or disputes involving Federal labor standards.

(c) When appropriate the Contractor may perform direct construction using direct hire employees. Requirements for the work are covered by the Davis-Bacon Act as prescribed in Section I of this contract.

H-36 WORKFORCE TRANSITION, CONTRACTOR COMPENSATION, BENEFITS AND PENSION **[Modified by Modification No. M138]**

(a) <u>Personnel Appendix</u>

This Clause and the Contract Section J Appendix entitled “Personnel Appendix” are adopted for the exclusive benefit and convenience of the Parties hereto; nothing contained herein shall be construed as conferring any right of action or any other right or benefit upon past, present, or future employees of the Contractor, or upon any other third party. The Personnel Appendix reflects NNSA’s minimum Contractor human resources requirements. Changes, if any, will be made to the Personnel Appendix through a Reimbursement Authorization. Personnel costs and related expenses incurred in accordance with the Personnel Appendix shall be allowable to the extent indicated therein.

(2) Definitions

(i) "Transferring Employees" are those employees who transfer from employment with the predecessor contractor to employment with the Contractor on June 1, 2006.

(ii) "Inactive Vested Transferring Employees" are transferring employees who do not elect to retire under the University of California Retirement Plan (UCRP) prior to June 1, 2006 and who remain vested participants as "inactive members" of the UCRP.

(iii) "UCRP Retiring Employees" are employees of the predecessor contractor who elect to retire under the UCRP prior to June 1, 2006.

(iv) "New Employees" are those employees hired by the Contractor on or after June 1, 2006, who are not Transferring Employees.

(b) Employee Retention

(1) Subject to the availability of funds, the Contractor shall offer employment to all employees of the predecessor contractor who as of June 1, 2006 are in good standing and have LANL "Career" or "Term" appointments as described in the LANL Human Resources Administrative Manual, except as set forth in subparagraph (b)(2) below. Subsequently, the Contractor shall exercise appropriate managerial judgment regarding employee retention and job assignments.

(2) The Contractor is not required to offer employment to those employees assigned to the predecessor contractor's key personnel positions or to other senior management positions that report directly to the predecessor contractor's laboratory director as reflected in the Contract's Section J Appendix entitled "Listing of Predecessor Contractor Senior Management Positions." In addition, the Contractor is not required to offer employment to UCRP Retiring Employees. The Contractor may offer employment to these categories of employees at its sole discretion.

(c) Labor Relations

(1) The Contractor shall respect the right of employees to organize and to form, join, or assist labor organizations, to bargain collectively through their chosen labor representatives, to engage in other concerted activities for the purpose of collective bargaining or other mutual aid or protection, and to refrain from any or all of these activities.

(2) The Contractor is authorized to enter into labor agreements and administer such agreements in accordance with their negotiated terms subject to the following requirements:

(i) The Contractor shall seek to maintain harmonious bargaining relationships that reflect a judicious expenditure of public funds, equitable resolution of disputes and effective and efficient bargaining relationships consistent with the requirements of FAR Subpart 22.1 as supplemented by DEAR Subpart 970.2201 and all applicable Federal and State labor laws.

(ii) The Contractor shall meet with the Contracting Officer or designee(s) for the purpose of reviewing the Contractor's bargaining objectives prior to negotiation of any collective bargaining agreement or revision thereto. During the collective bargaining process, the Contractor shall notify the Contracting Officer before submitting or agreeing to any collective bargaining proposal which could change costs under this Contract or which could involve other items of special interest to the Government. During the collective bargaining process, the Contractor shall obtain the approval of the Contracting Officer before proposing or agreeing to changes in any pension or other benefit plans.

(iii) The Contractor shall notify the Contracting Officer in a timely fashion of all labor relations issues and matters of local interest including organizing initiatives, unfair labor practices, work stoppages, picketing, labor arbitrations and settlement agreements, and will discuss economic parameters for negotiations before the start of any labor negotiations.

(3) The Contractor will furnish reports concerning labor relations and collective bargaining as may be required from time to time by the Contracting Officer.

(d) <u>Salary and Benefits</u>

(1) Compensation Packages

(i) Transferring Employees (Not including Inactive Vested Transferring Employees)

(I) The Contractor shall provide a total compensation package for Transferring Employees that is substantially equivalent to that provided by the predecessor contractor as of June 1, 2006. The Contracting Officer in his/her sole discretion will determine substantial equivalency by comparing the Contractor's total compensation package with the benefits provided by the predecessor contractor; provided, however, that the Contractor's total compensation package must include UCRP age factors as a basis for determining compensation, substantially equivalent pension and other benefits, must maintain the base salaries of the Transferring Employees, and shall comply with the requirements

of paragraph (e), pensions, set forth below.

(II) Transferring Employees shall carry over the length of service credit and vacation and sick leave balances accrued under the predecessor contract as of the date of transfer to the Contractor. Paragraphs (d) (6) (ii) - (iv) below do not apply to evaluating the reasonableness of benefits for Transferring Employees.

(III) The retiree medical benefit plan for Transferring Employees must include service based eligibility requirements that specify at a minimum, the service credit that all participants must have in order to qualify for retiree medical benefit coverage.

(ii) New Employees, Inactive Vested Transferring Employees and UCRP Retiring Employees.

(I) For New Employees, Inactive Vested Transferring Employees and UCRP Retiring Employees, the Contractor shall develop and provide a total compensation package that is market-driven and that will allow the Laboratory to recruit and retain critical scientific, technical, and engineering skills to develop the next generation of scientific personnel necessary to successfully carry out its mission. In addition, any total compensation package shall comply with the requirements of paragraph (e), pensions, as set forth below. Cost reimbursement of benefit plans will be consistent with the approved "Employee Benefits Value Study" and "Employee Benefits Cost Survey Comparison" as described below in paragraphs (d)(6)(i-iv).

(II) Inactive Vested Transferring Employees shall carry over vacation and sick leave balances accrued under the predecessor contract as of the date of transfer to the Contractor, but shall not receive service credit for calculation of benefits under the Contractor's Pension Plan Two, as identified and discussed below, for service credited under the UCRP.

(iii) The total compensation packages described in subparagraphs (i) and (ii) above are subject to the Contracting Officer's review and approval.

(iv) Notwithstanding any other term or condition set forth in the Contract, the compensation for each of the Contractor's Key Personnel, shall not exceed (i) $473,318 benchmark in effect at the time of Contract award (i.e., the Contract's effective date) or (ii) the revised benchmark amount, in any subsequent government fiscal year, as determined by the applicable Determination of Executive Compensation Benchmark Amount Pursuant

to Section 39 of the Office of Federal Procurement Policy (OFPP) Act (41 U.S.C. 435), as Amended, as required in FAR Subpart 31.205-6 "Compensation for Personal Services", paragraph (p) "Limitation on allowability of compensation for certain contractor personnel."

(2) Wages and Salaries

(i) The Contractor shall develop, implement and maintain formal policies, practices and procedures to be used in the administration of its compensation system including a compensation system self-assessment plan consistent with 48 CFR 31.205-6 as supplemented by DEAR 970.3102-05-6, "Compensation for personal services," as applied to the NNSA-approved standards in the Personnel Appendix. The Contractor's compensation system and methods shall be in accordance with 48 CFR 31.205-6 as supplemented by DEAR 970.3102-05-6, fully documented, consistently applied, and acceptable to the Contracting Officer.

(ii) The Contractor shall submit the following to the Contracting Officer:

(I) Any additional compensation system self-assessment data requested by the Contracting Officer that may be needed to validate and approve the Contractor's compensation system.

(II) Any proposed major compensation program design changes prior to implementation.

(III) An Annual Compensation Increase Plan (CIP) 90 days prior to the beginning of each succeeding fiscal year.

(IV) Individual compensation changes for the Laboratory Director, Deputy Directors (if any), and Senior Managers that report directly to the Laboratory Director/Deputy Directors, including initial and proposed changes to base salary and or payments under an Executive Incentive Compensation Plan.

(V) Any proposed establishment of an incentive compensation plan (variable pay plan/pay-at-risk).

(iii) NNSA will conduct periodic appraisals of Contractor performance with respect to compensation system implementation. Such appraisals, may be conducted by NNSA, by validation of Contractor self assessments of compensation system performance, a third party expert, or any other method directed by the Contracting Officer.

(3) Severance Pay

(i) Severance pay benefits are not payable to an employee under this Contract if the employee:

(I) Voluntarily separates, resigns or retires from employment,

(II) Is offered employment with a successor/replacement contractor,

(III) Is offered employment with the parent or an affiliated company of the Contractor, or

(IV) Is discharged for cause.

(ii) For all Transferring Employees the Contractor shall carry over the length of service credit accrued for eligibility for severance pay under service for the predecessor contractor as of the date of transfer to the Contractor. Service credit does not include any period of prior service at a DOE/NNSA facility for which severance pay has been previously paid.

(4) Reporting Requirements

The Contractor shall provide the following reports with respect to salary and benefits for all employees to the Contracting Officer:

(i) Annual Contractor Salary-Wage Increase Expenditure Reports to include, at a minimum, breakouts for merit, promotion, variable pay, special adjustments, and structure movements for each pay structure showing actual against approved amounts.

(ii) Annual Reports of Contractor Expenditures for Employee Supplemental Compensation through the Department Workforce Information System (WFIS), compensation and benefits module.

(iii) Annual Self-Assessments of its total compensation packages.

(5) Allowability of Pension and Other Benefits Costs

Prior to changing any employee benefit, the Contractor shall obtain Contracting Officer approval of the changes. No presumption of allowability associated with a change will exist unless the Contracting Officer approves the change.

(6) Benefits Evaluations

(i) Within twelve months of Contract award and annually thereafter, unless specified elsewhere in the Contract, or as directed by the Contracting

Officer, the Contractor shall submit for approval an evaluation of the Contractor's employee benefits based on two professionally recognized performance measures:

(I) An Employee Benefits Value Study (ben-val) Measure, every two years, commencing June 2006, which is an actuarial study of the relative value (RV) of the benefits programs offered by the Contractor measured against the RV of benefit programs offered by a comparator group of companies and institutions approved by the Contracting Officer. To the extent that the value study does not address Post Retirement Benefits (PRBs), other than pensions, the Contractor shall provide separate PRB cost and plan design data comparisons with external benchmarks for nationally recognized and Contracting Officer approved survey sources.

(II) An Employee Benefits Cost Survey Comparison (cost survey) Method every year that analyzes the Contractor's employee benefits cost on a per capita basis per full time equivalent employee and compares it with the cost reported by the U.S. Chamber of Commerce (CoC) Annual Employee Benefits Cost Survey or other Contracting Officer approved broad based national survey.

(ii) When the total RV and/or per capita cost exceed the comparator group by more than 5 percent, as required by the Contracting Officer, the Contractor shall submit for approval corrective action plans, including a timeline, to achieve a net benefit value and per capita cost not to exceed the comparator group by more than 5 percent.

(iii) When required by the Contracting Officer, the Contractor shall submit an analysis of any specific plan costs that are above the per capita cost range and a corrective action plan to achieve conformance with the per capita cost range required by the Contracting Officer.

(iv) The Contractor shall implement corrective action plans determined to be reimbursable by the Contracting Officer to align employee benefit programs with the target in subparagraph (d)(6)(ii) above.

(v) The Contractor shall annually submit a Report of Contractor Expenditures for Employee Supplemental Compensation.

(e) <u>Pension Plans</u>

(1) The Contractor shall sponsor at least two site-specific separate pension plans that cover site employees, including any pension plan spun off by the predecessor contractor. The pension plans sponsored by the Contractor shall include:

"Pension Plan One," which shall cover Transferring Employees (not including Inactive Vested Transferring Employees), and "Pension Plan Two," which shall cover New Employees, Inactive Vested Transferring Employees, and UCRP Retiring Employees hired by the Contractor.

(2) All Pension Plans shall meet the requirements of the Internal Revenue Code (IRC) and Employee Retirement Income Security Act of 1974 (ERISA), as applicable, and shall be distinct from any corporate or other pension plan. Each pension plan shall cover only Contractor employees working at the Laboratory under this Contract.

(3) (i) Pension Plan One. The Contractor shall consider amending Pension Plan One to be consistent with any changes made by the Board of Regents of the University of California to the UCRP during the term of this Contract. For Transferring Employees (not including Inactive Vested Transferring Employees), Pension Plan One shall include UCRP age factors, preserve accrued benefits and recognize service credit earned under the predecessor contractor's retirement plans including the UCRP.

(ii) Pension Plan Two. For New Employees, Inactive Vested Transferring Employees, and UCRP Retiring Employees hired under this Contract, the Contractor shall develop a pension benefit package that is market-driven and competitive for the industry and which will allow the Contractor to recruit and retain the appropriate personnel to assure that LANL continues to successfully carry out its mission.

(I) For Inactive Vested Transferring Employees, Pension Plan Two shall recognize service earned under the UCRP for purposes of determining eligibility and vesting under Pension Plan Two, but shall not recognize their prior service for calculation of benefits.

(II) UCRP Retiring Employees hired under this Contract shall not receive credit under Pension Plan Two for service under the predecessor contract.

(4) Contractor policies, practices, and procedures used in the administration of pension plans shall be consistent with law and regulation.

(5) The Contractor shall obtain an independent audit annually of each pension plan, which provides the accounting details specified by ERISA Sections 103 and 104.

(6) In addition to the information required under paragraph (d) (6) above, prior to making any changes to a pension plan the Contractor shall submit the information required under subparagraphs (i) and (ii) below for advance approval that the costs proposed to be incurred are consistent with the Contractor's pension plans and will be deemed allowable.

(i) For proposed changes to pension plans and pension plan funding, an analysis of the impact of any proposed changes on actuarial accrued liabilities and an analysis of relative benefit value.

(ii) For any proposed special programs (including, but not limited to, early retirement programs, window benefit programs, disability programs, plan-loan features, employee contribution refunds, asset reversions, or ancillary benefits), an analysis of the impact of special programs on the actuarial accrued liability of the pension plan, and on relative benefit value, if applicable.

(7) For each pension plan, the Contractor shall provide the Contracting Officer with the following when filed with the IRS or within nine months of the last day of the current pension plan year, whichever occurs first:

(i) The actuarial valuation.

(ii) Copies of IRS form 5500 with schedules.

(iii) Copies of all forms in the 5300 series that document the establishment, amendment, termination, spin-off, or merger of a plan.

(8) The Contractor shall perform an annual assessment to evaluate the effectiveness of its pension plan investment management. The assessment shall include at a minimum: a review and analysis of pension plan investment objectives; the strategies employed to achieve those objectives; the methods used to monitor execution of those strategies and the achievement of the investment objectives; and a comparative analysis of the objectives and performance of other comparable pension plans. The Contractor shall also identify its plans, if any, for revising any aspect of its pension plan management based on the results of the review. A copy of the pension plan performance assessment identified in this paragraph shall be provided to the Contracting Officer within 30 days of the completion of the assessment.

(9) Pension Plan Terminations

(i) The Contractor shall not terminate any pension plan covering any site employee without at least 60 days notice to and the approval of the Contracting Officer prior to the scheduled date of plan termination.

(ii) After all liabilities of the plan are satisfied, the Contractor shall return to NNSA an amount equaling the asset reversion from the plan termination and interest as determined pursuant to the Contract's Section I Clause

entitled "Interest" that has accrued on that amount because of a delay in the payment to NNSA. The Contracting Officer and the Contractor will agree to a schedule of payments. The Contracting Officer shall determine the method of payment.

(iii) The amount of asset reversion and interest is subject to audit consistent with Contracting Officer direction.

(f) Contract Expiration or Termination With a Follow-on Management and Operating Contract

If the Contract expires, or is terminated and an award is made to a follow-on management and operating contractor, as a part of the transition to another entity and in accordance with Contracting Officer direction and applicable law the Contractor shall transfer sponsorship of site-specific pension and other benefit plans covering employees at the Laboratory to the follow-on management and operating contractor.

(g) Contract Expiration or Termination Without a Follow-on Management and Operating Contract

If this Contract expires or terminates without a follow-on management and operating contract, notwithstanding any other obligations and requirements concerning expiration or termination under any other clause of this Contract, including but not limited to the Contract's Section I Clause entitled "Termination," the following actions shall occur:

(1) The Contractor shall continue as plan sponsor of all existing pension and welfare benefit plans covering site personnel, with continuing responsibility for management and administration of the plans, as directed by the Contracting Officer in his/her sole discretion.

(2) The Contract may be extended as appropriate for purposes deemed necessary by the Contracting Officer for benefit continuation.

(3) Pension plan contributions, plan asset management and administration costs, PRB costs and other applicable costs will continue to be allowable and fully reimbursable consistent with the terms of this Contract and in accordance with the applicable law and otherwise as acceptable to the Contracting Officer.

(4) The Contracting Officer shall provide written direction regarding the provision of post-contract pension and other benefits as he/she deems necessary.

(h) Work Force Planning

The Contractor will conduct work force planning which identifies the current and future status of critical-skills and the strategy for the recruitment and/or retention of

those skills. This shall be documented in the form of a plan, to be submitted to the Contracting Officer no later than two (2) months after Contract award, for review and approval, with subsequent annual updates thereafter. The plan shall specifically address the issues set forth below:

(1) Development of appropriate incentives, including an incentive compensation strategy for "Key Personnel," other management personnel, and other employees, as appropriate.

(2) Documentation of a strategy for meeting the requirements identified in paragraph (e) "Pension Plans" above.

(3) A framework for providing pension and other benefits applicable to the transferring workforce, relative to those provided under the predecessor contract, and an investment strategy for the management of transferred assets.

(4) A plan to provide the opportunity for predecessor contractor employees, who are considering retirement, to discuss employment with the Contractor during the transition period to enable the employees to decide whether to retire under the UCRP.

(i) Post Retirement Benefits

(1) The Contractor shall become the sponsor and be responsible for management and administration of a retiree medical benefit plan that will provide medical insurance benefits (including dental) substantially equivalent to those provided by the predecessor contractor to individuals who meet eligibility requirements under the plan and who retired from employment at LANL with the predecessor contractor prior to June 1, 2006. The Contracting Officer will determine substantial equivalency by comparing the Contractor's retiree medical benefit plan with the benefits provided by the predecessor contractor.

(2) Unless required by Federal or State law, advance funding of PRBs, other than pensions, is not allowable.

H-37 INTELLECTUAL AND SCIENTIFIC FREEDOM

(a) The Parties recognize the importance of fostering an atmosphere at the Laboratory conducive to scientific inquiry and the development of new knowledge and creative and innovative ideas related to important national interests.

(b) The Parties further recognize that the free exchange of ideas among scientists and engineers at the Laboratory and colleagues at universities, colleges, and other laboratories or scientific facilities is vital to the success of the scientific, engineering, and technical work performed by Laboratory personnel.

(c) In order to further the goals of the Laboratory and the national interest, it is agreed by the Parties that the scientific and engineering personnel at the Laboratory shall be accorded the rights of publication or other dissemination of research, and participation in open debate and in scientific, educational, or professional meetings or conferences, subject to the limitations included in technology transfer agreements and such other limitations as may be required by the terms of this Contract. Nothing in this clause is intended to alter the obligations of the Parties to protect classified or unclassified controlled nuclear information as provided by law.

(d) Nothing in the Section I clause entitled "DEAR 952.204-75 Public Affairs" is intended to limit the rights of the Contractor or its employees to publicize and to accurately state the results of its scientific research.

H-38 CONFLICTS OF INTEREST COMPLIANCE PLAN

The Contractor shall submit a Conflicts of Interest (COI) Compliance Plan to the Contracting Officer for approval within 90 days after the award date of this Contract. The COI Compliance Plan shall address the Contractor's approach for adhering to the Section I Clause entitled “Organizational Conflicts of Interest – Alternate I” and Section J Appendix entitled “Technology Commercialization” and describe its procedures for aggressively self-identifying and resolving both organizational and employee conflicts of interest. The overall purpose of the COI Compliance Plan is to demonstrate how the Contractor will assure that its operations meet the highest standards of ethical conduct, and how its assistance and advice are impartial and objective. The COI Compliance Plan shall specifically address:

(a) How actual or potential COI issues will be identified and either mitigated, resolved, or avoided during contract performance;

(b) How the Contractor will ensure its work force is aware of and complies with Organizational Conflicts of Interest and COI Compliance Plan requirements;

(c) How the Contractor will ensure that the activities of the Contractor’s Parent Organization(s) and affiliated companies are consistent with its COI Compliance Plan; and

(d) How the Contractor will protect confidential, proprietary, or sensitive information.

H-39 LOBBYING RESTRICTIONS

(a) The Contractor agrees that none of the Contract’s incremental funding shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

(b) The Contractor agrees that none of the Contract's incremental funding shall be made available for any activity or the publication or distribution of literature that in any way tends to promote public support or opposition to any legislative proposal on which Congressional action is not complete. This restriction is in addition to those prescribed elsewhere in statute and regulation.

H-40 ADDITION AND ALTERATIONS TO IMPLEMENT EXECUTIVE ORDER 13423, STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY AND TRANSPORTATION MANAGEMENT AND ITS IMPLEMENTING INSTRUCTIONS **[Modified by Modification No M067]**

This contract involves contractor operation of Government-owned facilities and/or vehicles and the provisions of Executive Order 13423 are applicable to the Contractor to the same extent they would be applicable if the Government were operating the facilities or vehicles. Information on the requirements of the Executive Order and its Implementing Instructions may be found at http://ofee.gov/eo/eo13423_main.asp. This requirement includes the Electronics Stewardship requirements of Implementing Instruction XII. When acquiring desktop or laptop computers and computer monitors, the Contractor shall acquire Electronic Product Environmental Assessment Tool registered products conforming to IEEE 1680-2006 Standard and ranked at least bronze, provided such products are life cycle cost efficient and meet applicable performance requirements. Information on EPEAT-registered computer products is available at http://www.epeat.net/.

H-41 WORK FUNDED UNDER THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 [Modified by Modification No M068]

Work performed under this Contract will be funded, in whole or in part, with funds appropriated by the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (Recovery Act). The Recovery Act's purposes are to stimulate the economy and to create and retain jobs. The Recovery Act gives preference to activities that can be started and completed expeditiously, including a goal of using at least 50 percent of the funds made available by it for activities that can be initiated not later than June 17, 2009.

To comply with the reporting requirements of Section 1512(c) of the Recovery Act and related Guidance, the Contractor shall segregate all costs associated with Recovery Act actions assigned and authorized under this Contract from those costs associated with all other work authorized under the terms of this Contract.

The Recovery Act funds can be used in conjunction with other funding as necessary to complete projects. However, the Contractor must ensure that the project contains the authorized Treasury Accounting Symbol (TAS) approved by the Contracting Officer to ensure linkage between procurement and financial data. The Contractor should issue

separate contracts (if subcontracted) for the Recovery Act project tasks to ensure compliance with the tracking and reporting requirements of the Recovery Act and related Guidance. For projects funded by sources other than the Recovery Act, the Contractor should record the TAS and project number and assign separate tasks codes to ensure that the financial information in not co-mingled and to ensure the records allows a clear and auditable linkage between the projects, procurement and financial data, as prescribed in the Recovery Act.

The Government will develop the implementing instructions of the Recovery Act, particularly concerning the how and where for the new reporting requirements. The Contractor will be provided these details as they become available. The Contractor shall comply with all applicable requirements of the Recovery Act including those Recovery Act requirements contained in a Work Authorization. If the Contractor believes there is any inconsistency between the Recovery Act requirements contained in the Work Authorization and the Contract terms and conditions, the Contractor shall seek guidance from the Contracting Officer. The Contractor shall also advise the Contracting Officer if there are any Contract deliverables or Contract requirements that may need to be updated in order to comply with the Recovery Act.

H-42 IMPLEMENTATION OF ITER AGREEMENT ANNEX ON INFORMATION AND INTELLECTUAL PROPERTY [MODIFIED BY MODIFICATION NO. M174]

(1) Contractor agrees to be subject to the Agreement on the Establishment of the ITER International Fusion Energy Organization for the Joint Implementation of the ITER Project (the ITER Agreement) as it applies to intellectual property, as follows: specifically, and without limitation, subject inventions and data produced in the performance of this contract and subcontracts related to the ITER project are subject to the license rights and other obligations provided for in the ITER Agreement's Annex on Information and Intellectual Property.

(2) Background intellectual property of the Contractor, as defined in the Annex, is also subject to the provisions of the ITER Agreement. In particular and under certain circumstances, Contractor shall use its best efforts to identify Background Intellectual Property (including patents and data) and grant a nonexclusive license in certain Background Intellectual Property to the Parties to the ITER Agreement (Members) for commercial fusion use. However, in individual cases and for good cause shown in writing, the requirement for such a license may be waived by 'DOE.

(3) Further, intellectual property generated by Contractor employees who are designated as seconded staff to the ITER organization shall be owned by the ITER Organization and the Contractor gets no rights to such intellectual property except those rights provided the Contractor by the Government as a result of the Government being a member of the ITER Organization. Contractor agrees that Contractor employee agreements will be suitably modified as necessary to effectuate this provision and that employees will be required to execute a separate secondment agreement with the ITER Organization.

(4) The Government may provide to each ITER Member, as defined in the ITER Agreement, the right, for non-commercial uses, to translate, reproduce, and publicly distribute data produced in the performance of this contract. Contractor will deliver, at a minimum, to DOE, copies of all ITER-related peer-reviewed manuscripts provided to scientific and technical journal publishers which may then be distributed to Members in accordance with the ITER Agreement. Contractor agrees that the ITER Organization may impose a different delivery requirement in order to be in compliant with this paragraph and that, if so, Contractor agrees that this paragraph may be suitably modified to be in accordance with the ITER Agreement.

(5) Contractor shall include the ITER patent and data rights clauses transmitted to the Contractor from the U.S. ITER Project Office, suitably modified to identify the parties, in all subcontracts related to ITER, at any tier, for experimental, developmental, demonstration or research work and in subcontracts in which technical data or computer software is expected to be produced or in subcontracts that contain a requirement for production or delivery of data.

Part II – Section I

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Part II - CONTRACT CLAUSES

Section I - CONTRACT CLAUSES

I-1 FAR 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)
[Modified by Modification No.M067]

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these address(es):

Federal Acquisition Regulations	*http://www.arnet.gov/far/*
Federal Acquisition Forms	*http://www.gsa.gov/forms/farnumer.htm*
Department of Energy Acquisition Regulations	*http://www.management.energy.gov/DEAR.htm* *or* *http://farsite.hill.af.mil/vfdoe1.htm*

I-2 NOTICE – SECTION I CLAUSES INCORPORATED BY REFERENCE

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I-4 FAR 52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

I-5 FAR 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (Sep 2006) [Modified by Modification No. M067]

I-6 FAR 52.203-7 ANTI-KICKBACK PROCEDURES (JUL 1995)

I-7 FAR 52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

I-8 FAR 52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

I-9 FAR 52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (SEP 2007) [Modified by Modification No. M067]

I-10 FAR 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

I-11 FAR 52.204-7 CENTRAL CONTRACTOR REGISTRATION (APR 2008) [Modified by Modification No. M067]

I-12 FAR 52.208-8 REQUIRED SOURCES FOR HELIUM AND HELIUM USAGE DATA (APR 2002)

I-13 FAR 52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (SEP 2006) [Modified by Modification No. M067]

I-14 FAR 52.211-5 MATERIAL REQUIREMENTS (AUG 2000)

I-15 FAR 52.211-15 DEFENSE PRIORITY AND ALLOCATION REQUIREMENT (APR 2008) [Modified by Modification No. M067]

I-16 FAR 52.215-8 ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT (OCT 1997)

I-17 FAR 52.215-10 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA (OCT 1997)

I-18 FAR 52.215-12 SUBCONTRACTOR COST OR PRICING DATA (OCT 1997)

I-19 FAR 52.215-15 PENSION ADJUSTMENTS AND ASSET REVERSIONS (OCT 2004)

I-20 FAR 52.215-17 WAIVER OF FACILITIES CAPITAL COST OF MONEY (OCT 1997)

I-21 FAR 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (Jan 2011) [Modified by Modification No. M192]

I-22 FAR 52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (Jan 2011) [Modified by Modification Nos. M067 and M192]

I-23 FAR 52.219-16 LIQUIDATED DAMAGES - SUBCONTRACTING PLAN (JAN 1999)

I-24 FAR 52.219-25 SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM-DISADVANTAGED STATUS AND REPORTING (APR 2008) [Modified by Modification No. M067]

I-25 FAR 52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

I-26 FAR 52.222-3 CONVICT LABOR (JUN 2003)

I-27 FAR 52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION (JUL 2005) [Modified by Modification No. M067]

I-28 FAR 52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

I-29 FAR 52.222-26 EQUAL OPPORTUNITY (MAR 2007) [Modified by Modification No. M067]

I-30 FAR 52.222-29 NOTIFICATION OF VISA DENIAL (JUN 2003)

I-31 FAR 52.222-35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEP 2006) [Modified by Modification No. M067]

I-32 FAR 52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)

I-33 FAR 52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEP 2006) [Modified by Modification No. M067]

I-34 FAR 52.222-39 NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES (DEC 2004)

I-35 FAR 52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (AUG 2003) ALTERNATE I (AUG 2003) (ALTERATION AS MODIFIED BY DOE ACQUISITION LETTER 2008-05) [Modified by Modification No. M067]

I-36 FAR 52.223-10 WASTE REDUCTION PROGRAM (AUG 2000) (ALTERATION AS MODIFIED BY DOE ACQUISITION LETTER 2008-05) [Modified by Modification No. M067]

I-37 FAR 52.223-11 OZONE-DEPLETING SUBSTANCES (MAY 2001)

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I-39 FAR 52.223-14 TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)

I-40 FAR 52.224-1 PRIVACY ACT NOTIFICATION (APR 1984)

I-41 FAR 52.224-2 PRIVACY ACT (APR 1984)

I-42 FAR 52.225-13 RESTRICTION ON CERTAIN FOREIGN PURCHASES (JUN 2008) [Modified by Modification No.M067]

I-43 FAR 52.230-2 COST ACCOUNTING STANDARDS (MAY 2012) [Modified by Modification Nos. M067 and M196]

I-44 FAR 52.230-6 ADMINISTRATION OF COST ACCOUNTING STANDARDS (MAR 2008) [Modified by Modification No.M067]

I-45 FAR 52.232-17 INTEREST (OCT 2008) [Modified by Modification No.M067]

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I-50 FAR 52.236-8 OTHER CONTRACTS (APR 1984)

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I-53 FAR 52.242-13 BANKRUPTCY (JUL 1995)

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I-55 FAR 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (DEC 2008) [Modified by Modification No.M067]

I-56 FAR 52.247-63 PREFERENCE FOR U.S. FLAG AIR CARRIERS (JUN 2003)

I-57 FAR 52.247-64 PREFERENCE FOR PRIVATELY OWNED U.S.-FLAG COMMERCIAL VESSELS (FEB 2006) [Modified by Modification No.M067]

I-58 FAR 52.247-67 SUBMISSION OF TRANSPORTATION DOCUMENTS FOR AUDIT (FEB 2006) [Modified by Modification No.M067]

I-59 FAR 52.249-14 EXCUSABLE DELAYS (APR 1984)

I-60 FAR 52.251-1 GOVERNMENT SUPPLY SOURCES (APR 1984)

I-61 FAR 52.251-2 INTERAGENCY FLEET MANAGEMENT SYSTEM (IFMS) VEHICLES AND RELATED SERVICES (JAN 1991)

I-62 FAR 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984) [Modified by Modification No.M067]

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any Department of Energy Acquisition Regulation (48 CFR Chapter 9) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

I-63 FAR 52.253-1 COMPUTER-GENERATED FORMS (JAN 1991)

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I-65 DEAR 952.204-70 CLASSIFICATION/DECLASSIFICATION (SEP 1997)

I-66 DEAR 952.204-71 SENSITIVE FOREIGN NATIONS CONTROLS (APR 1994)

I-67 DEAR 952.204-75 PUBLIC AFFAIRS (DEC 2000)

I-68 DEAR 952.208-7 TAGGING OF LEASED VEHICLES (APR 1984)

I-69 DEAR 952.209-72 ORGANIZATIONAL CONFLICTS OF INTEREST (JUN 1997) - ALTERNATE I

I-70 DEAR 952.211-71 PRIORITIES AND ALLOCATIONS (ATOMIC ENERGY) (APR 2008) [Modified by Modification No.M067]

I-71 RESERVED [Modified by Modification No.M067]

I-72 DEAR 952.219-70 DOE MENTOR-PROTÉGÉ PROGRAM (MAY 2000)

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I-74 DEAR 952.224-70 PAPERWORK REDUCTION ACT (APR 1994)

I-75 DEAR 952.226-74 DISPLACED EMPLOYEE HIRING PREFERENCE (JUN 1997)

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I-78 DEAR 970.5204-3 ACCESS TO AND OWNERSHIP OF RECORDS (JUL 2005) [Modified by Modification No. M067]

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I-80 DEAR 970.5217-1 WORK FOR OTHERS PROGRAM (NON-DOE FUNDED WORK) (JAN 2005)

I-81 DEAR 970.5222-1 COLLECTIVE BARGAINING AGREEMENTS - MANAGEMENT AND OPERATING CONTRACTS (DEC 2000)

I-82 DEAR 970.5222-2 OVERTIME MANAGEMENT (DEC 2000)

I-83 DEAR 970.5223-1 INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO WORK PLANNING AND EXECUTION (DEC 2000)

I-84 DEAR 970.5223-2 AFFIRMATIVE PROCUREMENT PROGRAM (MAR 2003) (ALTERATION AS MODIFIED BY DOE ACQUISITION LETTER 2008-05) [Modified by Modification No. M067]

I-85 DEAR 970.5223-4 WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (DEC 2000)

I-86 DEAR 970.5223-5 DOE MOTOR VEHICLE FLEET FUEL EFFICIENCY (OCT 2003) (ALTERATION AS MODIFIED BY DOE ACQUISITION LETTER 2008-05) [Modified by Modification No. M067]

I-87 DEAR 970.5226-2 WORKFORCE RESTRUCTURING UNDER SECTION 3161 OF THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 1993 (DEC 2000)

I-88 DEAR 970.5226-3 COMMUNITY COMMITMENT (DEC 2000)

I-89 DEAR 970.5227-4 AUTHORIZATION AND CONSENT (AUG 2002)

I-90 DEAR 970.5227-5 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 2002)

I-91 DEAR 970.5227-6 PATENT INDEMNITY – SUBCONTRACTS (DEC 2000)

I-92 DEAR 970.5227-8 REFUND OF ROYALTIES (AUG 2002)

I-93 DEAR 970.5228-1 INSURANCE -- LITIGATION AND CLAIMS (MAR 2002)

I-94 DEAR 970.5229-1 STATE AND LOCAL TAXES (DEC 2000)

I-95 DEAR 970.5232-1 REDUCTION OR SUSPENSION OF ADVANCE, PARTIAL, OR PROGRESS PAYMENTS (DEC 2000)

I-96 DEAR 970.5232-5 LIABILITY WITH RESPECT TO COST ACCOUNTING STANDARDS (DEC 2000)

I-97 DEAR 970.5232-6 WORK FOR OTHERS FUNDING AUTHORIZATION (DEC 2000)

I-98 DEAR 970.5232-7 FINANCIAL MANAGEMENT SYSTEM (DEC 2000)

I-99 DEAR 970.5232-8 INTEGRATED ACCOUNTING (DEC 2000)

I-100 DEAR 970.5235-1 FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER SPONSORING AGREEMENT (DEC 2000)

I-101 DEAR 970.5236-1 GOVERNMENT FACILITY SUBCONTRACT APPROVAL (DEC 2000)

I-102 DEAR 970.5242-1 PENALTIES FOR UNALLOWABLE COSTS (DEC 2000)

I-103 DEAR 970.5243-1 CHANGES (DEC 2000)

I-104 FAR 52.202-1 DEFINITIONS (JUL 2004) (DEVIATION)

(a) When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR 2.101 in effect at the time the solicitation was issued, unless-

(1) The solicitation, or amended solicitation, provides a different definition;
(2) The contracting parties agree to a different definition;

(3) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning; or
(4) The word or term is defined in FAR Part 31, for use in the cost principles and procedures.

(b) The FAR Index is a guide to words and terms the FAR defines and shows where each definition is located. The FAR Index is available via the Internet at http://www.acqnet.gov at the end of the FAR, after the FAR Appendix.

(c) "Agency head" or "head of agency" means the Secretary, Deputy Secretary, or the Under Secretary and Administrator for National Nuclear Security Administration of the Department of Energy. "Senior Procurement Executive" means, the individuals who are responsible for management direction of the acquisition system of NNSA, including implementation of the unique acquisition policies, regulations, and standards of NNSA. For NNSA, it is the Administrator for Nuclear Security and the Director, Acquisition and Supply Management.

I-105 FAR 52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997) ALTERNATE I (JUL 1995)

(a) "Hazardous material," as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material (If none, insert "None")	Identification No.
None	

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all

hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to-

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with paragraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in paragraph (b) of this clause.

(1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.

(2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

I-106 FAR 52.223-7 NOTICE OF RADIOACTIVE MATERIALS (JAN 1997)

(a) The Contractor shall notify the Contracting Officer or designee, in writing, *30* days prior to the delivery of, or prior to completion of any servicing required by this contract of, items containing either

(1) radioactive material requiring specific licensing under the regulations issued pursuant to the Atomic Energy Act of 1954, as amended, as set forth in Title 10 of the Code of Federal Regulations, in effect on the date of this contract, or

(2) other radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries.

Such notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials, and any other information known to the Contractor which will put users of the items on notice as to the hazards involved (OMB No. 9000-0107).

(b) If there has been no change affecting the quantity of activity, or the characteristics and composition of the radioactive material from deliveries under this contract or prior contracts, the Contractor may request that the Contracting Officer or designee waive the notice requirement in paragraph (a) of this clause. Any such request shall --

(1) Be submitted in writing;

(2) State that the quantity of activity, characteristics, and composition of the radioactive material have not changed; and

(3) Cite the contract number on which the prior notification was submitted and the contracting office to which it was submitted.

(c) All items, parts, or subassemblies which contain radioactive materials in which the specific activity is greater than 0.002 microcuries per gram or activity per item equals or exceeds 0.01 microcuries, and all containers in which such items, parts or subassemblies are delivered to the Government shall be clearly marked and labeled as required by the latest revision of MIL-STD 129 in effect on the date of the contract.

(d) This clause, including this paragraph (d), shall be inserted in all subcontracts for radioactive materials meeting the criteria in paragraph (a) of this clause.

I-107 FAR 52.223-9 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA DESIGNATED ITEMS (MAY 2008)
[Modified by Modification No. M067]

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

"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material."

"Recovered material" means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, shall—

(1) Estimate the percentage of the total recovered material content for EPA-designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of postconsumer material content; and

(2) Submit this estimate to *the Contracting Officer.*

I-108 FAR 52.225-1 BUY AMERICAN ACT –SUPPLIES (FEB 2009) [Modified by Modification No. 196]

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

"Commercially available off-the-shelf (COTS) item"—

(1) Means any item of supply (including construction material) that is—

(i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and
(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702), such as agricultural products and petroleum products.

"Component" means an article, material, or supply incorporated directly into an end product.

"Cost of components" means—

(3) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(4) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

"Domestic end product" means—

(1) An unmanufactured end product mined or produced in the United States;

(2) An end product manufactured in the United States, if—
(i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as those that the agency determines are not mined, produced, or manufactured in sufficient and reasonably available commercial quantities of a satisfactory quality are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic; or

(ii) The end product is a COTS item.

"End product" means those articles, materials, and supplies to be acquired under the contract for public use.
"Foreign end product" means an end product other than a domestic end product.
"United States" means the 50 States, the District of Columbia, and outlying areas.

(b) The Buy American Act (41 U.S.C. 10a - 10d) provides a preference for domestic end products for supplies acquired for use in the United States. In accordance with 41 U.S.C. 431, the component test of the Buy American Act is waived for an end product that is a COTS item (See 12.505(a)(1)).

(c) Offerors may obtain from the Contracting Officer a list of foreign articles that the Contracting Officer will treat as domestic for this contract.

(d) The Contractor shall deliver only domestic end products except to the extent that it specified delivery of foreign end products in the provision of the solicitation entitled "Buy American Act Certificate."

(End of clause)

I-109 FAR 52.225-9 BUY AMERICAN ACT – CONSTRUCTION MATERIALS (SEP 2010) [Modified by Modification No. 196]

(a) Definitions. As used in this clause-

"Commercially available off-the-shelf (COTS) item"—

(1) Means any item of supply (including construction material) that is—

(i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702), such as agricultural products and petroleum products.

"Component" means an article, material, or supply incorporated directly into a construction material.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

"Cost of components" means—

(3) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(4) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

"Domestic construction material" means—

(1) An unmanufactured construction material mined or produced in the United States;

(2) A construction material manufactured in the United States, if—

(i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic; or

(ii) The construction material is a COTS item.

"Foreign construction material" means a construction material other than a domestic construction material.

"United States" means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference.

(1) This clause implements the Buy American Act (41 U.S.C. 10a - 10d) by providing a preference for domestic construction material. In accordance

with 41 U.S.C. 431, the component test of the Buy American Act is waived for construction material that is a COTS item (See FAR 12.505(a)(2)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows:

_____

[*Contracting Officer to list applicable excepted materials or indicate "none"*]

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that—

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(d) Request for determination of inapplicability of the Buy American Act.

(1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including—

(A) A description of the foreign and domestic construction materials;
(B) Unit of measure;
(C) Quantity;
(D) Price;
(E) Time of delivery or availability;
(F) Location of the construction project;
(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.

(e) *Data*. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

FOREIGN AND DOMESTIC CONSTRUCTION MATERIALS PRICE COMPARISON

Construction Material Description	Unit of Measure	Quantity	Price (Dollars)*
Item 1:			
Foreign construction material	_____	_____	_____
Domestic construction material	_____	_____	_____
Item 2:	_____	_____	_____
Foreign construction material	_____	_____	_____
Domestic construction material			

[*List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.*]
[*Include other applicable supporting information.*]
[** Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).*]

I-110 FAR 52.227-23 RIGHTS TO PROPOSAL DATA (TECHNICAL) (JUNE 1987)

Except for data contained on pages _____ *[to be completed prior to award]*, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data-General" clause contained in this contract) in and to the technical data contained in the proposal dated _____,*[to be completed prior to award]* upon which this contract is based.

I-111 FAR 52.229-8 TAXES – FOREIGN COST-REIMBURSEMENT CONTRACTS (MAR 1990)

(a) Any tax or duty from which the United States Government is exempt by agreement with the Government of *the foreign country(ies) referenced in the applicable Work Authorization or as specified by the Contracting Officer* or from which the Contractor or any subcontractor under this contract is exempt under the laws of the *Country(ies) referenced in the applicable Work Authorization or as specified by the Contracting Officer*, shall not constitute an allowable cost under this contract.

(b) If the Contractor or subcontractor under this contract obtains a foreign tax credit that reduces its Federal income tax liability under the United States Internal Revenue Code (Title 26, U.S. Code) because of the payment of any tax or duty that was reimbursed under this contract, the amount of the reduction shall be paid or credited at the time of such offset to the Government of the United States as the Contracting Officer directs.

I-112 FAR 52.229-10 STATE OF NEW MEXICO GROSS RECEIPTS AND COMPENSATING TAX (APR 2003) (ALTERATION)

(a) Within thirty (30) days after award of this contract, the Contractor shall advise the State of New Mexico of this contract by registering with the State of New Mexico, Taxation and Revenue Department, Revenue Division, pursuant to the Tax Administration Act of the State of New Mexico and shall identify the contract number.

(b) The Contractor shall pay the New Mexico gross receipts taxes, pursuant to the Gross Receipts and Compensating Tax Act of New Mexico, assessed against the contract fee and costs paid for performance of this contract, or of any part or portion thereof, within the State of New Mexico. The allowability of any gross receipts taxes or local option taxes lawfully paid to the State of New Mexico by the Contractor or its subcontractors will be determined in accordance with the *Payments and Advances* clause of this contract except as provided in paragraph (d) of this clause.

(c) The Contractor shall submit applications for Nontaxable Transaction Certificates, Form CSR-3C, to the:

State of New Mexico Taxation and Revenue Dept.
Revenue Division
PO Box 630
Santa Fe, New Mexico 87509

When the Type 15 Nontaxable Transaction Certificate is issued by the Revenue Division, the Contractor shall use these certificates strictly in accordance with this contract, and the agreement between the *Department of Energy* and the New Mexico Taxation and Revenue Department.

(d) The Contractor shall provide Type 15 Nontaxable Transaction Certificates to each vendor in New Mexico selling tangible personal property to the Contractor for use in the performance of this contract. Failure to provide a Type 15 Nontaxable Transaction Certificate to vendors will result in the vendor's liability for the gross receipt taxes and those taxes, which are then passed on to the Contractor, shall not be reimbursable as an allowable cost by the Government.

(e) The Contractor shall pay the New Mexico compensating user tax for any tangible personal property which is purchased pursuant to a Nontaxable Transaction Certificate if such property is not used for Federal purposes.

(f) Out-of-state purchase of tangible personal property by the Contractor which would be otherwise subject to compensation tax shall be governed by the principles of this clause. Accordingly, compensating tax shall be due from the contractor only if such property is not used for Federal purposes.

(g) The *Department of Energy* may receive information regarding the Contractor from the Revenue Division of the New Mexico Taxation and Revenue Department and, at the discretion of the *Department of E*nergy, may participate in any matters or proceedings pertaining to this clause or the above-mentioned Agreement. This shall not preclude the Contractor from having its own representative nor does it obligate the *Department of Energy* to represent its Contractor.

(h) The Contractor agrees to insert the substance of this clause, including this paragraph (h), in each subcontract which meets the criteria in 29.401-4(b)(1) through (3) of the Federal Acquisition Regulation, 48 CFR part 29.

(i) Paragraphs (a) through (h) of this clause shall be null and void should the Agreement referred to in paragraph (c) of this clause be terminated; provided, however, that such termination shall not nullify obligations already incurred prior to the date of termination.

I-113 FAR 52.232-18 AVAILABILITY OF FUNDS (APR 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until the Contractor receives notice of such availability, to be confirmed in writing by the Contracting Officer.

I-114 FAR 52.247-1 COMMERCIAL BILL OF LADING NOTATIONS (FEB 2006)

[Modified by Modification No. M067]

When the Contracting Officer authorizes supplies to be shipped on a commercial bill of lading and the Contractor will be reimbursed these transportation costs as direct allowable costs, the Contractor shall ensure before shipment is made that the commercial shipping documents are annotated with either of the following notations, as appropriate:

(a) If the Government is shown as the consignor or the consignee, the annotation shall be:

Transportation is for the *U.S. Department of Energy* and the actual total transportation charges paid to the carrier(s) by the consignor or consignee are assignable to, and shall be reimbursed by, the Government.

(b) If the Government is not shown as the consignor or the consignee, the annotation shall be:

Transportation is for the *U.S. Department of Energy* and the actual total transportation charges paid to the carrier(s) by the consignor or consignee shall be reimbursed by the Government, pursuant to cost-reimbursement contract No. *DE-AC52-05NA25396*. This may be confirmed by contacting *the U.S. Department of Energy, National Nuclear Security Administration Los Alamos Site Office Contracting Officer, at 528 35th Street, Los Alamos, NM 87544 or via telephone at (505) 667-5105*.

I-115 FAR 52.249-6 TERMINATION (COST REIMBURSEMENT) (MAY 2004) (ALTERATION)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part, if-

(1) The Contracting Officer determines that a termination is in the Government's interest; or

(2) The Contractor defaults in performing this contract and fails to cure the default within 10 days (unless extended by the Contracting Officer) after receiving a notice specifying the default. "Default" includes failure to make progress in the work so as to endanger performance.

(b) The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying whether termination is for default of the Contractor or for convenience of the Government, the extent of termination, and the effective date. If, after termination for default, it is determined that the Contractor was not in default or that the Contractor's failure to perform or to make progress in performance is due to causes beyond the control and without the fault or negligence of the Contractor as set forth in the Excusable Delays clause, the rights and obligations of the parties will be the same as if the termination was for the convenience of the Government.

(c) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause), except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement

proposals arising from the termination of subcontracts, the cost of which would be reimbursable in whole or in part, under this contract; approval or ratification will be final for purposes of this clause.

(6) Transfer title (if not already transferred) and, as directed by the Contracting Officer, deliver to the Government-

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated;

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government; and

(iii) The jigs, dies, fixtures, and other special tools and tooling acquired or manufactured for this contract, the cost of which the Contractor has been or will be reimbursed under this contract.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in paragraph (c)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(d) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(e) After expiration of the plant clearance period as defined in Subpart 49.001 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the

Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept the items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(f) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(g) Subject to paragraph (f) of this clause, the Contractor and the Contracting Officer may agree on the whole or any part of the amount to be paid (including an allowance for fee) because of the termination. The contract shall be amended, and the Contractor paid the agreed amount.

(h) If the Contractor and the Contracting Officer fail to agree in whole or in part on the amount of costs and/or fee to be paid because of the termination of work, the Contracting Officer shall determine, on the basis of information available, the amount, if any, due the Contractor, and shall pay that amount, which shall include the following:

(1) All costs reimbursable under this contract, not previously paid, for the performance of this contract before the effective date of the termination, and those costs that may continue for a reasonable time with the approval of or as directed by the Contracting Officer; however, the Contractor shall discontinue those costs as rapidly as practicable.

(2) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in paragraph (h)(1) of this clause.

(3) The reasonable costs of settlement of the work terminated, including-

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory. If the termination is for default, no amounts for the preparation of the Contractor's termination settlement proposal may be included.

(4) A portion of the fee payable under the contract, determined as follows:

(i) If the contract is terminated for the convenience of the Government, the settlement shall include a percentage of the fee equal to the percentage of completion of work contemplated under the contract, but excluding subcontract effort included in subcontractors' termination proposals, less previous payments for fee.

(ii) If the contract is terminated for default, the total fee payable shall be such proportionate part of the fee as the total number of articles (or amount of services) delivered to and accepted by the Government is to the total number of articles (or amount of services) of a like kind required by the contract.

(5) If the settlement includes only fee, it will be determined under paragraph (h)(4) of this clause.

(i) The cost principles and procedures in Part 31 of the Federal Acquisition Regulation, *as supplemented in subpart 970.31 of the Department of Energy Acquisition Regulation*, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (f), (h), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal within the time provided in paragraph (f) and failed to request a time extension, there is no right of appeal. If the Contracting Officer has made a determination of the amount due under paragraph (f), (h) or (l) of this clause, the Government shall pay the Contractor-

(1) The amount determined by the Contracting Officer if there is no right of appeal or if no timely appeal has been taken; or

(2) The amount finally determined on an appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted-

(1) All unliquidated advance or other payments to the Contractor, under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of materials, supplies, or other things acquired by the Contractor or sold under this clause and not recovered by or credited to the Government.

(l) The Contractor and Contracting Officer must agree to any equitable adjustment in fee for the continued portion of the contract when there is a partial termination. The Contracting Officer shall amend the contract to reflect the agreement.

(m) (1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) The provisions of this clause relating to fee are inapplicable if this contract does not include a fee.

I-116 FAR 52.250-1 INDEMNIFICATION UNDER PUBLIC LAW 85-804 (APR 1984) ALTERNATE I (APR 1984) (DEVIATION) [Modified by Modification Nos. A011, d M037, M140, and Mod 165]

(a) "Contractor's principal officials," as used in this clause, means directors, officers, managers, superintendents, or other representatives supervising or directing--

(1) All or substantially all of the Contractor's business;

(2) All or substantially all of the Contractor's operations at any one plant or separate location at which this contract is being performed; or

(1) A separate and complete major industrial operation in connection with the performance of this contract.

(b) Under Public Law 85-804 (50 U.S.C. 1431-1435) and Executive Order 10789, as amended, and regardless of any other provisions of this contract, the Government shall, subject to the limitations contained in the other paragraphs of this clause, indemnify the Contractor against--

(1) Claims (including reasonable expenses of litigation or settlement) by third persons (including employees of the Contract) for death; personal injury; or loss of, damage to, or loss of use of property;

(2) Loss of, damage to, or loss of use of Contractor property, excluding loss of profit; and

(3) Loss of, damage to, or loss of use of Government property, excluding loss of profit.

(c) This indemnification applies only to the extent that the claim, loss, or damage (1) arises out of or results from a risk defined in this contract as unusually hazardous or nuclear and (2) is not compensated for by insurance or otherwise. Any such claim, loss, or damage, to the extent that it is within the deductible amounts of the Contractor's insurance, is not covered under this clause. If insurance coverage or other financial protection in effect on the date the approving official authorizes use of this clause is reduced, the Government's liability under this clause shall not increase as a result.

(d) When the claim, loss, or damage is caused by willful misconduct or lack of good faith on the part of any of the Contractor's principal officials, the Contractor shall not be indemnified for -

(1) Government claims against the Contractor (other than those arising through subrogation); or

(2) Loss or damage affecting the Contractor's property.

(e) With the Contracting Officer's prior written approval, the Contractor may, in any subcontract under the contract, indemnify the subcontractor against any risk defined in this contract as unusually hazardous or nuclear. This indemnification shall provide, between the Contractor and the subcontractor, the same rights and duties, and the same provisions for notice, furnishing of evidence or proof, and

Government settlement or defense of claims as this clause provides. The Contracting Officer may also approve indemnification of subcontractors at any lower tier, under the same terms and conditions. The Government shall indemnify the Contractor against liability to subcontractors incurred under subcontract provisions approved by the Contracting Officer.

(f) The rights and obligations of the parties under this clause shall survive this contract's termination, expiration, or completion. The Government shall make no payment under this clause unless the agency head determines that the amount is just and reasonable. The Government may pay the Contractor or subcontractors, or may directly pay parties to whom the Contractor or subcontractors may be liable.

(g) The Contractor shall -

(1) Promptly notify the Contracting Officer of any claim or action against, or any loss by, the Contractor or any subcontractors that may reasonably be expected to involve indemnification under this clause;

(2) Immediately furnish to the Government copies of all pertinent papers the Contractor receives;

(3) Furnish evidence or proof of any claim, loss, or damage covered by this clause in the manner and form the Government requires; and

(4) Comply with the Government's directions and execute any authorizations required in connection with settlement or defense of claims or actions.

(h) The Government may direct, control, or assist in settling or defending any claim or action that may involve indemnification under this clause.

(i) The cost of insurance (including self-insurance programs) covering a risk defined in this contract as unusually hazardous or nuclear shall not be reimbursed except to the extent that the Contracting Officer has required or approved this insurance.

The Government's obligations under this clause are -

(1) Excepted from the release required under this contract's clause relating to allowable cost; and

(2) Not affected by this contract's Availability of Funds or Obligation of Funds clause.

(j) The term "a risk defined in this contract as unusually hazardous or nuclear" means the risk of legal liability to third parties (including legal costs as defined in paragraph (jj) of section 11 of the Atomic Energy Act of 1954, as amended, 42

U.S.C. § 2014(jj), notwithstanding the fact that the claim or suit may not arise under section 170 of said Act, 42 U.S.C. §2210) arising from actions or inactions in the course of the following work performed by the Contractor under the Contract:

(1) Participation in --

(i) DOE's Nuclear Emergency Search Team ("NEST") outside the United States,

(ii) DOE's Accident Response Group ("ARG") outside the United States, or

(iii) DOE's Joint Technical Operations Team ("JTOT") outside the United States,

to the extent participation in activities described in subparagraphs (i), (ii) or (iii) above involves nuclear activities involving real or suspected nuclear weapons, nuclear weapons components, or nuclear materials which can be readily utilized either (A) for the production or the fabrication of nuclear weapons without substantial further effort; or (B) for intentional widespread contamination or dispersal of harmful nuclear materials, whether or not such real or suspected weapons, components, or harmful nuclear materials are owned by the United States; and

(2) (i) Repairs and maintenance of United States-owned nuclear weapons, requested by the Department of Defense under DOE's Stewardship role for the United States nuclear weapons stockpile.

(ii) Repairs and maintenance of United Kingdom-owned nuclear weapons requested by the Ministry of Defense of the United Kingdom, as directed or approved by the President of the United States, the Secretary of Energy, the Deputy Secretary of Energy, or the Under Secretary of Energy.

(iii) Participation in DOE's Materials Protection Control and Accountability (MPC&A) program including cooperative work outside the United States on the design and implementation of MPC&A systems for facilities processing, handling, and storing nuclear materials, and the transportation of nuclear materials; provision of U.S.-manufactured equipment, and procurement of equipment for installation in facilities in order to implement the above systems; and training in the design, use and assessment of MPC&A systems.

(iv) Participation in the U.S.-Russian Plutonium Disposition Program including cooperative work outside the United States on the demonstrations of alternative technologies for converting weapons-origin plutonium into forms unsuitable for direct weapons applications, and subsequently into forms suitable

for ultimate disposition; technical support for the construction and demonstration of a pilot line for Russian plutonium conversion/disposition of weapons-origin plutonium; and technical support for the construction of a Russian production line for conversion and/or disposition of Russian weapons-origin plutonium.

(3) Other activities relating to non-proliferation, emergency response, anti-terrorism activities, or critical national security activities that involve the use, detection, identification, assessment, control, containment, dismantlement, characterization, packaging, transportation, movement, storage, or disposal of nuclear, radiological, chemical, biological, or explosive materials, facilities or devices, provided such activities are specifically requested or approved, in writing, by the President of the United States, the Secretary of Energy, the Deputy Secretary of Energy, or the Under Secretary for Nuclear Security, and further provided that the request or approval specifically identifies the particular requested or approved activity and makes the indemnity provided by this clause applicable to that particular activity because it involves extraordinary risks.

(4) For purposes of implementation of Paragraph (j) of Contract Clause entitled I-116 FAR 52.250-1 indemnification under Public Law 85-804 (Alternate 1) (APR 1984) (Deviation), the parties agree to the following: Los Alamos National Security, LLC is indemnified under P.L. 85-804 for activities directed or authorized by the Department of Energy, including National Nuclear Security Administration, on or after April 24, 2010, in response to the Deepwater Horizon disaster, per the Secretarial Determination Authorizing Public Law 85-804 Indemnification for Contractors Engaged in Activities Responding to the Deepwater Horizon Disaster, dated July 2, 2010.

(5) Participation in tasks or activities by the Contractor or its subcontractors on or after March 11, 2011 that is directed or authorized by the U. S. Department of Energy or the U. S. Department of Energy National Nuclear Security Administration as an element of activities taken in response to the Japanese earthquake and tsunami, including efforts to address and assess damage to nuclear power plants and potential radioactive release from these plants now and in the future.

(k) This clause provides indemnification for the unusually hazardous or nuclear risks defined herein which are not covered by the Price Anderson Act (section 170d of the Atomic Energy Act of 1954, as amended 42 U.S.C. § 2210(d) or where the indemnification provided by the Price Anderson Act is limited by the restriction on public liability imposed by section 170e of the Atomic Energy Act of 1954, as amended, (42 U.S.C. § 2210(e)) to an amount which is not sufficient to provide complete indemnification for the legal liability to which the Contractor is exposed.

(l) Additional definitions applicable to this clause.

(1) the term “Contractor” except as used in paragraphs (a) and (e) means

(i) Los Alamos National Security LLC, and

(ii) Los Alamos National Security LLC's members: the University of California, Bechtel National, Inc., Washington Group International, and BWX Technologies, Inc., including, if applicable, the ultimate parent companies and the affiliates of each, and

(iii) employees, officers, and directors or any of the foregoing named or threatened to be named as defendants in lawsuits or litigation threatened or initiated by third parties which seek to impose or establish, or which could result in, a risk which is defined in this contract as unusually hazardous or nuclear, on account of actions or inactions of Los Alamos National Security LLC, or on account of the actions or inactions undertaken by the corporations or individuals identified in subparagraphs (a), (b), or (c) for, and on behalf of, or with respect to, Los Alamos National Security LLC, under this contract;

(2) the term "Contractor" as used in paragraphs (a), and (e) means Los Alamos National Security LLC;

(3) the term "Contractor's business" as used in this clause means the management and operation of the Government's facilities at Los Alamos, New Mexico, for the Department of Energy under this contract;

(4) the terms "Contractor's operations at any one plant or separate location in which this contract is being performed" and "a separate and complete major industrial operation in connection with the performance of this contract"" as used in this clause means the Government's facilities located at Los Alamos, New Mexico;

(5) the term "nuclear materials" as used in this clause means source, special nuclear, or byproduct materials as those terms are defined in Section 11 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2014;

(6) the term "agency head" as used in this clause means the Secretary of Energy; and

(7) the term "affiliate" as used in this clause means the member companies of Los Alamos National Security LLC (the University of California, Bechtel National, Inc., Washington

Group International, and BWX Technologies, Inc., and, if applicable, the parent companies of each including the ultimate parent company of each) as well as companies, other than Los Alamos National Security LLC, that directly or indirectly, are owned or otherwise controlled by the member companies of Los Alamos National Security LLC.

I-117 FAR 52.252-4 ALTERATIONS IN CONTRACT (APR 1984)

Portions of this contract are altered as follows: *See Clauses with the word "(ALTERATION)" at the end of the clause title. Each alteration is formatted in italics and underscored for ease of review.*

I-118 DEAR 952.204-2 SECURITY (MAY 2002) (DEVIATION)

(a) Responsibility. It is the contractor's duty to safeguard all classified information, special nuclear material, and other DOE property. The contractor shall, in accordance with DOE security regulations and requirements, be responsible for safeguarding all classified information and protecting against sabotage, espionage, loss or theft of the classified documents and material in the contractor's possession in connection with the performance of work under this contract. Except as otherwise expressly provided in this contract, the contractor shall, upon completion or termination of this contract, transmit to DOE any classified matter in the possession of the contractor or any person under the contractor's control in connection with performance of this contract. If retention by the contractor of any classified matter is required after the completion or termination of the contract, the contractor shall identify the items and types or categories of matter proposed for retention, the reasons for the retention of the matter, and the proposed period of retention. If the retention is approved by the contracting officer, the security provisions of the contract shall continue to be applicable to the matter retained. Special nuclear material shall not be retained after the completion or termination of the contract.

(b) Regulations. The contractor agrees to comply with all security regulations and requirements of DOE *as incorporated into the contract*.

(c) Definition of classified information. The term "classified information" means Restricted Data, Formerly Restricted Data, or National Security Information.

(d) Definition of restricted data. The term "Restricted Data" means all data concerning

(1) design, manufacture, or utilization of atomic weapons;

(2) the production of special nuclear material; or

(3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to Section 142 of the Atomic Energy Act of 1954, as amended.

(e) Definition of formerly restricted data. The term "Formerly Restricted Data" means all data removed from the Restricted Data category under section 142 d. of the Atomic Energy Act of 1954, as amended.

(f) Definition of National Security Information. The term "National Security Information" means any information or material, regardless of its physical form or characteristics, that is owned by, produced for or by, or is under the control of the United States Government, that has been determined pursuant to Executive Order *12958* or prior Orders to require protection against unauthorized disclosure, and which is so designated.

(g) Definition of Special Nuclear Material (SNM). SNM means:

(1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which pursuant to the provisions of Section 51 of the Atomic Energy Act of 1954, as amended, has been determined to be special nuclear material, but does not include source material; or

(2) any material artificially enriched by any of the foregoing, but does not include source material.

(h) Security clearance of personnel. The contractor shall not permit any individual to have access to any classified information, except in accordance with the Atomic Energy Act of 1954, as amended, Executive Order *12958*, and the DOE's regulations or requirements applicable to the particular level and category of classified information to which access is required.

(i) Criminal liability. It is understood that disclosure of any classified information relating to the work or services ordered hereunder to any person not entitled to receive it, or failure to safeguard any classified information that may come to the contractor or any person under the contractor's control in connection with work under this contract, may subject the contractor, its agents, employees, or subcontractors to criminal liability under the laws of the United States. (See the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq.; 18 U.S.C. 793 and 794; and E.O. *12958*.)

(j) Foreign Ownership, Control or Influence.

(1) The Contractor shall immediately provide the cognizant security office written notice of any change in the extent and nature of foreign ownership, control or influence over the Contractor which would affect any answer to

the questions presented in the Certificate Pertaining to Foreign Interests, Standard Form 328 or the Foreign Ownership, Control or Influence questionnaire executed by the Contractor prior to the award of this contract. In addition, any notice of changes in ownership or control which are required to be reported to the Securities and Exchange Commission, the Federal Trade Commission, or the Department of Justice shall also be furnished concurrently to the Contracting Officer.

(2) If a Contractor has changes involving foreign ownership, control or influence, DOE must determine whether the changes will pose an undue risk to the common defense and security. In making this determination, DOE will consider proposals made by the Contractor to avoid or mitigate foreign influences.

(3) If the cognizant security office at any time determines that the Contractor is, or is potentially, subject to foreign ownership, control or influence, the Contractor shall comply with such instructions as the Contracting Officer shall provide in writing to safeguard any classified information or special nuclear material.

(4) The Contractor agrees to insert terms that conform substantially to the language of this clause, including this paragraph, in all subcontracts under this contract that will require subcontractor employees to possess access authorizations. Additionally, the Contractor must require subcontractors to have an existing DOD or DOE Facility Clearance or submit a completed Certificate Pertaining to Foreign Interests, Standard Form 328, required in DEAR 952.204-73 prior to award of a subcontract. Information to be provided by a subcontractor pursuant to this clause may be submitted directly to the Contracting Officer. For purposes of this clause, subcontractor means any subcontractor at any tier and the term "Contracting Officer" means the DOE Contracting Officer. When this clause is included in a subcontract, the term "Contractor" shall mean Subcontractor and the term "contract" shall mean subcontract.

(5) The Contracting Officer may terminate this contract for default either if the Contractor fails to meet obligations imposed by this clause or if the Contractor creates a FOCI situation in order to avoid performance or a termination for default. The Contracting Officer may terminate this contract for convenience if the Contractor becomes subject to FOCI and for reasons other than avoidance of performance of the contract, cannot, or chooses not to, avoid or mitigate the FOCI problem.

I-119 DEAR 952.215-70 KEY PERSONNEL (DEC 2000) [Modified by Modification Nos. M051, M102]

(a) The personnel listed below or elsewhere in this contract *(see Contract Section J Appendix entitled "Key Personnel")* are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel, the Contractor must: (1) Notify the Contracting Officer reasonably in advance; (2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract; and (3) obtain the Contracting Officer's written approval. Notwithstanding the foregoing, if the Contractor deems immediate removal or suspension of any member of its management team is necessary to fulfill its obligation to maintain satisfactory standards of employee competency, conduct, and integrity, the Contractor may remove or suspend such person at once, although the Contractor must notify Contracting Officer prior to or concurrently with such action.

(b) The list of personnel may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel.

I-120 DEAR 952.250-70 NUCLEAR HAZARDS INDEMNITY AGREEMENT (OCT 2005) (AS MODIFIED BY DOE ACQUISITION LETTER 2005-15) [Modified by Modification No. M067]

(a) *Authority.* This clause is incorporated into this contract pursuant to the authority contained in subsection 170d. of the Atomic Energy Act of 1954, as amended (hereinafter called the Act.)

(b) *Definitions.* The definitions set out in the Act shall apply to this clause.

(c) *Financial protection.* Except as hereafter permitted or required in writing by DOE, the contractor will not be required to provide or maintain, and will not provide or maintain at Government expense, any form of financial protection to cover public liability, as described in paragraph (d)(2) below. DOE may, however, at any time require in writing that the contractor provide and maintain financial protection of such a type and in such amount as DOE shall determine to be appropriate to cover such public liability, provided that the costs of such financial protection are reimbursed to the contractor by DOE.

(d)

(1) *Indemnification.* To the extent that the contractor and other persons indemnified are not compensated by any financial protection permitted or required by DOE, DOE will indemnify the contractor and other persons indemnified against (i) claims for public liability as described in subparagraph (d)(2) of this clause; and (ii) such

legal costs of the contractor and other persons indemnified as are approved by DOE, provided that DOE's liability, including such legal costs, shall not exceed the amount set forth in section 170d. of the Act, as that amount may be increased in accordance with section 170t., in the aggregate for each nuclear incident or precautionary evacuation occurring within the United States or $500 million in the aggregate for each nuclear incident occurring outside the United States, irrespective of the number of persons indemnified in connection with this contract.

(2) The public liability referred to in subparagraph (d)(1) of this clause is public liability as defined in the Act which (i) arises out of or in connection with the activities under this contract, including transportation; and (ii) arises out of or results from a nuclear incident or precautionary evacuation, as those terms are defined in the Act.

(e)

(1) *Waiver of Defenses.* In the event of a nuclear incident, as defined in the Act, arising out of nuclear waste activities, as defined in the Act, the contractor, on behalf of itself and other persons indemnified, agrees to waive any issue or defense as to charitable or governmental immunity.

(2) In the event of an extraordinary nuclear occurrence which:

(i) Arises out of, results from, or occurs in the course of the construction, possession, or operation of a production or utilization facility; or

(ii) Arises out of, results from, or occurs in the course of transportation of source material, by-product material, or special nuclear material to or from a production or utilization facility; or

(iii) Arises out of or results from the possession, operation, or use by the contractor or a subcontractor of a device utilizing special nuclear material or by-product material, during the course of the contract activity; or

(iv) Arises out of, results from, or occurs in the course of nuclear waste activities, the contractor, on behalf of itself and other persons indemnified, agrees to waive:

(A) Any issue or defense as to the conduct of the claimant (including the conduct of persons through whom the claimant derives its cause of action) or fault of persons indemnified, including, but not limited to:

1. Negligence;

2. Contributory negligence;

3. Assumption of risk; or

4. Unforeseeable intervening causes, whether involving the conduct of a third person or an act of God;

(B) Any issue or defense as to charitable or governmental immunity; and

(C) Any issue or defense based on any statute of limitations, if suit is instituted within 3 years from the date on which the claimant first knew, or reasonably could have known, of his injury or change and the cause thereof. The waiver of any such issue or defense shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action. The waiver shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified.

(v) The term *extraordinary nuclear occurrence* means an event which DOE has determined to be an extraordinary nuclear occurrence as defined in the Act. A determination of whether or not there has been an extraordinary nuclear occurrence will be made in accordance with the procedures in 10 CFR part 840.

(vi) For the purposes of that determination, "offsite" as that term is used in 10 CFR part 840 means away from "the contract location" which phrase means any DOE facility, installation, or site at which contractual activity under this contract is being carried on, and any contractor-owned or controlled facility, installation, or site at which the

contractor is engaged in the performance of contractual activity under this contract.

(3) The waivers set forth above:

(i) Shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action;

(ii) Shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified;

(iii) Shall not preclude a defense based upon a failure to take reasonable steps to mitigate damages;

(iv) Shall not apply to injury or damage to a claimant or to a claimant's property which is intentionally sustained by the claimant or which results from a nuclear incident intentionally and wrongfully caused by the claimant;

(v) Shall not apply to injury to a claimant who is employed at the site of and in connection with the activity where the extraordinary nuclear occurrence takes place, if benefits therefor are either payable or required to be provided under any workmen's compensation or occupational disease law;

(vi) Shall not apply to any claim resulting from a nuclear incident occurring outside the United States;

(vii) Shall be effective only with respect to those obligations set forth in this clause and in insurance policies, contracts or other proof of financial protection; and

(viii) Shall not apply to, or prejudice the prosecution or defense of, any claim or portion of claim which is not within the protection afforded under (A) the limit of liability provisions under subsection 170e. of the Act, and (B) the terms of this agreement and the terms of insurance policies, contracts, or other proof of financial protection.

(f) *Notification and litigation of claims.* The contractor shall give immediate written notice to DOE of any known action or claim filed or made against the contractor or other person indemnified for public liability as defined in paragraph (d)(2). Except as otherwise directed by DOE, the contractor shall furnish promptly to DOE, copies of all pertinent papers received by the contractor or filed with respect to such actions or claims. DOE shall

have the right to, and may collaborate with, the contractor and any other person indemnified in the settlement or defense of any action or claim and shall have the right to (1) require the prior approval of DOE for the payment of any claim that DOE may be required to indemnify hereunder; and (2) appear through the Attorney General on behalf of the contractor or other person indemnified in any action brought upon any claim that DOE may be required to indemnify hereunder, take charge of such action, and settle or defend any such action. If the settlement or defense of any such action or claim is undertaken by DOE, the contractor or other person indemnified shall furnish all reasonable assistance in effecting a settlement or asserting a defense.

(g) *Continuity of DOE obligations.* The obligations of DOE under this clause shall not be affected by any failure on the part of the contractor to fulfill its obligation under this contract and shall be unaffected by the death, disability, or termination of existence of the contractor, or by the completion, termination or expiration of this contract.

(h) *Effect of other clauses.* The provisions of this clause shall not be limited in any way by, and shall be interpreted without reference to, any other clause of this contract, including the clause entitled Contract Disputes, provided, however, that this clause shall be subject to the clauses entitled Covenant Against Contingent Fees, and Accounts, records, and inspection, and any provisions that are later added to this contract as required by applicable Federal law, including statutes, executive orders and regulations, to be included in Nuclear Hazards Indemnity Agreements.

(i) *Civil penalties.* The contractor and its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to civil penalties, pursuant to section 234A of the Act, for violations of applicable DOE nuclear-safety related rules, regulations, or orders. If the contractor is a not-for-profit contractor, as defined by section 234Ad.(2), the total amount of civil penalties paid shall not exceed the total amount of fees paid within any 1-year period (as determined by the Secretary) under this contract.

(j) *Criminal penalties.* Any individual director, officer, or employee of the contractor or of its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to criminal penalties, pursuant to section 223(c) of the Act, for knowing and willful violation of the Atomic Energy Act of 1954, as amended, and applicable DOE nuclear safety-related rules, regulations or orders which violation results in, or, if undetected, would have resulted in a nuclear incident.

(k) *Inclusion in subcontracts.* The contractor shall insert this clause in any subcontract which may involve the risk of public liability, as that term is

defined in the Act and further described in paragraph (d)(2) above. However, this clause shall not be included in subcontracts in which the subcontractor is subject to Nuclear Regulatory Commission (NRC) financial protection requirements under section 170b. of the Act or NRC agreements of indemnification under section 170c. or k. of the Act for the activities under the subcontract.

(l) *Effective Date.* This contract was awarded on or after August 8, 2005 and at contract award contained the clause at DEAR 952.250-70 (JUNE 1996) or prior version. That clause has been deleted and replaced with this clause. The Price-Anderson Amendments Act of 2005, described by this clause, control the indemnity for any nuclear incident that occurred on or after August 8, 2005. The Contractor's liability for civil penalties for violations of the Atomic Energy Act of 1954 under this contract is described by paragraph (i) of this clause.

I-121 DEAR 970.5203-1 MANAGEMENT CONTROLS (JUN 2007) [Modified by Modification No. M067]

(a)

(1) The contractor shall be responsible for maintaining, as an integral part of its organization, effective systems of management controls for both administrative and programmatic functions. Management controls comprise the plan of organization, methods, and procedures adopted including consideration of outsourcing of functions by management to reasonably ensure that: the mission and functions assigned to the contractor are properly executed; efficient and effective operations are promoted; resources are safeguarded against waste, loss, mismanagement, unauthorized use, or misappropriation; all encumbrances and costs that are incurred under the contract and fees that are earned are in compliance with applicable clauses and other current terms, conditions, and intended purposes; all collections accruing to the contractor in connection with the work under this contract, expenditures, and all other transactions and assets are properly recorded, managed, and reported; and financial, statistical, and other reports necessary to maintain accountability and managerial control are accurate, reliable, and timely.

(2) The systems of controls employed by the contractor shall be documented and satisfactory to DOE.

(3) Such systems shall be an integral part of the contractor's management functions, including defining specific roles and responsibilities for each level of management, and holding employees accountable for the adequacy of the management systems and controls in their areas of assigned responsibility.

(4) The contractor shall, as part of the internal audit program required elsewhere in this contract, periodically review the management systems and controls

employed in programs and administrative areas to ensure that they are adequate to provide reasonable assurance that the objectives of the systems are being accomplished and that these systems and controls are working effectively. Annually, or at other intervals directed by the contracting officer, the contractor shall supply to the contracting officer copies of the reports reflecting the status of recommendations resulting from management audits performed by its internal audit activity and any other audit organization. This requirement may be satisfied in part by the reports required under paragraph (i) of 970.5232-3, Accounts, records, and inspection.

(b) The contractor shall be responsible for maintaining, as a part of its operational responsibilities, a baseline quality assurance program that implements documented performance, quality standards, and control and assessment techniques.

I-122 DEAR 970.5203-3 CONTRACTOR'S ORGANIZATION (DEC 2000) (DEVIATION)

(a) Organization chart. As promptly as possible after the execution of this Contract, the contractor shall furnish to the contracting officer *(1)* a chart showing the names, duties, and organization of key personnel (see 48 CFR 952.215-70) to be employed in connection with the work, and shall furnish supplemental information to reflect any changes as they occur*; and, (2) a chart showing the name and organization of the Contractor's Parent Organization's responsible official for administering the Contractor's Parent Organization's Oversight Plan, and shall furnish supplemental information to reflect any changes as they occur.*

(b) Supervisory representative of contractor. Unless otherwise directed by the contracting officer, a competent full-time resident supervisory representative of the contractor satisfactory to the contracting officer shall be in charge of the work at the site, and any work off-site, at all times. *For purposes of this Contract, the Los Alamos National Laboratory Director is the resident supervisory representative of the contractor.*

(c) Control of employees. The contractor shall be responsible for maintaining satisfactory standards of employee competency, conduct, and integrity and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary. In the event the contractor fails to remove any employee from the contract work whom DOE deems incompetent, careless, or insubordinate, or whose continued employment on the work is deemed by DOE to be inimical to the Department's mission, the contracting officer may require, with the approval of *the Administrator of the NNSA or* the Secretary of Energy, the contractor to remove the employee from work under the contract. This includes the right to direct the contractor to remove its most senior key person from work under the contract for serious contract performance deficiencies. *Furthermore, nothing contained in this paragraph (c) shall in any way impair the statutory or contractual collective bargaining rights of union-represented LANL employees.*

(d) Standards and procedures. The contractor shall establish such standards and procedures as are necessary to implement the requirements set forth in 48 CFR 970.0371. Such standards and procedures shall be subject to the approval of the contracting officer.

(e) Nothing in this clause or its implementation is intended to conflict with 42 U.S.C. §7274p, or to otherwise affect the scientific integrity of persons required to provide independent technical judgments to provide the President or the Congress assurances on the safety, security, reliability, or effectiveness of the US nuclear weapons stockpile.

I-123 DEAR 970.5204-2 LAWS, REGULATIONS, AND DOE DIRECTIVES (DEC 2000) (DEVIATION)

(a) In performing work under this contract, the contractor shall comply with the requirements of applicable Federal, State, and local laws and regulations (including DOE regulations), unless relief has been granted in writing by the appropriate regulatory *agency*.

(b) In performing work under this contract, the contractor shall comply with the requirements of those Department of Energy directives, or parts thereof, *and National Nuclear Security Administration Policy Letters* identified in the Contract's Section J Appendix entitled "List of Applicable Directives" *(the List)*. Except as otherwise provided for in paragraph (d) of this clause, the contracting officer may, from time to time and at any time, revise the *List* by unilateral modification to the contract to add, modify, or delete specific requirements. Prior to revising *the List*, the contracting officer shall notify the contractor in writing of the Department's intent to revise *the List* and provide the contractor with the opportunity to assess the effect of the contractor's compliance with the revised list on contract cost and funding, technical performance, and schedule; and identify any potential inconsistencies between the revised list and the other terms and conditions of the contract. Within 30 days after receipt of the contracting officer's notice, the contractor shall advise the contracting officer in writing of the potential impact of the contractor's compliance with the revised list. Based on the information provided by the contractor and any other information available, the contracting officer shall decide whether to revise *the List* and so advise the contractor not later than 30 days prior to the effective date of the revision of *the List*. The contractor and the contracting officer shall identify and, if appropriate, agree to any changes to other contract terms and conditions, including cost and schedule, associated with the revision of *the List and fee may be adjusted* pursuant to the clause of this contract entitled, "Changes."

(c) Environmental, safety, and health (ES&H) requirements appropriate for work conducted under this contract may be determined by a DOE approved process to evaluate the work and the associated hazards and identify an appropriately

tailored set of standards, practices, and controls, such as a tailoring process included in a DOE approved Safety Management System implemented under the clause entitled "Integration of Environmental, Safety, and Health into Work Planning and Execution." When such a process is used, the set of tailored (ES&H) requirements, as approved by DOE pursuant to the process, shall be incorporated into *the List* as contract requirements with full force and effect. These requirements shall supersede, in whole or in part, the contractual environmental, safety, and health requirements previously made applicable to the contract by *the List*. If the tailored set of requirements identifies an alternative requirement varying from an ES&H requirement of an applicable law or regulation, the contractor shall request an exemption or other appropriate regulatory relief specified in the regulation.

(d) Except as otherwise directed by the contracting officer, the contractor shall procure all necessary permits or licenses required for the performance of work under this contract.

(e) Regardless of the performer of the work, the contractor is responsible for compliance with the requirements of this clause. The contractor is responsible for flowing down the requirements of this clause to subcontracts at any tier to the extent necessary to ensure the contractor's compliance with the requirements.

I-124 DEAR 970.5215-3 CONDITIONAL PAYMENT OF FEE, PROFIT, AND INCENTIVES – FACILITY MANAGEMENT CONTRACTS (JAN 2004) (DEVIATION)

(a) General.

(1) The payment of earned fee, fixed fee, profit, or share of cost savings under this contract is dependent upon:

(i) The contractor's or contractor employees' compliance with the terms and conditions of this contract relating to environment, safety and health (ES&H), which includes worker safety and health (WS&H), including performance under an approved Integrated Safety Management System (ISMS); and

(ii) The contractor's or contractor employees' compliance with the terms and conditions of this contract relating to the safeguarding of Restricted Data and other classified information.

(2) The ES&H performance requirements of this contract are set forth in its ES&H terms and conditions, including the DOE approved contractor ISMS or similar document. Financial incentives for timely mission

accomplishment or cost effectiveness shall never compromise or impede full and effective implementation of the ISMS and full ES&H compliance.

(3) The performance requirements of this contract relating to the safeguarding of Restricted Data and other classified information are set forth in the clauses of this contract entitled, "Security" and "Laws, Regulations, and DOE Directives," as well as in other terms and conditions.

(4) If the contractor does not meet the performance requirements of this contract relating to ES&H or to the safeguarding of Restricted Data and other classified information during any performance evaluation period established under the *contract, otherwise* earned fee, fixed fee, profit or share of cost savings may be unilaterally reduced by the contracting officer.

(b) Reduction Amount.

(1) The amount of earned fee, fixed fee, profit, or share of cost savings that may be unilaterally reduced will be determined by the severity of the performance failure pursuant to the degrees specified in paragraphs (c) and (d) of this clause.

(2) If a reduction of earned fee, fixed fee, profit, or share of cost savings is warranted, unless mitigating factors apply, such reduction shall not be less than 26% nor greater than 100% of the amount of earned fee, fixed fee, profit, or the contractor's share of cost savings for a first degree performance failure, not less than 11% nor greater than 25% for a second degree performance failure, and up to 10% for a third degree performance failure.

(3) In determining the amount of the reduction and the applicability of mitigating factors, the contracting officer must consider the contractor's overall performance in meeting the ES&H or security requirements of the contract. Such consideration must include performance against any site specific performance criteria/requirements that provide additional definition, guidance for the amount of reduction, or guidance for the applicability of mitigating factors. In all cases, the contracting officer must consider mitigating factors that may warrant a reduction below the applicable range (see 48 CFR 970.1504-1-2). The mitigating factors include, but are not limited to, the following ((v), (vi), (vii) and (viii) apply to ES&H only).

(i) Degree of control the contractor had over the event or incident.

(ii) Efforts the contractor had made to anticipate and mitigate the possibility of the event in advance.

(iii) Contractor self-identification and response to the event to mitigate impacts and recurrence.

(iv) General status (trend and absolute performance) of: ES&H and compliance in related areas; or of safeguarding Restricted Data and other classified information and compliance in related areas.

(v) Contractor demonstration to the contracting officer's satisfaction that the principles of industrial ES&H standards are routinely practiced (e.g., Voluntary Protection Program, ISO 14000).

(vi) Event caused by "Good Samaritan" act by the contractor (e.g., offsite emergency response).

(vii) Contractor demonstration that a performance measurement system is routinely used to improve and maintain ES&H performance (including effective resource allocation) and to support DOE corporate decision-making (e.g., policy, ES&H programs).

(viii) Contractor demonstration that an Operating Experience and Feedback Program is functioning that demonstrably affects continuous improvement in ES&H by use of lessons-learned and best practices inter- and intra-DOE sites.

(4)(i) The amount of fee, fixed fee, profit, or share of cost savings that is otherwise earned by a contractor during an evaluation period may be reduced in accordance with this clause if it is determined that a performance failure warranting a reduction under this clause occurs within the evaluation period.

(ii) The amount of reduction under this clause, in combination with any reduction made under any other clause in the contract, shall not exceed the amount of fee, fixed fee, profit, or the contractor's share of cost savings that is otherwise earned during the evaluation period.

(iii) For the purposes of this clause, earned fee, fixed fee, profit, or share of cost savings for the evaluation period shall mean the amount determined by the contracting officer or fee determination official as otherwise payable based on the contractor's performance during the evaluation period. Where the contract provides for financial incentives that extend beyond a single evaluation period, this amount shall also include: any provisional amounts determined otherwise payable in the evaluation period; and, if provisional payments are not provided for, the allocable amount of any incentive determined otherwise payable at the conclusion of a subsequent evaluation period. The allocable amount shall be the total

amount of the earned incentive divided by the number of evaluation periods over which it was earned.

(iv) The Government will effect the reduction as soon as practicable after the end of the evaluation period in which the performance failure occurs. If the Government is not aware of the failure, it will effect the reduction as soon as practical after becoming aware. For any portion of the reduction requiring an allocation the Government will effect the reduction at the end of the evaluation period in which it determines the total amount earned under the incentive. If at any time a reduction causes the sum of the payments the contractor has received for fee, fixed fee, profit, or share of cost savings to exceed the sum of fee, fixed fee, profit, or share of cost savings the contractor has earned (provisionally or otherwise), the contractor shall immediately return the excess to the Government. (What the contractor "has earned" reflects any reduction made under this or any other clause of the contract.)

(v) At the end of the contract:

(A) The Government will pay the contractor the amount by which the sum of fee, fixed fee, profit, or share of cost savings the contractor has earned exceeds the sum of the payments the contractor has received; or

(B) The contractor shall return to the Government the amount by which the sum of the payments the contractor has received exceeds the sum of fee, fixed fee, profit, or share of cost savings the contractor has earned. (What the contractor "has earned" reflects any reduction made under this or any other clause of the contract.)

(c) Environment, Safety and Health (ES&H). Performance failures occur if the contractor does not comply with the contract's ES&H terms and conditions, including the DOE approved contractor ISMS. The degrees of performance failure under which reductions of earned or fixed fee, profit, or share of cost savings will be determined are:

(1) First Degree: Performance failures that are most adverse to ES&H. Failure to develop and obtain required DOE approval of an ISMS is considered first degree. The Government will perform necessary review of the ISMS in a timely manner and will not unreasonably withhold approval of the contractor's ISMS. The following performance failures or performance failures of similar import will be considered first degree.

(i) Type A accident (defined in DOE Order 225.1A).

(ii) Two Second Degree performance failures during an evaluation period.

(2) Second Degree: Performance failures that are significantly adverse to ES&H. They include failures to comply with an approved ISMS that result in an actual injury, exposure, or exceedence that occurred or nearly occurred but had minor practical long-term health consequences. They also include breakdowns of the Safety Management System. The following performance failures or performance failures of similar import will be considered second degree:

(i) Type B accident (defined in DOE Order 225.1A).

(ii) Non-compliance with an approved ISMS that results in a near miss of a Type A or B accident. A near miss is a situation in which an inappropriate action occurs, or a necessary action is omitted, but does not result in an adverse effect.

(iii) Failure to mitigate or notify DOE of an imminent danger situation after discovery, where such notification is a requirement of the contract.

(3) Third Degree: Performance failures that reflect a lack of focus on improving ES&H. They include failures to comply with an approved ISMS that result in potential breakdown of the System. The following performance failures or performance failures of similar import will be considered third degree:

(i) Failure to implement effective corrective actions to address deficiencies/non-compliances documented through: external (e.g., Federal) oversight and/or reported per DOE *Manual 231.1-2* requirements; or internal oversight of DOE Order 440.1A requirements.

(ii) Multiple similar non-compliances identified by external (e.g., Federal) oversight that in aggregate indicate a significant programmatic breakdown.

(iii) Non-compliances that either have, or may have, significant negative impacts to the worker, the public, or the environment or that indicate a significant programmatic breakdown.

(iv) Failure to notify DOE upon discovery of events or conditions where notification is required by the terms and conditions of the contract.

(d) Safeguarding Restricted Data and Other Classified Information. Performance failures occur if the contractor does not comply with the terms and conditions of this contract relating to the safeguarding of Restricted Data and other classified information. The degrees of performance failure under which reductions of fee, profit, or share of cost savings will be determined are as follows:

(1) First Degree: Performance failures that have been determined, in accordance with applicable law, DOE regulation, or directive, to have resulted in, or that can reasonably be expected to result in, exceptionally grave damage to the national security. The following are examples of performance failures or performance failures of similar import that will be considered first degree:

(i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating a risk of, loss, compromise, or unauthorized disclosure of Top Secret Restricted Data or other information classified as Top Secret, any classification level of information in a Special Access Program (SAP), information identified as sensitive compartmented information (SCI), or high risk nuclear weapons-related data.

(ii) Contractor actions that result in a breakdown of the safeguards and security management system that can reasonably be expected to result in the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data, or other information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.

(iii) Failure to promptly report the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data, or other information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.

(iv) Failure to timely implement corrective actions stemming from the loss, compromise, or unauthorized disclosure of Top Secret Restricted Data or other information classified as Top Secret, any classification level of information in a SAP, information identified as SCI, or high risk nuclear weapons-related data.

(2) Second Degree: Performance failures that have been determined, in accordance with applicable law, DOE regulation, or directive, to have actually resulted in, or that can reasonably be expected to result in, serious damage to the national security. The following are examples of

performance failures or performance failures of similar import that will be considered second degree:

(i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating risk of, loss, compromise, or unauthorized disclosure of Secret Restricted Data or other information classified as Secret.

(ii) Contractor actions that result in a breakdown of the safeguards and security management system that can reasonably be expected to result in the loss, compromise, or unauthorized disclosure of Secret Restricted Data, or other information classified as Secret.

(iii) Failure to promptly report the loss, compromise, or unauthorized disclosure of Restricted Data or other classified information regardless of classification (except for information covered by paragraph (d)(1)(iii) of this clause).

(iv) Failure to timely implement corrective actions stemming from the loss, compromise, or unauthorized disclosure of Secret Restricted Data or other classified information classified as Secret.

(3) Third Degree: Performance failures that have been determined, in accordance with applicable law, regulation, or DOE directive, to have actually resulted in, or that can reasonably be expected to result in, undue risk to the common defense and security. In addition, this category includes performance failures that result from a lack of contractor management and/or employee attention to the proper safeguarding of Restricted Data and other classified information. These performance failures may be indicators of future, more severe performance failures and/or conditions, and if identified and corrected early would prevent serious incidents. The following are examples of performance failures or performance failures of similar import that will be considered third degree:

(i) Non-compliance with applicable laws, regulations, and DOE directives actually resulting in, or creating risk of, loss, compromise, or unauthorized disclosure of Restricted Data or other information classified as Confidential.

(ii) Failure to promptly report alleged or suspected violations of laws, regulations, or directives pertaining to the safeguarding of Restricted Data or other classified information.

(iii) Failure to identify or timely execute corrective actions to mitigate or eliminate identified vulnerabilities and reduce residual risk

relating to the protection of Restricted Data or other classified information in accordance with the contractor's Safeguards and Security Plan or other security plan, as applicable.

(iv) Contractor actions that result in performance failures which unto themselves pose minor risk, but when viewed in the aggregate indicate degradation in the integrity of the contractor's safeguards and security management system relating to the protection of Restricted Data and other classified information.

I-125 DEAR 970.5226-1 DIVERSITY PLAN (DEC 2000)

The Contractor shall submit a Diversity Plan to the contracting officer for approval within 90 days after the effective date of this contract (or contract modification, if appropriate). The contractor shall submit an update to its Plan with its annual fee proposal. Guidance for preparation of a Diversity Plan is provided in *the Contract Section J Appendix entitled "Diversity Plan Guidance."* The Plan shall include innovative strategies for increasing opportunities to fully use the talents and capabilities of a diverse work force. The Plan shall address, at a minimum, the Contractor's approach for promoting diversity through (1) the Contractor's work force, (2) educational outreach, (3) community involvement and outreach, (4) subcontracting, (5) economic development (including technology transfer), and (6) the prevention of profiling based on race or national origin.

I-126 DEAR 970.5227-2 RIGHTS IN DATA-TECHNOLOGY TRANSFER (DEC 2000) (ALTERNATE I) (DEC 2000)

(a) Definitions.

(1) Computer data bases, as used in this clause, means a collection of data in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

(2) Computer software, as used in this clause, means

(i) computer programs which are data comprising a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations and

(ii) data comprising source code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the computer program to be produced, created, or compiled. The term does not include computer data bases.

(3) Data, as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term "data" does not include data incidental to the administration of this contract, such as financial, administrative, cost and pricing, or management information.

(4) Limited rights data, as used in this clause, means data, other than computer software, developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged. The Government's rights to use, duplicate, or disclose limited rights data are as set forth in the Limited Rights Notice of paragraph (g) of this clause.

(5) Restricted computer software, as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software, including minor modifications of any such computer software. The Government's rights to use, duplicate, or disclose restricted computer software are as set forth in the Restricted Rights Notice of subparagraph (h) of this clause.

(6) Technical data, as used in this clause, means recorded data, regardless of form or characteristic, that are of a scientific or technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer data base.

(7) Unlimited rights, as used in this clause, means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, including by electronic means, and perform publicly and display publicly, in any manner, including by electronic means, and for any purpose whatsoever, and to have or permit others to do so.

(b) Allocation of Rights.

(1) The Government shall have:

(i) Ownership of all technical data and computer software first produced in the performance of this Contract;

(ii) Unlimited rights in technical data and computer software specifically used in the performance of this Contract, except as provided herein regarding copyright, limited rights data, or restricted computer software, and except for data subject to the withholding provisions for protected Cooperative Research and Development Agreement (CRADA) information in accordance

with Technology Transfer actions under this Contract, or other data specifically protected by statute for a period of time or, where, approved by DOE, appropriate instances of the DOE Work for Others Program;

(iii) The right to inspect technical data and computer software first produced or specifically used in the performance of this Contract at all reasonable times. The Contractor shall make available all necessary facilities to allow DOE personnel to perform such inspection;

(iv) The right to have all technical data and computer software first produced or specifically used in the performance of this Contract delivered to the Government or otherwise disposed of by the Contractor, either as the contracting officer may from time to time direct during the progress of the work or in any event as the contracting officer shall direct upon completion or termination of this Contract. The Contractor agrees to leave a copy of such data at the facility or plant to which such data relate, and to make available for access or to deliver to the Government such data upon request by the contracting officer. If such data are limited rights data or restricted computer software, the rights of the Government in such data shall be governed solely by the provisions of paragraph (g) of this clause ("Rights in Limited Rights Data") or paragraph (h) of this clause ("Rights in Restricted Computer Software"); and

(v) The right to remove, cancel, correct, or ignore any markings not authorized by the terms of this Contract on any data furnished hereunder if, in response to a written inquiry by DOE concerning the propriety of the markings, the Contractor fails to respond thereto within 60 days or fails to substantiate the propriety of the markings. In either case DOE will notify the Contractor of the action taken.

(2) The Contractor shall have:

(i) The right to withhold limited rights data and restricted computer software unless otherwise provided in provisions of this clause;

(ii) The right to use for its private purposes, subject to patent, security or other provisions of this Contract, data it first produces in the performance of this Contract, except for data in DOE's Uranium Enrichment Technology, including diffusion, centrifuge, and atomic vapor laser isotope separation and except Restricted Data in category C-24, 10 CFR part 725, in which DOE has reserved the

right to receive reasonable compensation for the use of its inventions and discoveries, including related data and technology, provided the data requirements of this Contract have been met as of the date of the private use of such data; and

(iii) The right to assert copyright subsisting in scientific and technical articles as provided in paragraph (d) of this clause and the right to request permission to assert copyright subsisting in works other than scientific and technical articles as provided in paragraph (e) of this clause.

(3) The Contractor agrees that for limited rights data or restricted computer software or other technical business or financial data in the form of recorded information which it receives from, or is given access to by DOE or a third party, including a DOE contractor or subcontractor, and for technical data or computer software it first produces under this Contract which is authorized to be marked by DOE, the Contractor shall treat such data in accordance with any restrictive legend contained thereon.

(c) Copyright (General).

(1) The Contractor agrees not to mark, register, or otherwise assert copyright in any data in a published or unpublished work, other than as set forth in paragraphs (d) and (e) of this clause.

(2) Except for material to which the Contractor has obtained the right to assert copyright in accordance with either paragraph (d) or (e) of this clause, the Contractor agrees not to include in the data delivered under this Contract any material copyrighted by the Contractor and not to knowingly include any material copyrighted by others without first granting or obtaining at no cost a license therein for the benefit of the Government of the same scope as set forth in paragraph (d) of this clause. If the Contractor believes that such copyrighted material for which the license cannot be obtained must be included in the data to be delivered, rather than merely incorporated therein by reference, the Contractor shall obtain the written authorization of the contracting officer to include such material in the data prior to its delivery.

(d) Copyrighted works (scientific and technical articles).

(1) The Contractor shall have the right to assert, without prior approval of the contracting officer, copyright subsisting in scientific and technical articles composed under this contract or based on or containing data first produced in the performance of this Contract, and published in academic, technical or professional journals, symposia, proceedings, or similar works. When

assertion of copyright is made, the Contractor shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) on the data when such data are delivered to the Government as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. The Contractor grants to the Government, and others acting on its behalf, a nonexclusive, paid-up, irrevocable, world-wide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.

(2) The contractor shall mark each scientific or technical article first produced or composed under this Contract and submitted for journal publication or similar means of dissemination with a notice, similar in all material respects to the following, on the front reflecting the Government's non-exclusive, paid-up, irrevocable, world-wide license in the copyright.

> Notice: This manuscript has been authored by [insert the name of the Contractor] under Contract No. [insert the contract number] with the U.S. Department of Energy. The United States Government retains and the publisher, by accepting the article for publication, acknowledges that the United States Government retains a non-exclusive, paid-up, irrevocable, world-wide license to publish or reproduce the published form of this manuscript, or allow others to do so, for United States Government purposes.

(End of Notice)

(3) The title to the copyright of the original of unclassified graduate theses and the original of related unclassified scientific papers shall vest in the author thereof, subject to the right of DOE to retain duplicates of such documents and to use such documents for any purpose whatsoever without any claim on the part of the author or the contractor for additional compensation.

(e) Copyrighted works (other than scientific and technical articles and data produced under a CRADA). The Contractor may obtain permission to assert copyright subsisting in technical data and computer software first produced by the Contractor in performance of this Contract, where the Contractor can show that commercialization would be enhanced by such copyright protection, subject to the following:

(1) Contractor Request to Assert Copyright.

(i) For data other than scientific and technical articles and data produced under a CRADA, the Contractor shall submit in writing

to Patent Counsel its request to assert copyright in data first produced in the performance of this Contract pursuant to this clause. The right of the Contractor to copyright data first produced under a CRADA is as described in the individual CRADA. Each request by the Contractor must include:

(A) The identity of the data (including any computer program) for which the Contractor requests permission to assert copyright, as well as an abstract which is descriptive of the data and is suitable for dissemination purposes,

(B) The program under which it was funded,

(C) Whether, to the best knowledge of the Contractor, the data is subject to an international treaty or agreement,

(D) Whether the data is subject to export control,

(E) A statement that the Contractor plans to commercialize the data in compliance with the clause of this contract entitled, "Technology Transfer Mission," within five (5) years after obtaining permission to assert copyright or, on a case-by-case basis, a specified longer period where the Contractor can demonstrate that the ability to commercialize effectively is dependent upon such longer period, and

(F) For data other than computer software, a statement explaining why the assertion of copyright is necessary to enhance commercialization and is consistent with DOE's dissemination responsibilities.

(ii) For data that is developed using other funding sources in addition to DOE funding, the permission to assert copyright in accordance with this clause must also be obtained by the Contractor from all other funding sources prior to the Contractor's request to Patent Counsel. The request shall include the Contractor's certification or other documentation acceptable to Patent Counsel demonstrating such permission has been obtained.

(iii) Permission for the Contractor to assert copyright in excepted categories of data as determined by DOE will be expressly withheld. Such excepted categories include data whose release

(A) would be detrimental to national security, i.e., involve classified information or data or sensitive information under Section 148 of the Atomic Energy Act of 1954, as

amended, or are subject to export control for nonproliferation and other nuclear-related national security purposes,

(B) would not enhance the appropriate transfer or dissemination and commercialization of such data,

(C) would have a negative impact on U.S. industrial competitiveness,

(D) would prevent DOE from meeting its obligations under treaties and international agreements, or

(E) would be detrimental to one or more of DOE's programs. Additional excepted categories may be added by the Assistant General Counsel for Technology Transfer and Intellectual Property. Where data are determined to be under export control restriction, the Contractor may obtain permission to assert copyright subject to the provisions of this clause for purposes of limited commercialization in a manner that complies with export control statutes and applicable regulations. In addition, notwithstanding any other provision of this Contract, all data developed with Naval Reactors' funding and those data that are classified fall within excepted categories. The rights of the Contractor in data are subject to the disposition of data rights in the treaties and international agreements identified under this Contract as well as those additional treaties and international agreements which DOE may from time to time identify by unilateral amendment to the Contract; such amendment listing added treaties and international agreements is effective only for data which is developed after the date such treaty or international agreement is added to this Contract. Also, the Contractor will not be permitted to assert copyright in data in the form of various technical reports generated by the Contractor under the Contract without first obtaining the advanced written permission of the contracting officer.

(2) DOE Review and Response to Contractor's Request. The Patent Counsel shall use its best efforts to respond in writing within 90 days of receipt of a complete request by the Contractor to assert copyright in technical data and computer software pursuant to this clause. Such response shall either give or withhold DOE's permission for the Contractor to assert copyright or advise the Contractor that DOE needs additional time to respond, and the reasons therefor.

(3) Permission for Contractor to Assert Copyright.

(i) For computer software, the Contractor shall furnish to the DOE designated, centralized software distribution and control point, the Energy Science and Technology Software Center, at the time permission to assert copyright is given under paragraph (e)(2) of this clause:

(A) An abstract describing the software suitable for publication,

(B) the source code for each software program, and

(C) the object code and at least the minimum support documentation needed by a technically competent user to understand and use the software. The Patent Counsel, for good cause shown by the Contractor, may allow the minimum support documentation to be delivered within 60 days after permission to assert copyright is given or at such time the minimum support documentation becomes available. The Contractor acknowledges that the DOE designated software distribution and control point may provide a technical description of the software in an announcement identifying its availability from the copyright holder.

(ii) Unless otherwise directed by the contracting officer, for data other than computer software to which the Contractor has received permission to assert copyright under paragraph (e)(2) of this clause above, the Contractor shall within sixty (60) days of obtaining such permission furnish to DOE's Office of Scientific and Technical Information (OSTI) a copy of such data as well as an abstract of the data suitable for dissemination purposes. The Contractor acknowledges that OSTI may provide an abstract of the data in an announcement to DOE, its contractors and to the public identifying its availability from the copyright holder.

(iii) For a five year period or such other specified period as specifically approved by Patent Counsel beginning on the date the Contractor is given permission to assert copyright in data, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works and perform publicly and display publicly, by or on behalf of the Government. Upon request, the initial period may be extended after DOE approval. The DOE approval will be based on the

standard that the work is still commercially available and the market demand is being met.

(iv) After the period approved by Patent Counsel for application of the limited Government license described in paragraph (e)(3)(iii) of this clause, or if, prior to the end of such period(s), the Contractor abandons commercialization activities pertaining to the data to which the Contractor has been given permission to assert copyright, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, distribute copies to the public, prepare derivative works, perform publicly and display publicly, and to permit others to do so.

(v) Whenever the Contractor asserts copyright in data pursuant to this paragraph (e), the Contractor shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 on the copyrighted data and also an acknowledgment of the Government sponsorship and license rights of paragraphs (e)(3) (iii) and (iv) of this clause. Such action shall be taken when the data are delivered to the Government, published, licensed or deposited for registration as a published work in the U.S. Copyright Office. The acknowledgment of Government sponsorship and license rights shall be as follows:

Notice: These data were produced by (insert name of Contractor) under Contract No.------- with the Department of Energy. For (period approved by Patent Counsel) from (date permission to assert copyright was obtained), the Government is granted for itself and others acting on its behalf a nonexclusive, paid-up, irrevocable worldwide license in this data to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government. There is provision for the possible extension of the term of this license. Subsequent to that period or any extension granted, the Government is granted for itself and others acting on its behalf a nonexclusive, paid-up, irrevocable worldwide license in this data to reproduce, prepare derivative works, distribute copies to the public, perform publicly and display publicly, and to permit others to do so. The specific term of the license can be identified by inquiry made to Contractor or DOE. Neither the United States nor the United States Department of Energy, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any data, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

(End of Notice)

(vi) With respect to any data to which the Contractor has received permission to assert copyright, the DOE has the right, during the five (5) year or specified longer period approved by Patent Counsel as provided for in paragraph (e) of this clause, to request the Contractor to grant a nonexclusive, partially exclusive or exclusive license in any field of use to a responsible applicant(s) upon terms that are reasonable under the circumstances, and if the Contractor refuses such request, to grant such license itself, if the DOE determines that the Contractor has not made a satisfactory demonstration that either it or its licensee(s) is actively pursuing commercialization of the data as set forth in subparagraph (e)(1)(A) of this clause. Before licensing under this subparagraph (vi), DOE shall furnish the Contractor a written request for the Contractor to grant the stated license, and the Contractor shall be allowed thirty (30) days (or such longer period as may be authorized by the contracting officer for good cause shown in writing by the Contractor) after such notice to show cause why the license should not be granted. The Contractor shall have the right to appeal the decision of the DOE to grant the stated license to the Invention Licensing Appeal Board as set forth in 10 CFR 781.65-"Appeals."

(vii) No costs shall be allowable for maintenance of copyrighted data, primarily for the benefit of the Contractor and/or a licensee which exceeds DOE Program needs, except as expressly provided in writing by the contracting officer. The Contractor may use its net royalty income to effect such maintenance costs.

(viii) At any time the Contractor abandons commercialization activities for data for which the Contractor has received permission to assert copyright in accordance with this clause, it shall advise OSTI and Patent Counsel and upon request assign the copyright to the Government so that the Government can distribute the data to the public.

(4) The following notice may be placed on computer software prior to any publication and prior to the Contractor's obtaining permission from the Department of Energy to assert copyright in the computer software pursuant to paragraph (c)(3) of this section.

Notice: This computer software was prepared by [insert the Contractor's name and the individual author], hereinafter the Contractor, under Contract [insert the Contract Number] with the Department of Energy (DOE). All rights in the computer software are reserved by DOE on

behalf of the United States Government and the Contractor as provided in the Contract. You are authorized to use this computer software for Governmental purposes but it is not to be released or distributed to the public. NEITHER THE GOVERNMENT NOR THE CONTRACTOR MAKES ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUMES ANY LIABILITY FOR THE USE OF THIS SOFTWARE. This notice including this sentence must appear on any copies of this computer software.

(End of Notice)

(5) a similar notice can be used for data, other than computer software, upon approval of Patent Counsel.

(f) Subcontracting.

(1) Unless otherwise directed by the contracting officer, the Contractor agrees to use in subcontracts in which technical data or computer software is expected to be produced or in subcontracts for supplies that contain a requirement for production or delivery of data in accordance with the policy and procedures of 48 CFR Subpart 27.4 as supplemented by 48 CFR 927.401 through 927.409, the clause entitled, "Rights in Data-General" at 48 CFR 52.227-14 modified in accordance with 927.409(a) and including Alternate V. Alternates II through IV of that clause may be included as appropriate with the prior approval of DOE Patent Counsel, and the Contractor shall not acquire rights in a subcontractor's limited rights data or restricted computer software, except through the use of Alternates II or III, respectively, without the prior approval of DOE Patent Counsel. The clause at 48 CFR 52.227-16, Additional Data Requirements, shall be included in subcontracts in accordance with 48 CFR 927.409(h). The Contractor shall use instead the Rights in Data-Facilities clause at 48 CFR 970.5227-1 in subcontracts, including subcontracts for related support services, involving the design or operation of any plants or facilities or specially designed equipment for such plants or facilities that are managed or operated under its contract with DOE.

(2) It is the responsibility of the Contractor to obtain from its subcontractors technical data and computer software and rights therein, on behalf of the Government, necessary to fulfill the Contractor's obligations to the Government with respect to such data. In the event of refusal by a subcontractor to accept a clause affording the Government such rights, the Contractor shall:

(i) Promptly submit written notice to the contracting officer setting forth reasons or the subcontractor's refusal and other pertinent information which may expedite disposition of the matter, and

(ii) Not proceed with the subcontract without the written authorization of the contracting officer.

(3) Neither the Contractor nor higher-tier subcontractors shall use their power to award subcontracts as economic leverage to acquire rights in a subcontractor's limited rights data and restricted computer software for their private use.

(g) Rights in Limited Rights Data. Except as may be otherwise specified in this Contract as data which are not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable nonexclusive, paid-up license by or for the Government, in any limited rights data of the Contractor specifically used in the performance of this Contract, provided, however, that to the extent that any limited rights data when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Limited Rights Notice" set forth below. All such limited rights data shall be marked with the following "Limited Rights Notice:"

Limited Rights Notice

These data contain "limited rights data," furnished under Contract No. *DE-AC52-05NA25396* with the United States Department of Energy which may be duplicated and used by the Government with the express limitations that the "limited rights data" may not be disclosed outside the Government or be used for purposes of manufacture without prior permission of the Contractor, except that further disclosure or use may be made solely for the following purposes:

(a) Use (except for manufacture) by support services contractors within the scope of their contracts;

(b) This "limited rights data" may be disclosed for evaluation purposes under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;

(c) This "limited rights data" may be disclosed to other contractors participating in the Government's program of which this Contract is a part for information or use (except for manufacture) in connection with the work performed under their contracts and under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;

(d) This "limited rights data" may be used by the Government or others on its behalf for emergency repair or overhaul work under the restriction that the "limited rights data" be retained in confidence and not be further disclosed; and

(e) Release to a foreign government, or instrumentality thereof, as the interests of the United States Government may require, for information or evaluation, or for emergency repair or overhaul work by such government.

This Notice shall be marked on any reproduction of this data in whole or in part.

(End of Notice)

(h) Rights in Restricted Computer Software.

(1) Except as may be otherwise specified in this Contract as data which are not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up, license by or for the Government, in any restricted computer software of the Contractor specifically used in the performance of this Contract; provided, however, that to the extent that any restricted computer software when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Restricted Rights Notice" set forth below. All such restricted computer software shall be marked with the following "Restricted Rights Notice:"

Restricted Rights Notice-Long Form

(a) This computer software is submitted with restricted rights under Department of Energy Contract No. *DE-AC52-05NA25396*. It may not be used, reproduced, or disclosed by the Government except as provided in paragraph (b) of this notice.

(b) This computer software may be:

(1) Used or copied for use in or with the computer or computers for which it was acquired, including use at any Government installation to which such computer or computers may be transferred;

(2) Used, copied for use, in a backup or replacement computer if any computer for which it was acquired is inoperative or is replaced;

(3) Reproduced for safekeeping (archives) or backup purposes;

(4) Modified, adapted, or combined with other computer software, provided that only the portions of the derivative software consisting of the restricted computer software are to be made subject to the same restricted rights; and

(5) Disclosed to and reproduced for use by contractors under a service contract (of the type defined in 48 CFR 37.101) in accordance with subparagraphs (b)(1) through (4) of this Notice, provided the Government makes such disclosure or reproduction subject to these restricted rights.

(c) Notwithstanding the foregoing, if this computer software has been published under copyright, it is licensed to the Government, without disclosure prohibitions, with the rights set forth in the restricted rights notice above.

(d) This Notice shall be marked on any reproduction of this computer software, in whole or in part.

(End of Notice)

(2) Where it is impractical to include the Restricted Rights Notice on restricted computer software, the following short-form Notice may be used in lieu thereof:

Restricted Rights Notice-Short Form

Use, reproduction, or disclosure is subject to restrictions set forth in the Long Form Notice of DOE Contract No. *DE-AC52-05NA25396* with *(New Contractor Name to be Inserted Here).*

(End of Notice)

(3) If the software is embedded, or if it is commercially impractical to mark it with human readable text, then the symbol R and the clause date (mo/yr) in brackets or a box, a [R-mo/yr], may be used. This will be read to mean restricted computer software, subject to the rights of the Government as described in the Long Form Notice, in effect as of the date indicated next to the symbol. The symbol shall not be used to mark human readable

material. In the event this Contract contains any variation to the rights in the Long Form Notice, then the contract number must also be cited.

(4) If restricted computer software is delivered with the copyright notice of 17 U.S.C. 401, the software will be presumed to be published copyrighted computer software licensed to the Government without disclosure prohibitions and with unlimited rights, unless the Contractor includes the following statement with such copyright notice "Unpublished-rights reserved under the Copyright Laws of the United States."

(i) Relationship to patents. Nothing contained in this clause creates or is intended to imply a license to the Government in any patent or is intended to be construed as affecting the scope of any licenses or other rights otherwise granted to the Government under any patent.

I-127 DEAR 970.5227-3 TECHNOLOGY TRANSFER MISSION (AUG 2002)

This clause has as its purpose implementation of the National Competitiveness Technology Transfer Act of 1989 (Sections 3131, 3132, 3133, and 3157 of Pub. L. 101-189 and as amended by Pub. L. 103-160, Sections 3134 and 3160). The Contractor shall conduct technology transfer activities with a purpose of providing benefit from Federal research to U.S. industrial competitiveness.

(a) Authority.

(1) In order to ensure the full use of the results of research and development efforts of, and the capabilities of, the Laboratory, technology transfer, including Cooperative Research and Development Agreements (CRADAs), is established as a mission of the Laboratory consistent with the policy, principles and purposes of Sections 11(a)(1) and 12(g) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a); Section 3132(b) of Pub. L. 101-189, Sections 3134 and 3160 of Pub. L. 103-160, and of Chapter 38 of the Patent Laws (35 U.S.C. 200 et seq.); Section 152 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2182); Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908); and Executive Order 12591 of April 10, 1987.

(2) In pursuing the technology transfer mission, the Contractor is authorized to conduct activities including but not limited to: identifying and protecting Intellectual Property made, created or acquired at or by the Laboratory; negotiating licensing agreements and assignments for Intellectual Property made, created or acquired at or by the Laboratory that the Contractor controls or owns; bailments; negotiating all aspects of and entering into CRADAs; providing technical consulting and personnel exchanges; conducting science education activities and reimbursable

Work for Others (WFO); providing information exchanges; and making available laboratory or weapon production user facilities. It is fully expected that the Contractor shall use all of the mechanisms available to it to accomplish this technology transfer mission, including, but not limited to, CRADAs, user facilities, WFO, science education activities, consulting, personnel, assignments, and licensing in accordance with this clause.

(b) Definitions.

(1) Contractor's Laboratory Director means the individual who has supervision over all or substantially all of the Contractor's operations at the Laboratory.

(2) Intellectual Property means patents, trademarks, copyrights, mask works, protected CRADA information, and other forms of comparable property rights protected by Federal Law and other foreign counterparts.

(3) Cooperative Research and Development Agreement (CRADA) means any agreement entered into between the Contractor as operator of the Laboratory, and one or more parties including at least one non-Federal party under which the Government, through its laboratory, provides personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the Laboratory; except that such term does not include a procurement contract, grant, or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of Title 31 of the United States Code.

(4) Joint Work Statement (JWS) means a proposal for a CRADA prepared by the Contractor, signed by the Contractor's Laboratory Director or designee which describes the following:

(i) Purpose;

(ii) Scope of Work which delineates the rights and responsibilities of the Government, the Contractor and Third Parties, one of which must be a non-Federal party;

(iii) Schedule for the work; and

(iv) Cost and resource contributions of the parties associated with the work and the schedule.

(5) Assignment means any agreement by which the Contractor transfers ownership of Laboratory Intellectual Property, subject to the Government's retained rights.

(6) Laboratory Biological Materials means biological materials capable of replication or reproduction, such as plasmids, deoxyribonucleic acid molecules, ribonucleic acid molecules, living organisms of any sort and their progeny, including viruses, prokaryote and eukaryote cell lines, transgenic plants and animals, and any derivatives or modifications thereof or products produced through their use or associated biological products, made under this contract by Laboratory employees or through the use of Laboratory research facilities.

(7) Laboratory Tangible Research Product means tangible material results of research which

(i) are provided to permit replication, reproduction, evaluation or confirmation of the research effort, or to evaluate its potential commercial utility;

(ii) are not materials generally commercially available; and

(iii) were made under this contract by Laboratory employees or through the use of Laboratory research facilities.

(8) Bailment means any agreement in which the Contractor permits the commercial or non-commercial transfer of custody, access or use of Laboratory Biological Materials or Laboratory Tangible Research Product for a specified purpose of technology transfer or research and development, including without limitation evaluation, and without transferring ownership to the bailee.

(c) Allowable Costs.

(1) The Contractor shall establish and carry out its technology transfer efforts through appropriate organizational elements consistent with the requirements for an Office of Research and Technology Applications (ORTA) pursuant to paragraphs (b) and (c) of Section 11 of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710). The costs associated with the conduct of technology transfer through the ORTA including activities associated with obtaining, maintaining, licensing, and assigning Intellectual Property rights, increasing the potential for the transfer of technology, and the widespread notice of technology transfer opportunities, shall be deemed allowable provided that such costs meet the other requirements of the allowable

costs provisions of this Contract. In addition to any separately designated funds, these costs in any fiscal year shall not exceed an amount equal to 0.5 percent of the operating funds included in the Federal research and development budget (including Work For Others) of the Laboratory for that fiscal year without written approval of the contracting officer.

(2) The Contractor's participation in litigation to enforce or defend Intellectual Property claims incurred in its technology transfer efforts shall be as provided in the clause entitled "Insurance-Litigation and Claims" of this contract.

(d) Conflicts of Interest-Technology Transfer. The Contractor shall have implementing procedures that seek to avoid employee and organizational conflicts of interest, or the appearance of conflicts of interest, in the conduct of its technology transfer activities. These procedures shall apply to other persons participating in Laboratory research or related technology transfer activities. Such implementing procedures shall be provided to the contracting officer for review and approval within sixty (60) days after execution of this contract. The contracting officer shall have thirty (30) days thereafter to approve or require specific changes to such procedures. Such implementing procedures shall include procedures to:

(1) Inform employees of and require conformance with standards of conduct and integrity in connection with the CRADA activity in accordance with the provisions of paragraph (n)(5) of this clause;

(2) Review and approve employee activities so as to avoid conflicts of interest arising from commercial utilization activities relating to Contractor-developed Intellectual Property;

(3) Conduct work performed using royalties so as to avoid interference with or adverse effects on ongoing DOE projects and programs;

(4) Conduct activities relating to commercial utilization of Contractor-developed Intellectual Property so as to avoid interference with or adverse effects on user facility or WFO activities of the Contractor;

(5) Conduct DOE-funded projects and programs so as to avoid the appearance of conflicts of interest or actual conflicts of interest with non-Government funded work;

(6) Notify the contracting officer with respect to any new work to be performed or proposed to be performed under the Contract for DOE or other Federal agencies where the new work or proposal involves Intellectual Property in which the Contractor has obtained or intends to request or elect title;

(7) Except as provided elsewhere in this Contract, obtain the approval of the contracting officer for any licensing of or assignment of title to Intellectual Property rights by the Contractor to any business or corporate affiliate of the Contractor;

(8) Obtain the approval of the contracting officer, prior to any assignment, exclusive licensing, or option for exclusive licensing, of Intellectual Property to any individual who has been a Laboratory employee within the previous two years or to the company in which the individual is a principal;

(9) Notify non-Federal sponsors of WFO activities, or non-Federal users of user facilities, of any relevant Intellectual Property interest of the Contractor prior to execution of WFOs or user agreements; *and*

(10) Notify DOE prior to evaluating a proposal by a third party or DOE, when the subject matter of the proposal involves an elected or waived subject invention under this contract or one in which the Contractor intends to elect to retain title under this contract.

(e) Fairness of Opportunity. In conducting its technology transfer activities, the Contractor shall prepare procedures and take all reasonable measures to ensure widespread notice of availability of technologies suited for transfer and opportunities for exclusive licensing and joint research arrangements. The requirement to widely disseminate the availability of technology transfer opportunities does not apply to a specific application originated outside of the Laboratory and by entities other than the Contractor.

(f) U.S. Industrial Competitiveness.

(1) In the interest of enhancing U.S. Industrial Competitiveness, the Contractor shall, in its licensing and assignments of Intellectual Property, give preference in such a manner as to enhance the accrual of economic and technological benefits to the U.S. domestic economy. The Contractor shall consider the following factors in all of its licensing and assignment decisions involving Laboratory intellectual property where the Laboratory obtains rights during the course of the Contractor's operation of the Laboratory under this contract:

(i) whether any resulting design and development will be performed in the United States and whether resulting products, embodying parts, including components thereof, will be substantially manufactured in the United States; or

(ii) (A) whether the proposed licensee or assignee has a business unit located in the United States and whether significant economic and technical benefits will flow to the United States as a result of the license or assignment agreement; and

(B) in licensing any entity subject to the control of a foreign company or government, whether such foreign government permits United States agencies, organizations or other persons to enter into cooperative research and development agreements and licensing agreements, and has policies to protect United States Intellectual Property rights.

(2) If the Contractor determines that neither of the conditions in paragraphs (f)(1)(i) or (ii) of this clause are likely to be fulfilled, the Contractor, prior to entering into such an agreement, must obtain the approval of the contracting officer. The contracting officer shall act on any such requests for approval within thirty (30) days.

(3) The Contractor agrees to be bound by the provisions of 35 U.S.C. 204 (Preference for United States industry).

(g) Indemnity-Product Liability. In entering into written technology transfer agreements, including but not limited to, research and development agreements, licenses, assignments and CRADAs, the Contractor agrees to include in such agreements a requirement that the U.S. Government and the Contractor, except for any negligent acts or omissions of the Contractor, be indemnified for all damages, costs, and expenses, including attorneys' fees, arising from personal injury or property damage occurring as a result of the making, using or selling of a product, process or service by or on behalf of the Participant, its assignees or licensees which was derived from the work performed under the agreement. The Contractor shall identify and obtain the approval of the contracting officer for any proposed exceptions to this requirement such as where State or local law expressly prohibit the Participant from providing indemnification or where the research results will be placed in the public domain.

(h) Disposition of Income.

(1) Royalties or other income earned or retained by the Contractor as a result of performance of authorized technology transfer activities herein shall be used by the Contractor for scientific research, development, technology transfer, and education at the Laboratory, consistent with the research and development mission and objectives of the Laboratory and subject to

Section 12(b)(5) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(b)(5)) and Chapter 38 of the Patent Laws (35 U.S.C. 200 et seq.) as amended through the effective date of this contract award or modification. If the net amounts of such royalties and income received from patent licensing after payment of patenting costs, licensing costs, payments to inventors and other expenses incidental to the administration of Subject Inventions during any fiscal year exceed 5 percent of the Laboratory's budget for that fiscal year, 75 percent of such excess amounts shall be paid to the Treasury of the United States, and the remaining amount of such excess shall be used by the Contractor for the purposes as described above in this paragraph. Any inventions arising out of such scientific research and development activities shall be deemed to be Subject Inventions under the Contract.

(2) The Contractor shall include as a part of its annual Laboratory Institutional Plan or other such annual document a plan setting out those uses to which royalties and other income received as a result of performance of authorized technology transfer activities herein will be applied at the Laboratory, and at the end of the year, provide a separate accounting for how the funds were actually used. Under no circumstances shall these royalties and income be used for an illegal augmentation of funds furnished by the U.S. Government.

(3) The Contractor shall establish subject to the approval of the contracting officer a policy for making awards or sharing of royalties with Contractor employees, other coinventors and coauthors, including Federal employee coinventors when deemed appropriate by the contracting officer.

(i) Transfer to Successor Contractor. In the event of termination or upon the expiration of this Contract, any unexpended balance of income received for use at the Laboratory shall be transferred, at the contracting officer's request, to a successor contractor, or in the absence of a successor contractor, to such other entity as designated by the contracting officer. The Contractor shall transfer title, as one package, to the extent the Contractor retains title, in all patents and patent applications, licenses, accounts containing royalty revenues from such license agreements, including equity positions in third party entities, and other Intellectual Property rights which arose at the Laboratory, to the successor contractor or to the Government as directed by the contracting officer.

(j) Technology Transfer Affecting the National Security.

(1) The Contractor shall notify and obtain the approval of the contracting officer, prior to entering into any technology transfer arrangement, when such technology or any part of such technology is classified or sensitive under Section 148 of the Atomic Energy Act (42 U.S.C. 2168). Such notification shall include sufficient information to enable DOE to

determine the extent that commercialization of such technology would enhance or diminish security interests of the United States, or diminish communications within DOE nuclear weapon production complex. DOE shall use its best efforts to complete its determination within sixty (60) days of the Contractor's notification, and provision of any supporting information, and DOE shall promptly notify the Contractor as to whether the technology is transferable.

(2) The Contractor shall include in all of its technology transfer agreements with third parties, including, but not limited to, CRADAs, licensing agreements and assignments, notice to such third parties that the export of goods and/or Technical Data from the United States may require some form of export control license or other authority from the U.S. Government and that failure to obtain such export control license may result in criminal liability under U.S. laws.

(3) For other than fundamental research as defined in National Security Decision Directive 189, the Contractor is responsible to conduct internal export control reviews and assure that technology is transferred in accordance with applicable law.

(k) Records. The Contractor shall maintain records of its technology transfer activities in a manner and to the extent satisfactory to the DOE and specifically including, but not limited to, the licensing agreements, assignments and the records required to implement the requirements of paragraphs (e), (f), and (h) of this clause and shall provide reports to the contracting officer, to enable DOE to maintain the reporting requirements of Section 12(c)(6) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(c)(6)). Such reports shall be made annually in a format to be agreed upon between the Contractor and DOE and in such a format which will serve to adequately inform DOE of the Contractor's technology transfer activities while protecting any data not subject to disclosure under the Rights in Technical Data clause and paragraph (n) of this clause. Such records shall be made available in accordance with the clauses of this Contract pertaining to inspection, audit and examination of records.

(l) Reports to Congress. To facilitate DOE reporting to Congress, the Contractor is required to submit annually to DOE a technology transfer plan for conducting its technology transfer function for the upcoming year, including plans for securing Intellectual Property rights in Laboratory innovations with commercial promise and plans for managing such innovations so as to benefit the competitiveness of United States industry. This plan shall be provided to the contracting officer on or before October 1st of each year.

(m) Oversight and Appraisal. The Contractor is responsible for developing and implementing effective internal controls for all technology transfer activities

consistent with the audit and record requirements of this Contract. Laboratory Contractor performance in implementing the technology transfer mission and the effectiveness of the Contractor's procedures will be evaluated by the contracting officer as part of the annual appraisal process, with input from the cognizant Secretarial Officer or program office.

(n) Technology Transfer Through Cooperative Research and Development Agreements. Upon approval of the contracting officer, and as provided in a DOE approved Joint Work Statement (JWS), the Laboratory Director, or designee, may enter into CRADAs on behalf of the DOE subject to the requirements set forth in this paragraph.

(1) Review and Approval of CRADAs.

(i) Except as otherwise directed in writing by the contracting officer, each JWS shall be submitted to the contracting officer for approval. The Contractor's Laboratory Director or designee shall provide a program mission impact statement and shall include an impact statement regarding related Intellectual Property rights known by the Contractor to be owned by the Government to assist the contracting officer, in the approval determination.

(ii) The Contractor shall also include (specific to the proposed CRADA), a statement of compliance with the Fairness of Opportunity requirements of paragraph (e) of this clause.

(iii) Within thirty (30) days after submission of a JWS or proposed CRADA, the contracting officer shall approve, disapprove or request modification to the JWS or CRADA. The contracting officer shall provide a written explanation to the Contractor's Laboratory Director or designee of any disapproval or requirement for modification of a JWS or proposed CRADA.

(iv) Except as otherwise directed in writing by the contracting officer, the Contractor shall not enter into, or begin work under, a CRADA until approval of the CRADA has been granted by the contracting officer. The Contractor may submit its proposed CRADA to the contracting officer at the time of submitting its proposed JWS or any time thereafter.

(2) Selection of Participants. The Contractor's Laboratory Director or designee in deciding what CRADA to enter into shall:

(i) Give special consideration to small business firms, and consortia involving small business firms;

(ii) Give preference to business units located in the United States which agree that products or processes embodying Intellectual Property will be substantially manufactured or practiced in the United States and, in the case of any industrial organization or other person subject to the control of a foreign company or government, take into consideration whether or not such foreign government permits United States agencies, organizations, or other persons to enter into cooperative research and development agreements and licensing agreements;

(iii) Provide Fairness of Opportunity in accordance with the requirements of paragraph (e) of this clause; and

(iv) Give consideration to the Conflicts of Interest requirements of paragraph (d) of this clause.

(3) Withholding of Data.

(i) Data that is first produced as a result of research and development activities conducted under a CRADA and that would be a trade secret or commercial or financial data that would be privileged or confidential, if such data had been obtained from a non-Federal third party, may be protected from disclosure under the Freedom of Information Act as provided in the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(c)(7)) for a period as agreed in the CRADA of up to five (5)years from the time the data is first produced. The DOE shall cooperate with the Contractor in protecting such data.

(ii) Unless otherwise expressly approved by the contracting officer in advance for a specific CRADA, the Contractor agrees, at the request of the contracting officer, to transmit such data to other DOE facilities for use by DOE or its Contractors by or on behalf of the Government. When data protected pursuant to paragraph (n)(3)(i) of this clause is so transferred, the Contractor shall clearly mark the data with a legend setting out the restrictions against private use and further dissemination, along with the expiration date of such restrictions.

(iii) In addition to its authority to license Intellectual Property, the Contractor may enter into licensing agreements with third parties for data developed by the Contractor under a CRADA subject to other provisions of this Contract. However, the Contractor shall neither use the protection against dissemination nor the licensing of data as an alternative to the submittal of invention disclosures

which include data protected pursuant to paragraph (n)(3)(i) of this clause.

(4) Work For Others and User Facility Programs.

(i) WFO and User Facility Agreements (UFAs) are not CRADAs and will be available for use by the Contractor in addition to CRADAs for achieving utilization of employee expertise and unique facilities for maximizing technology transfer. The Contractor agrees form prospective CRADA participants, which are intending to substantially pay full cost recovery for the effort under a proposed CRADA, of the availability of alternative forms of agreements, i.e., WFO and UFA, and of the Class Patent Waiver provisions associated therewith.

(ii) Where the Contractor believes that the transfer of technology to the U.S. domestic economy will benefit from, or other equity considerations dictate, an arrangement other than the Class Waiver of patent rights to the sponsor in WFO and UFAs, a request may be made to the contracting officer for an exception to the Class Waivers.

(iii) Rights to inventions made under agreements other than funding agreements with third parties shall be governed by the appropriate provisions incorporated, with DOE approval, in such agreements, and the provisions in such agreements take precedence over any disposition of rights contained in this Contract. Disposition of rights under any such agreement shall be in accordance with any DOE class waiver (including Work for Others and User Class Waivers) or individually negotiated waiver which applies to the agreement.

(5) Conflicts of Interest.

(i) Except as provided in paragraph (n)(5)(iii) of this clause, the Contractor shall assure that no employee of the Contractor shall have a substantial role (including an advisory role) in the preparation, negotiation, or approval of a CRADA, if, to such employee's knowledge:

(A) Such employee, or the spouse, child, parent, sibling, or partner of such employee, or an organization (other than the Contractor) in which such employee serves as an officer, director, trustee, partner, or employee-

(1) holds financial interest in any entity, other than the Contractor, that has a substantial interest in the preparation, negotiation, or approval of the CRADA;

(2) receives a gift or gratuity from any entity, other than the Contractor, that has a substantial interest in the preparation, negotiation, or approval of the CRADA; or

(B) A financial interest in any entity, other than the Contractor, that has a substantial interest in the preparation, negotiation, or approval of the CRADA, is held by any person or organization with whom such employee is negotiating or has any arrangement concerning prospective employment.

(ii) The Contractor shall require that each employee of the Contractor who has a substantial role (including an advisory role) in the preparation, negotiation, or approval of a CRADA certify through the Contractor to the contracting officer that the circumstances described in paragraph (n)(5)(i) of this clause do not apply to that employee.

(iii) The requirements of paragraphs (n)(5)(i) and (n)(5)(ii) of this clause shall not apply in a case where the contracting officer is advised by the Contractor in advance of the participation of an employee described in those paragraphs in the preparation, negotiation or approval of a CRADA of the nature of and extent of any financial interest described in paragraph (n)(5)(i) of this clause, and the contracting officer determines that such financial interest is not so substantial as to be considered likely to affect the integrity of the Contractor employee's participation in the process of preparing, negotiating, or approving the CRADA.

(o) Technology Transfer in Other Cost-Sharing Agreements. In conducting research and development activities in cost-shared agreements not covered by paragraph (n) of this clause, the Contractor, with prior written permission of the contracting officer, may provide for the withholding of data produced thereunder in accordance with the applicable provisions of paragraph (n)(3) of this clause.

(p) Technology Partnership Ombudsman.

(1) The Contractor agrees to establish a position to be known as "Technology Partnership Ombudsman," to help resolve complaints from outside organizations regarding the policies and actions of the contractor with respect to technology partnerships (including CRADAs), patents owned

by the contractor for inventions made at the laboratory, and technology licensing.

(2) The Ombudsman shall be a senior official of the Contractor's laboratory staff, who is not involved in day-to-day technology partnerships, patents or technology licensing, or, if appointed from outside the laboratory or facility, shall function as such senior official.

(3) The duties of the Technology Partnership Ombudsman shall include:

(i) Serving as the focal point for assisting the public and industry in resolving complaints and disputes with the laboratory or facility regarding technology partnerships, patents, and technology licensing;

(ii) Promoting the use of collaborative alternative dispute resolution techniques such as mediation to facilitate the speedy and low cost resolution of complaints and disputes, when appropriate; and

(iii) Submitting a quarterly report, in a format provided by DOE, to the Secretary of Energy, the Administrator for Nuclear Security, the Director of the DOE Office of Dispute Resolution, and the Contracting Officer concerning the number and nature of complaints and disputes raised, along with the Ombudsman's assessment of their resolution, consistent with the protection of confidential and sensitive information.

I-128 DEAR 970.5227-10 PATENT RIGHTS - MANAGEMENT AND OPERATING CONTRACTS, NONPROFIT ORGANIZATION OR SMALL BUSINESS FIRM CONTRACTOR (AUG 2002) ALTERNATE 1 (ALTERATION)

[This clause is only applicable if the selected offeror (Contractor) is a NonProfit Organization (See FAR Subpart 31.701) or Small Business Firm Contractor (see FAR Subpart 19.301). If these conditions are not met, then this clause 970.5227-10 shall not apply and marked "Reserved".]

(a) DEFINITIONS.

(1) DOE licensing regulations means the Department of Energy patent licensing regulations at 10 CFR Part 781.

(2) Exceptional circumstance subject invention means any subject invention in a technical field or related to a task determined by the Department of

Energy to be subject to an exceptional circumstance under 35 U.S.C. 202(a)(ii) and in accordance with 37 CFR Part 401.3(e).

(3) Invention means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).

(4) Made when used in relation to any invention means the conception or first actual reduction to practice of such invention.

(5) Nonprofit organization means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

(6) Patent Counsel means the Department of Energy (DOE) Patent Counsel assisting the DOE contracting activity.

(7) Practical application means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

(8) Small business firm means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, are used.

(9) Subject Invention means any invention of the contractor conceived or first actually reduced to practice in the performance of work under this contract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) shall also occur during the period of contract performance.

(10) Weapons Related Subject Invention means any subject invention conceived or first actually reduced to practice in the course of or under work funded by or through defense programs, including Department of

Defense and intelligence reimbursable work, or the Naval Nuclear Propulsion Program of the Department of Energy or the National Nuclear Security Administration.

(b) ALLOCATION OF PRINCIPAL RIGHTS.

(1) Retention of title by the Contractor. Except for exceptional circumstance subject inventions, the contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the Contractor retains title, the Federal government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

(2) Exceptional circumstance subject inventions. Except to the extent that rights are retained by the Contractor in a determination of exceptional circumstances or granted to a contractor through a determination of greater rights in accordance with subparagraph (b)(4) of this clause, the Contractor does not have a right to retain title to any exceptional circumstance subject inventions and agrees to assign to the Government the entire right, title, and interest, throughout the world, in and to any exceptional circumstance subject inventions.

(i) Inventions within or relating to the following fields of technology are exceptional circumstance subject inventions:

(A) uranium enrichment technology;

(B) storage and disposal of civilian high-level nuclear waste and spent fuel technology; and

(C) national security technologies classified or sensitive under Section 148 of the Atomic Energy Act (42 U.S.C. 2168).

(ii) Inventions made under any agreement, contract or subcontract related to the following are exceptional circumstance subject inventions:

(A) DOE Steel Initiative and Metals Initiative;

(B) U.S. Advanced Battery Consortium; and

(C) any funding agreement which is funded in part by the Electric Power Research Institute (EPRI) or the Gas Research Institute (GRI).

(iii) DOE reserves the right to unilaterally amend this contract to modify, by deletion or insertion, technical fields, tasks, or other classifications for the purpose of determining DOE exceptional circumstance subject inventions.

(3) Treaties and international agreements. Any rights acquired by the Contractor in subject inventions are subject to any disposition of right, title, or interest in or to subject inventions provided for in treaties or international agreements identified in *the Contract Section J Appendix entitled "All In Force Bilateral Agreements."* DOE reserves the right to unilaterally amend this contract to identify specific treaties or international agreements entered into or to be entered into by the Government after the effective date of this contract and to effectuate those license or other rights which are necessary for the Government to meet its obligations to foreign governments, their nationals and international organizations under such treaties or international agreements with respect to subject inventions made after the date of the amendment.

(4) Contractor request for greater rights in exceptional circumstance subject inventions. The Contractor may request rights greater than allowed by the exceptional circumstance determination in an exceptional circumstance subject invention by submitting such a request in writing to Patent Counsel at the time the exceptional circumstance subject invention is disclosed to DOE or within eight (8) months after conception or first actual reduction to practice of the exceptional circumstance subject invention, whichever occurs first, unless a longer period is authorized in writing by the Patent Counsel for good cause shown in writing by the Contractor. DOE may, in its discretion, grant or refuse to grant such a request by the Contractor.

(5) Contractor employee-inventor rights. If the Contractor does not elect to retain title to a subject invention or does not request greater rights in an exceptional circumstance subject invention, a Contractor employee-inventor, after consultation with the Contractor and with written authorization from the Contractor in accordance with 10 CFR 784.9(b)(4), may request greater rights, including title, in the subject invention or the exceptional circumstance invention from DOE, and DOE may, in its discretion, grant or refuse to grant such a request by the Contractor employee-inventor.

(6) Government assignment of rights in Government employees' subject inventions. If a Government employee is a joint inventor of a subject invention or of an exceptional circumstance subject invention to which the Contractor has rights, the Government may assign or refuse to assign to the Contractor any rights in the subject invention or exceptional

circumstance subject invention acquired by the Government from the Government employee, in accordance with 48 CFR 27.304-1(d). The rights assigned to the Contractor are subject to any provision of this clause that is applicable to subject inventions in which the Contractor retains title, including reservation by the Government of a nonexclusive, nontransferable, irrevocable, paid-up license, except that the Contractor shall file its initial patent application claiming the subject invention or exceptional circumstance invention within one (1) year after the assignment of such rights. The Contractor shall share royalties collected for the manufacture, use or sale of the subject invention with the Government employee.

(7) Weapons related subject inventions. Except to the extent that DOE is solely satisfied that the Contractor meets certain procedural requirements and DOE grants rights to the Contractor in weapons related subject inventions, the Contractor does not have the right to retain title to any weapons related subject inventions.

(c) SUBJECT INVENTION DISCLOSURE, ELECTION OF TITLE AND FILING OF PATENT APPLICATION BY CONTRACTOR.

(1) Subject invention disclosure. The contractor will disclose each subject invention to the Patent Counsel within two months after the inventor discloses it in writing to contractor personnel responsible for patent matters. The disclosure to the agency shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s) and all sources of funding by B&R code for the invention. It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. The disclosure shall include a written statement as to whether the invention falls within an exceptional circumstance field. DOE will make a determination and advise the Contractor within 30 days of receipt of an invention disclosure as to whether the invention is an exceptional circumstance subject invention. In addition, after disclosure to the Patent Counsel, the Contractor will promptly notify the agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the contractor. The Contractor shall obtain approval from Patent Counsel prior to any release or publication of information concerning any nonelectable subject invention such as an exceptional circumstance subject invention or any subject invention related to a treaty or international agreement.

(2) Election by the Contractor. Except as provided in paragraph (b)(2) of this clause, the Contractor will elect in writing whether or not to retain title to any such invention by notifying the Federal agency within two years of disclosure to the Federal agency. However, in any case where publication, on sale or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.

(3) Filing of patent applications by the Contractor. The Contractor will file its initial patent application on a subject invention to which it elects to retain title within one year after election of title or, if earlier, or prior to the end of any 1-year statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Contractor will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application or six months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) Contractor's request for an extension of time. Requests for an extension of the time for disclosure, election, and filing under subparagraphs (c)(1), (2) and (3) may, at the discretion of Patent Counsel, be granted.

(5) Publication Approval. During the course of the work under this contract, the Contractor or its employees may desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interest of DOE or the Contractor, approval for release or publication shall be secured from the Contractor personnel responsible for patent matters prior to any such release or publication. Where DOE's approval of publication is requested, DOE's response to such requests for approval shall normally be provided within 90 days except in circumstances in which a domestic patent application must be filed in order to protect foreign rights. In the case involving foreign patent rights, DOE shall be granted an additional 180 days with which to respond to the request for approval, unless extended by mutual agreement.

(d) <u>CONDITIONS WHEN THE GOVERNMENT MAY OBTAIN TITLE</u>.

The Contractor will convey to the DOE, upon written request, title to any subject invention --

(1) If the Contractor fails to disclose or elect title to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain title; provided, that DOE may only request title within sixty (60) days after learning of the failure of the Contractor to disclose or to elect within the specified times.

(2) In those countries in which the Contractor fails to file a patent application within the times specified in subparagraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in subparagraph (c) above, but prior to its receipt of the written request of the DOE, the Contractor shall continue to retain title in that country.

(3) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.

(4) If the Contractor requests that DOE acquire title or rights from the Contractor in a subject invention to which the Contractor had initially retained title or rights, or in an exceptional circumstance subject invention to which the Contractor was granted greater rights, DOE may acquire such title or rights from the Contractor, or DOE may decide against acquiring such title or rights from the Contractor, at DOE's sole discretion.

(e) MINIMUM RIGHTS OF THE CONTRACTOR AND PROTECTION OF THE CONTRACTOR'S RIGHT TO FILE.

(1) Request for a Contractor license. The Contractor may request the right to reserve a revocable, nonexclusive, royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. DOE may grant or refuse to grant such a request by the Contractor. When DOE approves such reservation, the Contractor's license will normally extend to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the contractor's business to which the invention pertains.

(2) Revocation or modification of a Contractor license. The Contractor's domestic license may be revoked or modified by DOE to the extent

necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR Part 404 and DOE licensing regulations at 10 CFR Part 781. This license will not be revoked in the field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the subject invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Contractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application of the subject invention in that foreign country.

(2) Notice of revocation of modification of a Contractor license. Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed thirty days (or such other time as may be authorized by DOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable regulations in 37 CFR part 404 and DOE licensing regulations at 10 CFR part 781 concerning the licensing of Government owned inventions, any decision concerning the revocation or modification of the license.

(f) CONTRACTOR ACTION TO PROTECT THE GOVERNMENT'S INTEREST.

(1) Execution of delivery of title or license instruments. The Contractor agrees to execute or to have executed, and promptly deliver to the Patent Counsel all instruments necessary to accomplish the following actions:

(i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the Contractor elects to retain title, and

(ii) convey title to DOE when requested under subparagraphs (b) or paragraph (d) of this clause and to enable the Government to obtain patent protection throughout the world in that subject invention.

(2) Contractor employee agreements. The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to Contractor personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor, each subject invention made under this contract in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish

the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) Notification of discontinuation of patent protection. The contractor will notify the Patent Counsel of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than thirty days before the expiration of the response period required by the relevant patent office.

(4) Notification of Government rights. The contractor agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with government support under (identify the contract) awarded by (identify the Federal agency). The government has certain rights in the invention."

(5) Invention Identification Procedures. The Contractor shall establish and maintain active and effective procedures to ensure that subject inventions are promptly identified and timely disclosed and shall submit a written description of such procedures to the Contracting Officer so that the Contracting Officer may evaluate and determine their effectiveness.

(6) Invention Filing Documentation. If the Contractor files a domestic or foreign patent application claiming a subject invention, the Contractor shall promptly submit to Patent Counsel, upon request, the following information and documents:

(i) the filing date, serial number, title, and a copy of the patent application (including an English-language version if filed in a language other than English);

(ii) an executed and approved instrument fully confirmatory of all Government rights in the subject invention; and

(iii) the patent number, issue date, and a copy of any issued patent claiming the subject invention.

(7) Duplication and disclosure of documents. The Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause; provided, however, that any such duplication or disclosure by the Government is

subject to the confidentiality provision at 35 U.S.C. 205 and 37 CFR Part 40.

(g) SUBCONTRACTS.

(1) Subcontractor subject inventions. The Contractor shall not obtain rights in the subcontractor's subject inventions as part of the consideration for awarding a subcontract.

(2) Inclusion of patent rights clause - non-profit organization or small business firm subcontractors. Unless otherwise authorized or directed by the Contracting Officer, the Contractor shall include the patent rights clause at 48 CFR 952.227-11, suitably modified to identify the parties, in all subcontracts, at any tier, for experimental, developmental, demonstration or research work to be performed by a small business firm or domestic nonprofit organization, except subcontracts which are subject to exceptional circumstances in accordance with 35 U.S.C. 202 and subparagraph (b)(2) of this clause. The subcontractor retains all rights provided for the contractor in the patent rights clause at 48 CFR 952.227-11.

(3) Inclusion of patent rights clause - subcontractors other than non-profit organizations and small business firms. Except for the subcontracts described in subparagraph (g)(2) of this clause, the Contractor shall include the patent rights clause at 48 CFR 952.227-13, suitably modified to identify the parties, in any contract for experimental, developmental, demonstration or research work. For subcontracts subject to exceptional circumstances, the contractor must consult with DOE patent counsel with respect to the appropriate patent clause.

(4) DOE and subcontractor contract. With respect to subcontracts at any tier, DOE, the subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (j) of this clause.

(5) Subcontractor refusal to accept terms of patent clause. If a prospective subcontractor refuses to accept the terms of a patent rights clause, the Contractor shall promptly submit a written notice to the Contracting Officer stating the subcontractor's reasons for such a refusal, including any relevant information for expediting disposition of the matter, and the Contractor shall not proceed with the subcontract without the written authorization of the Contracting Officer.

(6) Notification of award of subcontract. Upon the award of any subcontract at any tier containing a patent rights clause, the Contractor shall promptly notify the Contracting Officer in writing and identify the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Contractor shall furnish a copy of a subcontract.

(7) Identification of subcontractor subject inventions. If the Contractor in the performance of this contract becomes aware of a subject invention made under a subcontract, the Contractor shall promptly notify Patent Counsel and identify the subject invention.

(h) REPORTING ON UTILIZATION OF SUBJECT INVENTIONS.

The Contractor agrees to submit to DOE on request, periodic reports, no more frequently than annually, on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceeding undertaken by DOE in accordance with paragraph (j) of this clause. As required by 35 U.S.C. 202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without permission of the Contractor.

(i) PREFERENCE FOR UNITED STATES INDUSTRY.

Notwithstanding any other provision of this clause, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any product embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) MARCH-IN RIGHTS.

The Contractor agrees that, with respect to any subject invention in which it has acquired title, DOE has the right in accordance with the procedures in 37 CFR 401.6 and any DOE supplemental regulations to require the Contractor, an

assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and, if the Contractor, assignee or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that --

(1) Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;

(2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee, or their licensees;

(3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or

(4) Such action is necessary because the agreement required by paragraph (i) of this clause has not been obtained or waived, or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(k) SPECIAL PROVISIONS FOR CONTRACTS WITH NONPROFIT ORGANIZATIONS.

If the Contractor is a nonprofit organization, it agrees that --

(1) DOE approval of assignment of rights. Rights to a subject invention in the United States may not be assigned by the Contractor without the approval of DOE, except where such assignment is made to an organization which has as one of its primary functions the management of inventions; provided, that such assignee will be subject to the same provisions of this clause as the Contractor.

(2) Small business firm licensees. It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms, and that it will give a preference to a small business firm when licensing a subject invention if the Contractor determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the Contractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor. However, the Contractor agrees that the Secretary of Commerce may review the Contractor's licensing

program and decisions regarding small business firm applicants, and the Contractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when that Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of this subparagraph (k)(2).

(3) Contractor licensing of subject inventions. To the extent that it provides the most effective technology transfer, licensing of subject inventions shall be administered by Contractor employees on location at the facility.

(l) COMMUNICATIONS.

The Contractor shall direct any notification, disclosure or request provided for in this clause to the Patent Counsel assisting the DOE contracting activity.

(m) REPORTS.

(1) Interim reports. Upon DOE's request, the Contractor shall submit to DOE, no more frequently than annually, a list of subject inventions disclosed to DOE during a specified period, or a statement that no subject inventions were made during the specified period; and a list of subcontracts containing a patent clause and awarded by the Contractor during a specified period, or a statement that no such subcontracts were awarded during the specified period.

(2) Final reports. Upon DOE's request, the Contractor shall submit to DOE, prior to closeout of the contract, a list of all subject inventions disclosed during the performance period of the contract, or a statement that no subject inventions were made during the contract performance period; and a list of all subcontracts containing a patent clause and awarded by the Contractor during the contract performance period, or a statement that no such subcontracts were awarded during the contract performance period.

(n) EXAMINATION OF RECORDS RELATING TO SUBJECT INVENTIONS.

(1) Contractor compliance. Until the expiration of three (3) years after final payment under this contract, the Contracting Officer or any authorized representative may examine any books (including laboratory notebooks), records, documents, and other supporting data of the Contractor, which the Contracting Officer or authorized representative deems reasonably pertinent to the discovery or identification of subject inventions, including

exceptional circumstance subject inventions, or to determine Contractor compliance with any requirement of this clause.

(2) Unreported inventions. If the Contracting Officer is aware of an invention that is not disclosed by the Contractor to DOE, and the Contracting Officer believes the unreported invention may be a subject invention, including exceptional circumstance subject inventions, DOE may require the Contractor to submit to DOE a disclosure of the invention for a determination of ownership rights.

(3) Confidentiality. Any examination of records under this paragraph is subject to appropriate conditions to protect the confidentiality of the information involved.

(4) Power of inspection. With respect to a subject invention for which the Contractor has responsibility for patent prosecution, the Contractor shall furnish the Government, upon request by DOE, an irrevocable power to inspect and make copies of a prosecution file for any patent application claiming the subject invention.

(o) FACILITIES LICENSE.

In addition to the rights of the parties with respect to inventions or discoveries conceived or first actually reduced to practice in the course of or under this contract, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice or acquired by the Contractor at any time through completion of this contract and which are incorporated or embodied in the construction of the facility or which are utilized in the operation of the facility or which cover articles, materials, or product manufactured at the facility (1) to practice or have practiced by or for the Government at the facility, and (2) to transfer such license with the transfer of that facility. Notwithstanding the acceptance or exercise by the Government of these rights, the Government may contest at any time the enforceability, validity or scope of, or title to, any rights or patents herein licensed.

(p) ATOMIC ENERGY.

(1) Pecuniary awards. No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, may be asserted with respect to any invention or discovery made or conceived in the course of or under this contract.

(2) Patent agreements. Except as otherwise authorized in writing by the Contracting Officer, the Contractor shall obtain patent agreements to effectuate the provisions of subparagraph (p)(1) of this clause from all

persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

(q) CLASSIFIED INVENTIONS.

(1) Approval for filing a foreign patent application. The Contractor shall not file or cause to be filed an application or registration for a patent disclosing a subject invention related to classified subject matter in any country other than the United States without first obtaining the written approval of the Contracting Officer.

(2) Transmission of classified subject matter. If in accordance with this clause the Contractor files a patent application in the United States disclosing a subject invention that is classified for reasons of security, the Contractor shall observe all applicable security regulations covering the transmission of classified subject matter. If the Contractor transmits a patent application disclosing a classified subject invention to the United States Patent and Trademark Office (USPTO), the Contractor shall submit a separate letter to the USPTO identifying the contract or contracts by agency and agreement number that require security classification markings to be placed on the patent application.

(3) Inclusion of clause in subcontracts. The Contractor agrees to include the substance of this clause in subcontracts at any tier that cover or are likely to cover subject matter classified for reasons of security.

(r) PATENT FUNCTIONS.

Upon the written request of the Contracting Officer or Patent Counsel, the Contractor agrees to make reasonable efforts to support DOE in accomplishing patent-related functions for work arising out of the contract, including, but not limited to, the prosecution of patent applications, and the determination of questions of novelty, patentability, and inventorship.

(s) EDUCATIONAL AWARDS SUBJECT TO 35 U.S.C. 212.

The Contractor shall notify the Contracting Officer prior to the placement of any person subject to 35 U.S.C. 212 in an area of technology or task (1) related to exceptional circumstance technology or (2) which is subject to treaties or international agreements as set forth in paragraph (b)(3) of this clause or agreements other than funding agreements. The Contracting Officer may disapprove of any such placement.

(t) ANNUAL APPRAISAL BY PATENT COUNSEL.

Patent Counsel may conduct an annual appraisal to evaluate the Contractor's effectiveness in identifying and protecting subject inventions in accordance with DOE policy.

I-129 DEAR 970.5227-12 PATENT RIGHTS MANAGEMENT AND OPERATING CONTRACTS, FOR-PROFIT CONTRACTOR, ADVANCE CLASS WAIVER (AUG 2002) ALTERNATE 1 (ALTERATION)

[This clause is only applicable if the selected offeror (Contractor) is a For-Profit Business entity that may apply for an advance class waiver. If the selected offeror (Contractor) is not a For-Profit Business, then this clause 970.5227-12 shall not apply and be marked "Reserved".]

(a) Definitions.

(1) DOE licensing regulations means the Department of Energy patent licensing regulations at 10 CFR Part 781.

(2) DOE patent waiver regulations means the Department of Energy patent waiver regulations at 10 CFR Part 784.

(3) Exceptional Circumstance Subject Invention means any subject invention in a technical field or related to a task determined by the Department of Energy to be subject to an exceptional circumstance under 35 U.S.C. 202(a)(ii), and in accordance with 37 CFR 401.3(e).

(4) Invention means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).

(5) Made when used in relation to any invention means the conception or first actual reduction to practice of such invention.

(6) Patent Counsel means DOE Patent Counsel assisting the contracting activity.

(7) Practical application means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

(8) Subject Invention means any invention of the contractor conceived or first actually reduced to practice in the course of or under this contract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) shall also occur during the period of contract performance.

(9) Weapons Related Subject Invention means any subject invention conceived or first actually reduced to practice in the course of or under work funded by or through defense programs, including Department of Defense and intelligence reimbursable work, or the Naval Nuclear Propulsion Program of the Department of Energy or the National Nuclear Security Administration.

(b) Allocation of Principal Rights.

(1) Assignment to the Government. Except to the extent that rights are retained by the Contractor by the granting of an advance class waiver pursuant to subparagraph (b)(2) of this clause or a determination of greater rights pursuant to subparagraph (b)(7) of this clause, the Contractor agrees to assign to the Government the entire right, title, and interest throughout the world in and to each subject invention.

(2) Advance class waiver of Government rights to the Contractor. DOE may grant to the Contractor an advance class waiver of Government rights in any or all subject inventions, at the time of execution of the contract, such that the Contractor may elect to retain the entire right, title and interest throughout the world to such waived subject inventions, in accordance with the terms and conditions of the advance class waiver. Unless otherwise provided by the terms of the advance class waiver, any rights in a subject invention retained by the Contractor under an advance class waiver are subject to 35 U.S.C. 203 and the provisions of this clause, including the Government license provided for in subparagraph (b)(3) of this clause, and any reservations and conditions deemed appropriate by the Secretary of Energy or designee.

(3) Government license. With respect to any subject invention to which the Contractor retains title, either under an advance class waiver pursuant to subparagraph (b)(2) or a determination of greater rights pursuant to subparagraph (b)(7) of this clause, the Government has a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

(4) Foreign patent rights. If the Government has title to a subject invention and the Government decides against securing patent rights in a foreign country for the subject invention, the Contractor may request such foreign patent rights from DOE, and DOE may grant the Contractor's request, subject to 35 U.S.C. 203 and the provisions of this clause, including the Government license provided for in subparagraph (b)(3) of this clause, and any reservations and conditions deemed appropriate by the Secretary of Energy or designee.

(5) Exceptional circumstance subject inventions. Except to the extent that rights are retained by the Contractor by a determination of greater rights in accordance with subparagraph (b)(7) of this clause, the Contractor does not have the right to retain title to any exceptional circumstance subject inventions and agrees to assign to the Government the entire right, title, and interest, throughout the world, in and to any exceptional circumstance subject inventions.

(i) Inventions within or relating to the following fields of technology are exceptional circumstance subject inventions:

(A) uranium enrichment technology;

(B) storage and disposal of civilian high-level nuclear waste and spent fuel technology; and

(C) national security technologies classified or sensitive under Section 148 of the Atomic Energy Act (42 U.S.C. 2168).

(ii) Inventions made under any agreement, contract or subcontract related to the following initiatives or programs are exceptional circumstance subject inventions:

(A) DOE Steel Initiative and Metals Initiative;

(B) U.S. Advanced Battery Consortium; and

(C) any funding agreement which is funded in part by the Electric Power Research Institute (EPRI) or the Gas Research Institute (GRI).

(iii) DOE reserves the right to unilaterally amend this contract to modify, by deletion or insertion, technical fields, programs, initiatives, and/or other classifications for the purpose of defining DOE exceptional circumstance subject inventions.

(6) Treaties and international agreements. Any rights acquired by the Contractor in subject inventions are subject to any disposition of right, title, or interest in or to subject inventions provided for in treaties or international agreements identified *in the Contract's Section J Appendix entitled "All In Force Bilateral Agreements."* DOE reserves the right to unilaterally amend this contract to identify specific treaties or international agreements entered into or to be entered into by the Government after the effective date of this contract and to effectuate those license or other rights which are necessary for the Government to meet its obligations to foreign

governments, their nationals and international organizations under such treaties or international agreements with respect to subject inventions made after the date of the amendment.

(7) Contractor request for greater rights. The Contractor may request greater rights in an identified subject invention, including an exceptional circumstance subject invention, to which the Contractor does not have the right to elect to retain title, in accordance with the DOE patent waiver regulations, by submitting such a request in writing to Patent Counsel with a copy to the Contracting Officer at the time the subject invention is first disclosed to DOE pursuant to subparagraph (c)(1) of this clause, or not later than eight (8) months after such disclosure, unless a longer period is authorized in writing by the Contracting Officer for good cause shown in writing by the Contractor. DOE may grant or refuse to grant such a request by the Contractor. Unless otherwise provided in the greater rights determination, any rights in a subject invention obtained by the Contractor under a determination of greater rights is subject to 35 U.S.C. 203 and the provisions of this clause, including the Government license provided for in subparagraph (b)(3) of this clause, and to any reservations and conditions deemed appropriate by the Secretary of Energy or designee.

(8) Contractor employee-inventor rights. If the Contractor does not elect to retain title to a subject invention or does not request greater rights in a subject invention, including an exceptional circumstance subject invention, to which the Contractor does not have the right to elect to retain title, a Contractor employee-inventor, after consultation with the Contractor and with written authorization from the Contractor in accordance with 10 CFR 784.9(b)(4), may request greater rights, including title, in the subject invention or the exceptional circumstance invention from DOE, and DOE may grant or refuse to grant such a request by the Contractor employee-inventor.

(9) Government assignment of rights in Government employees' subject inventions. If a DOE employee is a joint inventor of a subject invention to which the Contractor has rights, DOE may assign or refuse to assign any rights in the subject invention acquired by the Government from the DOE employee to the Contractor, consistent with 48 CFR 27.304-1(d). Unless otherwise provided in the assignment, the rights assigned to the Contractor are subject to the Government license provided for in subparagraph (b)(3) of this clause, and to any provision of this clause applicable to subject inventions in which rights are retained by the Contractor, and to any reservations and conditions deemed appropriate by the Secretary of Energy or designee. The Contractor shall share royalties collected for the manufacture, use or sale of the subject invention with the DOE employee.

(c) Subject Invention Disclosure, Election of Title, and Filing of Patent Application by Contractor.

(1) Subject invention disclosure. The Contractor shall disclose each subject invention to Patent Counsel with a copy to the Contracting Officer within two (2) months after an inventor discloses it in writing to Contractor personnel responsible for patent matters or, if earlier, within six (6) months after the Contractor has knowledge of the subject invention, but in any event before any on sale, public use, or publication of the subject invention. The disclosure to DOE shall be in the form of a written report and shall include:

(i) the contract number under which the subject invention was made;

(ii) the inventor(s) of the subject invention;

(iii) a description of the subject invention in sufficient technical detail to convey a clear understanding of the nature, purpose and operation of the subject invention, and of the physical, chemical, biological or electrical characteristics of the subject invention, to the extent known by the Contractor at the time of the disclosure;

(iv) the date and identification of any publication, on sale or public use of the invention;

(v) the date and identification of any submissions for publication of any manuscripts describing the invention, and a statement of whether the manuscript is accepted for publication, to the extent known by the Contractor at the time of the disclosure;

(vi) a statement indicating whether the subject invention is an exceptional circumstance subject invention, related to national security, or subject to a treaty or an international agreement, to the extent known or believed by Contractor at the time of the disclosure;

(vii) all sources of funding by Budget and Resources (B&R) code; and

(viii) the identification of any agreement relating to the subject invention, including Cooperative Research and Development Agreements and Work-for-Others agreements.

Unless the Contractor contends otherwise in writing at the time the invention is disclosed, inventions disclosed to DOE under this paragraph are deemed made in the manner specified in Sections (a)(1) and (a)(2) of 42 U.S.C. 5908.

(2) Publication after disclosure. After disclosure of the subject invention to the DOE, the Contractor shall promptly notify Patent Counsel of the acceptance for publication of any manuscript describing the subject invention or of any expected or on sale or public use of the subject invention, known by the Contractor. The Contractor shall obtain approval from Patent Counsel prior to any release or publication of information concerning an exceptional circumstance subject invention or any subject invention related to a treaty or international agreement.

(3) Election by the Contractor under an advance class waiver. If the Contractor has the right to elect to retain title to subject inventions under an advance class waiver granted in accordance with subparagraph (b)(2) of this clause, and unless otherwise provided for by the terms of the advance class waiver, the Contractor shall elect in writing whether or not to retain title to any subject invention by notifying DOE within two (2) years of the date of the disclosure of the subject invention to DOE, in accordance with subparagraph (c)(1) of this clause. The notification shall identify the advance class waiver, state the countries, including the United States, in which rights are retained, and certify that the subject invention is not an exceptional circumstance subject invention or subject to a treaty or international agreement. If a publication, on sale or public use of the subject invention has initiated the 1-year statutory period under 35 U.S.C. 102(b), the period for election may be shortened by DOE to a date that is no more than sixty (60) days prior to the end of the 1-year statutory period.

(4) Filing of patent applications by the Contractor under an advance class waiver. If the Contractor has the right to retain title to a subject invention in accordance with an advance class waiver pursuant to subparagraph (b)(2) of this clause or a determination of greater rights pursuant to paragraph (b)(7) of this clause, and unless otherwise provided for by the terms of the advance class waiver or greater rights determination, the Contractor shall file an initial patent application claiming the subject invention to which it retains title either within one (1) year after the Contractor's election to retain or grant of title to the subject invention or prior to the end of any 1-year statutory period under 35 U.S.C. 102(b), whichever occurs first. Any patent applications filed by the Contractor in foreign countries or international patent offices shall be filed within either ten (10) months of the corresponding initial patent application or, if such filing has been prohibited by a Secrecy Order, within six (6) months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications.

(5) Submission of patent information and documents. If the Contractor files a domestic or foreign patent application claiming a subject invention, the

Contractor shall promptly submit to Patent Counsel the following information and documents:

(i) The filing date, serial number, title, and a copy of the patent application (including an English-language version if filed in a language other than English);

(ii) An executed and approved instrument fully confirmatory of all Government rights in the subject invention; and

(iii) The patent number, issue date, and a copy of any issued patent claiming the subject invention.

(6) Contractor's request for an extension of time. Requests for an extension of the time to disclose a subject invention, to elect to retain title to a subject invention, or to file a patent application under subparagraphs (c)(1), (3), and (4) of this clause may be granted at the discretion of Patent Counsel or DOE.

(7) Duplication and disclosure of documents. The Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause; provided, however, that any such duplication or disclosure by the Government is subject to 35 U.S.C. 205 and 37 CFR Part 40.

(d) Conditions When the Government May Obtain Title Notwithstanding an Advance Class Waiver.

(1) Return of title to a subject invention. If the Contractor requests that DOE acquire title or rights from the Contractor in a subject invention, including an exceptional circumstance subject invention, to which the Contractor retained title or rights under subparagraph (b)(2) or subparagraph (b)(7) of this clause, DOE may acquire such title or rights from the Contractor, or DOE may decide against acquiring such title or rights from the Contractor, at DOE's sole discretion.

(2) Failure to disclose or elect to retain title. Title vests in DOE and DOE may request, in writing, a formal assignment of title to a subject invention from the Contractor, and the Contractor shall convey title to the subject invention to DOE, if the Contractor elects not to retain title to the subject invention under an advance class waiver, or the Contractor fails to disclose or fails to elect to retain title to the subject invention within the times specified in subparagraphs (c)(1) and (c)(3) of this clause.

(3) Failure to file domestic or foreign patent applications. In those countries in which the Contractor fails to file a patent application within the times

specified in subparagraph (c)(4) of this clause, DOE may request, in writing, title to the subject invention from the Contractor, and the Contractor shall convey title to the subject invention to DOE; provided, however, that if the Contractor has filed a patent application in any country after the times specified in subparagraph (c)(4) of this clause, but prior to its receipt of DOE's written request for title, the Contractor continues to retain title in that country.

(4) Discontinuation of patent protection by the Contractor. If the Contractor decides to discontinue the prosecution of a patent application, the payment of maintenance fees, or the defense of a subject invention in a reexamination or opposition proceeding, in any country, DOE may request, in writing, title to the subject invention from the Contractor, and the Contractor shall convey title to the subject invention to DOE.

(5) Termination of advance class waiver. DOE may request, in writing, title to any subject inventions from the Contractor, and the Contractor shall convey title to the subject inventions to DOE, if the advance class waiver granted under subparagraph (b)(2) of this clause is terminated under paragraph (u) of this clause.

(e) Minimum Rights of the Contractor.

(1) Request for a Contractor license. Except for subject inventions that the Contractor fails to disclose within the time periods specified at subparagraph (c)(1) of this clause, the Contractor may request a revocable, nonexclusive, royalty-free license in each patent application filed in any country claiming a subject invention and any resulting patent in which the Government obtains title, and DOE may grant or refuse to grant such a request by the Contractor. If DOE grants the Contractor's request for a license, the Contractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded.

(2) Transfer of a Contractor license. DOE shall approve any transfer of the Contractor's license in a subject invention, and DOE may determine that the Contractor's license is non-transferrable, on a case-by-case basis.

(3) Revocation or modification of a Contractor license. DOE may revoke or modify the Contractor's domestic license to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions in 37 CFR Part 404 and DOE licensing regulations. DOE may not revoke the Contractor's domestic license in that field of use

or the geographical areas in which the Contractor, its licensees or its domestic subsidiaries or affiliates have achieved practical applications and continues to make the benefits of the invention reasonably accessible to the public. DOE may revoke or modify the Contractor's license in any foreign country to the extent the Contractor, its licensees, or its domestic subsidiaries or affiliates failed to achieve practical application in that foreign country.

(4) Notice of revocation or modification of a Contractor license. Before revocation or modification of the license, DOE shall furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor shall be allowed thirty (30) days from the date of the notice (or such other time as may be authorized by DOE for good cause shown by the Contractor) to show cause why the license should not be revoked or modified. The Contractor has the right to appeal any decision concerning the revocation or modification of its license, in accordance with applicable regulations in 37 CFR Part 404 and DOE licensing regulations.

(f) Contractor Action to Protect the Government's Interest.

(1) Execution and delivery of title or license instruments. The Contractor agrees to execute or have executed, and to deliver promptly to DOE all instruments necessary to accomplish the following actions:

(i) establish or confirm the Government's rights throughout the world in subject inventions to which the Contractor elects to retain title;

(ii) convey title in a subject invention to DOE pursuant to subparagraph (b)(5) and paragraph (d) of this clause; or

(iii) enable the Government to obtain patent protection throughout the world in a subject invention to which the Government has title.

(2) Contractor employee agreements. The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to Contractor personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor, each subject invention made under this contract, and to execute all papers necessary to file patent applications claiming subject inventions or to establish the Government's rights in the subject inventions. This disclosure format shall at a minimum include the information required by subparagraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, on the importance of reporting

inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) Contractor procedures for reporting subject inventions to DOE. The Contractor agrees to establish and maintain effective procedures for ensuring the prompt identification and timely disclosure of subject inventions to DOE. The Contractor shall submit a written description of such procedures to the Contracting Officer, upon request, for evaluation and approval of the effectiveness of such procedures by the Contracting Officer.

(4) Notification of discontinuation of patent protection. With respect to any subject invention for which the Contractor has responsibility for patent prosecution, the Contractor shall notify Patent Counsel of any decision to discontinue the prosecution of a patent application, payment of maintenance fees, or defense of a subject invention in a reexamination or opposition proceeding, in any country, not less than thirty (30) days before the expiration of the response period for any action required by the corresponding patent office.

(5) Notification of Government rights. With respect to any subject invention to which the Contractor has title, the Contractor agrees to include, within the specification of any United States patent application and within any patent issuing thereon claiming a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by the United States Department of Energy. The Government has certain rights in the invention."

(6) Avoidance of Royalty Charges. If the Contractor licenses a subject invention, the Contractor agrees to avoid royalty charges on acquisitions involving Government funds, including funds derived through a Military Assistance Program of the Government or otherwise derived through the Government, to refund any amounts received as royalty charges on a subject invention in acquisitions for, or on behalf of, the Government, and to provide for such refund in any instrument transferring rights in the subject invention to any party.

(7) DOE approval of assignment of rights. Rights in a subject invention in the United States may not be assigned by the Contractor without the approval of DOE.

(8) Small business firm licensees. The Contractor shall make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms, and may give a preference to a small business firm when licensing a subject invention if the Contractor determines that the small business firm has a plan or proposal for

marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, the Contractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision as to whether to give a preference in any specific case is at the discretion of the Contractor.

(9) Contractor licensing of subject inventions. To the extent that it provides the most effective technology transfer, licensing of subject inventions shall be administered by Contractor employees on location at the facility.

(g) Subcontracts.

(1) Subcontractor subject inventions. The Contractor shall not obtain rights in the subcontractor's subject inventions as part of the consideration for awarding a subcontract.

(2) Inclusion of patent rights clause-non-profit organization or small business firm subcontractors. Unless otherwise authorized or directed by the Contracting Officer, the Contractor shall include the patent rights clause at 48 CFR 952.227-11, suitably modified to identify the parties, in all subcontracts, at any tier, for experimental, developmental, demonstration or research work to be performed by a small business firm or domestic nonprofit organization, except subcontracts which are subject to exceptional circumstances in accordance with 35 U.S.C. 202 and subparagraph (b)(5) of this clause.

(3) Inclusion of patent rights clause-subcontractors other than non-profit organizations or small business firms. Except for the subcontracts described in subparagraph (g)(2) of this clause, the Contractor shall include the patent rights clause at 48 CFR 952.227-13, suitably modified to identify the parties and any applicable exceptional circumstance, in any contract for experimental, developmental, demonstration or research work.

(4) DOE and subcontractor contract. With respect to subcontracts at any tier, DOE, the subcontractor and Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to those matters covered by this clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (j) of this clause.

(5) Subcontractor refusal to accept terms of patent rights clause. If a prospective subcontractor refuses to accept the terms of a patent rights clause, the Contractor shall promptly submit a written notice to the Contracting Officer stating the subcontractor's reasons for such refusal and

including relevant information for expediting disposition of the matter; and the Contractor shall not proceed with the subcontract without the written authorization of the Contracting Officer.

(6) Notification of award of subcontract. Upon the award of any subcontract at any tier containing a patent rights clause, the Contractor shall promptly notify the Contracting Officer in writing and identify the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Contractor shall furnish a copy of a subcontract.

(7) Identification of subcontractor subject inventions. If the Contractor in the performance of this contract becomes aware of a subject invention made under a subcontract, the Contractor shall promptly notify Patent Counsel and identify the subject invention, with a copy of the notification and identification to the Contracting Officer.

(h) Reporting on Utilization of Subject Inventions. Upon request by DOE, the Contractor agrees to submit periodic reports, no more frequently than annually, describing the utilization of a subject invention or efforts made by the Contractor or its licensees or assignees to obtain utilization of the subject invention. The reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and other data and information reasonably specified by DOE. Upon request by DOE, the Contractor also agrees to provide reports in connection with any march-in proceedings undertaken by DOE, in accordance with paragraph (j) of this clause. If any data or information reported by the Contractor in accordance with this provision is considered privileged and confidential by the Contractor, its licensee, or assignee and the Contractor properly marks the data or information privileged or confidential, DOE agrees not to disclose such information to persons outside the Government, to the extent permitted by law.

(i) Preference for United States Industry. Notwithstanding any other provision of this clause the Contractor agrees that with respect to any subject invention in which it retains title, neither it nor any assignee may grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, DOE may waive the requirement for such an agreement upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) March-In Rights. With respect to any subject invention to which the Contractor has elected to retain or is granted title, DOE may, in accordance with the procedures in the DOE patent waiver regulations, require the Contractor, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances. If the Contractor, assignee or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that-

(1) Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;

(2) Such action is necessary to alleviate health or safety needs that are not reasonably satisfied by the Contractor, assignee, or their licensees;

(3) Such action is necessary to meet requirements for public use specified by government regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or

(4) Such action is necessary because the agreement to substantially manufacture in the United States and required by paragraph (i) of this clause has neither been obtained nor waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(k) Communications. The Contractor shall direct any notification, disclosure, or request provided for in this clause to the Patent Counsel identified in the contract.

(l) Reports.

(1) Interim reports. Upon DOE's request, the Contractor shall submit to DOE, no more frequently than annually, a list of subject inventions disclosed to DOE during a specified period, or a statement that no subject inventions were made during the specified period; and/or a list of subcontracts containing a patent clause and awarded by the Contractor during a specified period, or a statement that no such subcontracts were awarded during the specified period. The interim report shall state whether the Contractor's invention disclosures were submitted to DOE in accordance with the requirements of subparagraphs (f)(3) and (f)(4) of this clause.

(2) Final reports. Upon DOE's request, the Contractor shall submit to DOE, prior to closeout of the contract or within three (3) months of the date of completion of the contracted work, a list of all subject inventions disclosed during the performance period of the contract, or a statement

that no subject inventions were made during the contract performance period; and/or a list of all subcontracts containing a patent clause and awarded by the Contractor during the contract performance period, or a statement that no such subcontracts were awarded during the contract performance period.

(m) Facilities License. In addition to the rights of the parties with respect to inventions or discoveries conceived or first actually reduced to practice in the course of or under this contract, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice or acquired by the contractor at any time through completion of this contract and which are incorporated or embodied in the construction of the facility or which are utilized in the operation of the facility or which cover articles, materials, or products manufactured at the facility

(1) to practice or have practiced by or for the Government at the facility, and

(2) to transfer such license with the transfer of that facility. Notwithstanding the acceptance or exercise by the Government of these rights, the Government may contest at any time the enforceability, validity or scope of, or title to, any rights or patents herein licensed.

(n) Atomic Energy.

(1) Pecuniary awards. No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, may be asserted with respect to any invention or discovery made or conceived in the course of or under this contract.

(2) Patent Agreements. Except as otherwise authorized in writing by the Contracting Officer, the Contractor shall obtain patent agreements to effectuate the provisions of subparagraph (o)(1) of this clause from all persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

(o) Classified Inventions.

(1) Approval for filing a foreign patent application. The Contractor shall not file or cause to be filed an application or registration for a patent disclosing a subject invention related to classified subject matter in any country other than the United States without first obtaining the written approval of the Contracting Officer.

(2) Transmission of classified subject matter. If in accordance with this clause the Contractor files a patent application in the United States

disclosing a subject invention that is classified for reasons of security, the Contractor shall observe all applicable security regulations covering the transmission of classified subject matter. If the Contractor transmits a patent application disclosing a classified subject invention to the United States Patent and Trademark Office (USPTO), the Contractor shall submit a separate letter to the USPTO identifying the contract or contracts by agency and agreement number that require security classification markings to be placed on the patent application.

(3) Inclusion of clause in subcontracts. The Contractor agrees to include the substance of this clause in subcontracts at any tier that cover or are likely to cover subject matter classified for reasons of security.

(p) Examination of Records Relating to Inventions.

(1) Contractor compliance. Until the expiration of three (3) years after final payment under this contract, the Contracting Officer or any authorized representative may examine any books (including laboratory notebooks), records, and documents and other supporting data of the Contractor, which the Contracting Officer or authorized representative deems reasonably pertinent to the discovery or identification of subject inventions, including exceptional circumstance subject inventions, or to determine Contractor (and inventor) compliance with the requirements of this clause, including proper identification and disclosure of subject inventions, and establishment and maintenance of invention disclosure procedures.

(2) Unreported inventions. If the Contracting Officer is aware of an invention that is not disclosed by the Contractor to DOE, and the Contracting Officer believes the unreported invention may be a subject invention, DOE may require the Contractor to submit to DOE a disclosure of the invention for a determination of ownership rights.

(3) Confidentiality. Any examination of records under this paragraph is subject to appropriate conditions to protect the confidentiality of the information involved.

(4) Power of inspection. With respect to a subject invention for which the Contractor has responsibility for patent prosecution, the Contractor shall furnish the Government, upon request by DOE, an irrevocable power to inspect and make copies of a prosecution file for any patent application claiming the subject invention.

(q) Patent Functions. Upon the written request of the Contracting Officer or Patent Counsel, the Contractor agrees to make reasonable efforts to support DOE in accomplishing patent-related functions for work arising out of the contract,

including, but not limited to, the prosecution of patent applications, and the determination of questions of novelty, patentability, and inventorship.

(r) Educational Awards Subject to 35 U.S.C. 212. The Contractor shall notify the Contracting Officer prior to the placement of any person subject to 35 U.S.C. 212 in an area of technology or task (1) related to exceptional circumstance technology or (2) any person who is subject to treaties or international agreements as set forth in paragraph (b)(6) of this clause or to agreements other than funding agreements. The Contracting Officer may disapprove of any such placement.

(s) Annual Appraisal by Patent Counsel. Patent Counsel may conduct an annual appraisal to evaluate the Contractor's effectiveness in identifying and protecting subject inventions in accordance with DOE policy.

(t) Publication. The Contractor shall receive approval from Patent Counsel prior to releasing or publishing information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract, to ensure such release or publication does not adversely affect the patent rights of DOE or the Contractor.

(u) Termination of Contractor's Advance Class Waiver. If a request by the Contractor for an advance class waiver pursuant to subparagraph (b)(2) of this clause or a determination of greater rights pursuant to paragraph (c) of this clause contains false material statements or fails to disclose material facts, and DOE relies on the false statements or omissions in granting the Contractor's request, the waiver or grant of any Government rights (in whole or in part) to the subject invention(s) may be terminated at the discretion of the Secretary of Energy or designee. Prior to termination, DOE shall provide the Contractor with written notification of the termination, including a statement of facts in support of the termination, and the Contractor shall be allowed thirty (30) days, or a longer period authorized by the Secretary of Energy or designee for good cause shown in writing by the Contractor, to show cause for not terminating the waiver or grant. Any termination of an advance class waiver or a determination of greater rights is subject to the Contractor's license as provided for in paragraph (f) of this clause.

I-130 DEAR 970.5231-4 PREEXISTING CONDITIONS (DEC 2000) ALTERNATE I (DEC 2000) (ALTERATION)

[This Alternate I clause is only applicable if the selected offeror (Contractor) is the predecessor contractor. If this condition is not met, then this clause shall be "Reserved".]

(a) Any liability, obligation, loss, damage, claim (including without limitation, a claim involving strict or absolute liability), action, suit, civil fine or penalty, cost, expense or disbursement, which may be incurred or imposed, or asserted by any

party and arising out of any condition, act or failure to act which occurred before *June 1, 2006*, in conjunction with the management and operation of the *Los Alamos National Laboratory*, shall be deemed incurred under Contract No. *W-7405-ENG-36*.

(b) The obligations of the Department of Energy under this clause are subject to the availability of appropriated funds.

I-131 DEAR 970.5231-4 PREEXISTING CONDITIONS (DEC 2000) ALTERNATE II (DEC 2000) (ALTERATION)

[This Alternate II clause is only applicable if the selected offeror (Contractor) has not previously worked at LANL. If this condition is not met, then this clause shall be "Reserved".]

(a) The Department of Energy agrees to reimburse the contractor, and the contractor shall not be held responsible, for any liability (including without limitation, a claim involving strict or absolute liability and any civil fine or penalty), expense, or remediation cost, but limited to those of a civil nature, which may be incurred by, imposed on, or asserted against the contractor arising out of any condition, act, or failure to act which occurred before the contractor assumed responsibility on *June 1, 2006*. To the extent the acts or omissions of the contractor cause or add to any liability, expense or remediation cost resulting from conditions in existence prior to *June 1, 2006*, the contractor shall be responsible in accordance with the terms and conditions of this contract.

(b) The obligations of the Department of Energy under this clause are subject to the availability of appropriated funds.

(c) The contractor has the duty to inspect the facilities and sites and timely identify to the contracting officer those conditions which it believes could give rise to a liability, obligation, loss, damage, penalty, fine, claim, action, suit, cost, expense, or disbursement or areas of actual or potential noncompliance with the terms and conditions of this contract or applicable law or regulation. The contractor has the responsibility to take corrective action, as directed by the contracting officer and as required elsewhere in this contract.

I-132 DEAR 970.5232-2 PAYMENTS AND ADVANCES (DEC 2000) - ALTERNATE III (DEC 2000)

(a) Installments of fixed-fee. The fixed-fee payable under this contract shall become due and payable in periodic installments in accordance with a schedule determined by the contracting officer. Fixed-fee payments shall be made by direct payment or withdrawn from funds advanced or available under this contract, as determined by the contracting officer. The contracting officer may offset against any such fee payment the amounts owed to the Government by the

contractor, including any amounts owed for disallowed costs under this contract. No fixed-fee payment may be withdrawn against the payments cleared financing arrangement without prior written approval of the contracting officer.

(b) Payments on Account of Allowable Costs. The contracting officer and the contractor shall agree as to the extent to which payment for allowable costs or payments for other items specifically approved in writing by the contracting officer (for example, negotiated fixed amounts) shall be made from advances of Government funds. When pension contributions are paid by the contractor to the retirement fund less frequently than quarterly, accrued costs therefor shall be excluded from costs for payment purposes until such costs are paid. If pension contributions are paid on a quarterly or more frequent basis, accrual therefor may be included in costs for payment purposes, provided that they are paid to the fund within 30 days after the close of the period covered. If payments are not made to the fund within such 30-day period, pension contribution costs shall be excluded from cost for payment purposes until payment has been made.

(c) Special financial institution account--use. All advances of Government funds shall be withdrawn pursuant to a payments cleared financing arrangement prescribed by DOE in favor of the financial institution or, at the option of the Government, shall be made by direct payment or other payment mechanism to the contractor, and shall be deposited only in the special financial institution account referred to in the Special Financial Institution Account Agreement, which is incorporated into the Contract Section J Appendix entitled "*Special Financial Institution Agreement For Use With The Payments-Cleared Financing Arrangement*." No part of the funds in the special financial institution account shall be commingled with any funds of the contractor or used for a purpose other than that of making payments for costs allowable and, if applicable, fees earned under this contract, negotiated fixed amounts, or payments for other items specifically approved in writing by the contracting officer. If the contracting officer determines that the balance of such special financial institution account exceeds the contractor's current needs, the contractor shall promptly make such disposition of the excess as the contracting officer may direct.

(d) Title to funds advanced. Title to the unexpended balance of any funds advanced and of any special financial institution account established pursuant to this clause shall remain in the Government and be superior to any claim or lien of the financial institution of deposit or others. It is understood that an advance to the contractor hereunder is not a loan to the contractor, and will not require the payment of interest by the contractor, and that the contractor acquires no right, title or interest in or to such advance other than the right to make expenditures therefrom, as provided in this clause.

(e) Financial settlement. The Government shall promptly pay to the contractor the unpaid balance of allowable costs and fee upon termination of the work,

expiration of the term of the contract, or completion of the work and its acceptance by the Government after:

(1) Compliance by the contractor with DOE's patent clearance requirements, and

(2) The furnishing by the contractor of:

(i) An assignment of the contractor's rights to any refunds, rebates, allowances, accounts receivable, collections accruing to the contractor in connection with the work under this contract, or other credits applicable to allowable costs under the contract;

(ii) A closing financial statement;

(iii) The accounting for Government-owned property required by the clause entitled "Property"; and

(iv) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract subject only to the following exceptions:

(A) Specified claims in stated amounts or in estimated amounts where the amounts are not susceptible to exact statement by the contractor;

(B) Claims, together with reasonable expenses incidental thereto, based upon liabilities of the contractor to third parties arising out of the performance of this contract; provided that such claims are not known to the contractor on the date of the execution of the release; and provided further that the contractor gives notice of such claims in writing to the contracting officer promptly, but not more than one (1) year after the contractor's right of action first accrues. In addition, the contractor shall provide prompt notice to the contracting officer of all potential claims under this clause, whether in litigation or not (see also Contract Clause entitled "Insurance--Litigation and Claims");

(C) Claims for reimbursement of costs (other than expenses of the contractor by reason of any indemnification of the Government against patent liability), including reasonable expenses incidental thereto, incurred by the contractor under the provisions of this contract relating to patents; and

(D) Claims recognizable under the clause entitled, Nuclear Hazards Indemnity Agreement.

(3) In arriving at the amount due the contractor under this clause, there shall be deducted,

(i) any claim which the Government may have against the contractor in connection with this contract, and

(ii) deductions due under the terms of this contract, and not otherwise recovered by or credited to the Government. The unliquidated balance of the special financial institution account may be applied to the amount due and any balance shall be returned to the Government forthwith.

(f) Claims. Claims for credit against funds advanced for payment shall be accompanied by such supporting documents and justification as the contracting officer shall prescribe.

(g) Discounts. The contractor shall take and afford the Government the advantage of all known and available cash and trade discounts, rebates, allowances, credits, salvage, and commissions unless the contracting officer finds that action is not in the best interest of the Government.

(h) Collections. All collections accruing to the contractor in connection with the work under this contract, except for the contractor's fee and royalties or other income accruing to the contractor from technology transfer activities in accordance with this contract, shall be Government property and shall be processed and accounted for in accordance with applicable requirements imposed by the contracting officer pursuant to the Laws, regulations, and DOE directives clause of this contract and, to the extent consistent with those requirements, shall be deposited in the special financial institution account or otherwise made available for payment of allowable costs under this contract, unless otherwise directed by the contracting officer.

(i) Direct payment of charges. The Government reserves the right, upon ten days written notice from the contracting officer to the contractor, to pay directly to the persons concerned, all amounts due which otherwise would be allowable under this contract. Any payment so made shall discharge the Government of all liability to the contractor therefor.

(j) Determining Allowable Costs. The contracting officer shall determine allowable costs in accordance with the Federal Acquisition Regulation subpart 31.2 and the Department of Energy Acquisition Regulation subpart 48 CFR 970.31 in effect on the date of this contract and other provisions of this contract.

(k) Review and approval of costs incurred. The contractor shall prepare and submit annually as of September 30, a "Statement of Costs Incurred and Claimed" (Cost Statement) for the total of net expenditures accrued (i.e., net costs incurred) for the period covered by the Cost Statement. The contractor shall certify the Cost Statement subject to the penalty provisions for unallowable costs as stated in sections 306(b) and (i) of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 256), as amended. DOE, after audit and appropriate adjustment, will approve such Cost Statement. This approval by DOE will constitute an acknowledgment by DOE that the net costs incurred are allowable under the contract and that they have been recorded in the accounts maintained by the contractor in accordance with DOE accounting policies, but will not relieve the contractor of responsibility for DOE's assets in its care, for appropriate subsequent adjustments, or for errors later becoming known to DOE.

I-133 DEAR 970.5232-3 ACCOUNTS, RECORDS, AND INSPECTION (JUN 2007) [Modified by Modification No. M067]

(a) Accounts. The contractor shall maintain a separate and distinct set of accounts, records, documents, and other evidence showing and supporting: all allowable costs incurred; collections accruing to the contractor in connection with the work under this contract, other applicable credits, negotiated fixed amounts, and fee accruals under this contract; and the receipt, use, and disposition of all Government property coming into the possession of the contractor under this contract. The system of accounts employed by the contractor shall be satisfactory to DOE and in accordance with generally accepted accounting principles consistently applied.

(b) Inspection and audit of accounts and records. All books of account and records relating to this contract shall be subject to inspection and audit by DOE or its designees in accordance with the provisions of Clause, Access to and ownership of records, at all reasonable times, before and during the period of retention provided for in paragraph (d) of this clause, and the contractor shall afford DOE proper facilities for such inspection and audit.

(c) Audit of subcontractors' records. The contractor also agrees, with respect to any subcontracts (including fixed-price or unit-price subcontracts or purchase orders) where, under the terms of the subcontract, costs incurred are a factor in determining the amount payable to the subcontractor of any tier, to either conduct an audit of the subcontractor's costs or arrange for such an audit to be performed by the cognizant government audit agency through the contracting officer.

(d) Disposition of records. Except as agreed upon by the Government and the contractor, all financial and cost reports, books of account and supporting documents, system files, data bases, and other data evidencing costs allowable, collections accruing to the contractor in connection with the work under this contract, other applicable credits, and fee accruals under this contract, shall be the

property of the Government, and shall be delivered to the Government or otherwise disposed of by the contractor either as the contracting officer may from time to time direct during the progress of the work or, in any event, as the contracting officer shall direct upon completion or termination of this contract and final audit of accounts hereunder. Except as otherwise provided in this contract, including provisions of Clause, Access to and ownership of records, all other records in the possession of the contractor relating to this contract shall be preserved by the contractor for a period of three years after final payment under this contract or otherwise disposed of in such manner as may be agreed upon by the Government and the contractor.

(e) Reports. The contractor shall furnish such progress reports and schedules, financial and cost reports, and other reports concerning the work under this contract as the contracting officer may from time to time require.

(f) Inspections. The DOE shall have the right to inspect the work and activities of the contractor under this contract at such time and in such manner as it shall deem appropriate.

(g) Subcontracts. The contractor further agrees to require the inclusion of provisions similar to those in paragraphs (a) through (g) and paragraph (h) of this clause in all subcontracts (including fixed-price or unit-price subcontracts or purchase orders) of any tier entered into hereunder where, under the terms of the subcontract, costs incurred are a factor in determining the amount payable to the subcontractor.

(h) Comptroller General.

(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the contractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder.

(2) This paragraph may not be construed to require the contractor or subcontractor to create or maintain any record that the contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(3) Nothing in this contract shall be deemed to preclude an audit by the General Accounting Office of any transaction under this contract.

(i) Internal audit. The contractor agrees to design and maintain an internal audit plan and an internal audit organization.

(1) Upon contract award, the exercise of any contract option, or the extension of the contract, the contractor must submit to the contracting officer for

approval an Internal Audit Implementation Design to include the overall strategy for internal audits. The Audit Implementation Design must describe:

(i) The internal audit organization's placement within the contractor's organization and its reporting requirements;

(ii) The audit organization's size and the experience and educational standards of its staff;

(iii) The audit organization's relationship to the corporate entities of the contractor;

(iv) The standards to be used in conducting the internal audits;

(v) The overall internal audit strategy of this contract, considering particularly the method of auditing costs incurred in the performance of the contract;

(vi) The intended use of external audit resources;

(vii) The plan for audit of subcontracts, both pre-award and post-award; and

(viii) The schedule for peer review of internal audits by other contractor internal audit organizations, or other independent third party audit entities approved by the DOE contracting officer.

(2) By each January 31 of the contract performance period, the contractor must submit an annual audit report, providing a summary of the audit activities undertaken during the previous fiscal year. That report shall reflect the results of the internal audits during the previous fiscal year and the actions to be taken to resolve weaknesses identified in the contractor's system of business, financial, or management controls.

(3) By each June 30 of the contract performance period, the contractor must submit to the contracting officer an annual audit plan for the activities to be undertaken by the internal audit organization during the next fiscal year that is designed to test the costs incurred and contractor management systems described in the internal audit design.

(4) The contracting officer may require revisions to documents submitted under paragraphs (i)(1), (i)(2), and (i)(3) of this clause, including the design plan for the internal audits, the annual report, and the annual internal audits.

(j) Remedies. If at any time during contract performance, the contracting officer determines that unallowable costs were claimed by the contractor to the extent of making the contractor's management controls suspect, or the contractor's management systems that validate costs incurred and claimed suspect, the contracting officer may, in his or her sole discretion, require the contractor to cease using the special financial institution account in whole or with regard to specified accounts, requiring reimbursable costs to be claimed by periodic vouchering. In addition, the contracting officer, where he or she deems it appropriate, may: Impose a penalty under 970.5242-1, Penalties for unallowable costs; require a refund; reduce the contractor's otherwise earned fee; and take such other action as authorized in law, regulation, or this contract.

I-134 DEAR 970.5232-4 OBLIGATION OF FUNDS (DEC 2000)

(a) Obligation of funds. The amount presently obligated by the Government with respect to this contract is *identified in the Contract Section B Clause entitled "Contract Type And Value."* Such amount may be increased unilaterally by DOE by written notice to the contractor and may be increased or decreased by written agreement of the parties (whether or not by formal modification of this contract). Estimated collections from others for work and services to be performed under this contract are not included in the amount presently obligated. Such collections, to the extent actually received by the contractor, shall be processed and accounted for in accordance with applicable requirements imposed by the contracting officer pursuant to the Laws, Regulations, and DOE Directives clause of this contract. Nothing in this paragraph is to be construed as authorizing the contractor to exceed limitations stated in financial plans established by DOE and furnished to the contractor from time to time under this contract.

(b) Limitation on payment by the Government. Except as otherwise provided in this contract and except for costs which may be incurred by the contractor pursuant to the Termination clause of this contract or costs of claims allowable under the contract occurring after completion or termination and not released by the contractor at the time of financial settlement of the contract in accordance with the clause entitled "Payments and Advances," payment by the Government under this contract on account of allowable costs shall not, in the aggregate, exceed the amount obligated with respect to this contract, less the contractor's fee and any negotiated fixed amount. Unless expressly negated in this contract, payment on account of those costs excepted in the preceding sentence which are in excess of the amount obligated with respect to this contract shall be subject to the availability of:

(1) collections accruing to the contractor in connection with the work under this contract and processed and accounted for in accordance with

applicable requirements imposed by the contracting officer pursuant to the Laws, Regulations, and DOE Directives clause of this contract, and

(2) other funds which DOE may legally use for such purpose, provided DOE will use its best efforts to obtain the appropriation of funds for this purpose if not otherwise available.

(c) Notices-Contractor excused from further performance. The contractor shall notify DOE in writing whenever the unexpended balance of available funds (including collections available under paragraph (a) of this clause), plus the contractor's best estimate of collections to be received and available during the 90 day period hereinafter specified, is in the contractor's best judgment sufficient to continue contract operations at the programmed rate for only 90 days and to cover the contractor's unpaid fee and any negotiated fixed amounts, and outstanding encumbrances and liabilities on account of costs allowable under the contract at the end of such period. Whenever the unexpended balance of available funds (including collections available under paragraph (a) of this clause), less the amount of the contractor's fee then earned but not paid and any negotiated fixed amounts, is in the contractor's best judgment sufficient only to liquidate outstanding encumbrances and liabilities on account of costs allowable under this contract, the contractor shall immediately notify DOE and shall make no further encumbrances or expenditures (except to liquidate existing encumbrances and liabilities), and, unless the parties otherwise agree, the contractor shall be excused from further performance (except such performance as may become necessary in connection with termination by the Government) and the performance of all work hereunder will be deemed to have been terminated for the convenience of the Government in accordance with the provisions of the Termination clause of this contract.

(d) Financial plans; cost and encumbrance limitations. In addition to the limitations provided for elsewhere in this contract, DOE may, through financial plans, such as Approved Funding Programs, or other directives issued to the contractor, establish controls on the costs to be incurred and encumbrances to be made in the performance of the contract work. Such plans and directives may be amended or supplemented from time to time by DOE. The contractor agrees

(1) to comply with the specific limitations (ceilings) on costs and encumbrances set forth in such plans and directives,

(2) to comply with other requirements of such plans and directives, and

(3) to notify DOE promptly, in writing, whenever it has reason to believe that any limitation on costs and encumbrances will be exceeded or substantially underrun.

(e) Government's right to terminate not affected. The giving of any notice under this clause shall not be construed to waive or impair any right of the Government to terminate the contract under the provisions of the Termination clause of this contract.

I-135 DEAR 970.5244-1 CONTRACTOR PURCHASING SYSTEM (DEC 2000) (DEVIATION)

(a) General. The contractor shall develop, implement, and maintain formal policies, practices, and procedures to be used in the award of subcontracts consistent with this clause and 48 CFR 970.44. The contractor's purchasing system and methods shall be fully documented, consistently applied, and acceptable to DOE in accordance with 48 CFR 970.4401-1. The contractor shall maintain file documentation which is appropriate to the value of the purchase and is adequate to establish the propriety of the transaction and the price paid. The contractor's purchasing performance will be evaluated against such performance criteria and measures as may be set forth elsewhere in this contract. DOE reserves the right at any time to require that the contractor submit for approval any or all purchases under this contract. The contractor shall not purchase any item or service the purchase of which is expressly prohibited by the written direction of DOE and shall use such special and directed sources as may be expressly required by the DOE contracting officer. DOE will conduct periodic appraisals of the contractor's management of all facets of the purchasing function, including the contractor's compliance with its approved system and methods. Such appraisals will be performed through the conduct of Contractor Purchasing System Reviews in accordance with 48 CFR subpart 44.3, or, when approved by the contracting officer, through the contractor's participation in the conduct of the Balanced Scorecard performance measurement and performance management system. The contractor's approved purchasing system and methods shall include the requirements set forth in paragraphs (b) through (y) of this clause.

(b) Acquisition of Utility Services. Utility services shall be acquired in accordance with the requirements of 48 CFR 970.41.

(c) Acquisition of Real Property. Real property shall be acquired in accordance with 48 CFR Subpart 917.74.

(d) Advance Notice of Proposed Subcontract Awards. Advance notice shall be provided in accordance with 48 CFR 970.4401-3.

(e) Audit of Subcontractors.

(1) The contractor shall provide for:

(i) periodic post-award audit of cost-reimbursement subcontractors at all tiers, and

(ii) audits, where necessary, to provide a valid basis for pre-award or cost or price analysis.

(2) Responsibility for determining the costs allowable under each cost-reimbursement subcontract remains with the contractor or next higher-tier subcontractor. The contractor shall provide, in appropriate cases, for the timely involvement of the contractor and the DOE contracting officer in resolution of subcontract cost allowability.

(3) Where audits of subcontractors at any tier are required, arrangements may be made to have the cognizant Federal agency perform the audit of the subcontract. These arrangements shall be made administratively between DOE and the other agency involved and shall provide for the cognizant agency to audit in an appropriate manner in light of the magnitude and nature of the subcontract. In no case, however, shall these arrangements preclude determination by the DOE contracting officer of the allowability or unallowability of subcontractor costs claimed for reimbursement by the contractor.

(4) Allowable costs for cost reimbursable subcontracts are to be determined in accordance with the cost principles of 48 CFR Part 31, appropriate for the type of organization to which the subcontract is to be awarded, as supplemented by 48 CFR Part 931. Allowable costs in the purchase or transfer from contractor-affiliated sources shall be determined in accordance with 48 CFR 970.4402-2 and 48 CFR 970.3102-21(b).

(f) Bonds and Insurance.

(1) The contractor shall require performance bonds in penal amounts as set forth in 48 CFR 28.102-2(a) for all fixed priced and unit-priced construction subcontracts in excess of $100,000. The contractor shall consider the use of performance bonds in fixed price nonconstruction subcontracts, where appropriate.

(2) For fixed price, unit-priced and cost-reimbursement construction subcontractors in excess of $100,000 a payment bond shall be obtained on Standard Form 25A modified to name the contractor as well as the United States of America as obligees. The penal amounts shall be determined in accordance with 48 CFR 28.102-2(b).

(3) For fixed-price, unit-priced and cost-reimbursement construction subcontracts, greater than $25,000, but not greater than $100,000, the contractor shall select two or more of the payment protections at 48 CFR 28.102-1(b), giving particular consideration to the inclusion of an irrevocable letter of credit as one of the selected alternatives.

(4) A subcontractor may have more than one acceptable surety in both construction and other subcontracts, provided that in no case will the liability of any one surety exceed the maximum penal sum for which it is qualified for any one obligation. For subcontracts other than construction, a co-surety (two or more sureties together) may reinsure amounts in excess of their individual capacity, with each surety having the required underwriting capacity that appears on the list of acceptable corporate sureties.

(g) Buy American. The contractor shall comply with the provisions of the Buy American Act as reflected in 48 CFR 52.225-*1 (May 2002), as amended by AL 2002-06* and 48 CFR 52.225-*9 (May 2002), as amended by AL 2002-06*. The contractor shall forward determinations of nonavailability of individual items to the DOE contracting officer for approval. Items in excess of $100,000 require the prior concurrence of the Head of Contracting Activity. If, however, the contractor has an approved purchasing system, the Head of the Contracting Activity may authorize the contractor to make determinations of nonavailability for individual items valued at $100,000 or less.

(h) Construction and Architect-Engineer Subcontracts.

(1) Independent Estimates. A detailed, independent estimate of costs shall be prepared for all construction work to be subcontracted.

(2) Specifications. Specifications for construction shall be prepared in accordance with the DOE publication entitled "General Design Criteria Manual."

(3) Prevention of Conflict of Interest.

(i) The contractor shall not award a subcontract for construction to the architect-engineer firm or an affiliate that prepared the design. This prohibition does not preclude the award of a "turnkey" subcontract so long as the subcontractor assumes all liability for defects in design and construction and consequential damages.

(ii) The contractor shall not award both a cost-reimbursement subcontract and a fixed-price subcontract for construction or architect-engineer services or any combination thereof to the same firm where those subcontracts will be performed at the same site.

(iii) The contractor shall not employ the construction subcontractor or an affiliate to inspect the firm's work. The contractor shall assure that the working relationships of the construction subcontractor

and the subcontractor inspecting its work and the authority of the inspector are clearly defined.

(i) Contractor-Affiliated Sources. Equipment, materials, supplies, or services from a contractor-affiliated source shall be purchased or transferred in accordance with 48 CFR 970.4402-3.

(j) Contractor-Subcontractor Relationship. The obligations of the contractor under paragraph (a) of this clause, including the development of the purchasing system and methods, and purchases made pursuant thereto, shall not relieve the contractor of any obligation under this contract (including, among other things, the obligation to properly supervise, administer, and coordinate the work of subcontractors). Subcontracts shall be in the name of the contractor, and shall not bind or purport to bind the Government.

(k) Government Property. Identification, inspection, maintenance, protection, and disposition of Government property shall conform with the policies and principles of 48 CFR Part 45, 48 CFR 945, the Federal Property Management Regulations 41 CFR Chapter 101, the DOE Property Management Regulations 41 CFR Chapter 109, and their contracts.

(l) Indemnification. Except for Price-Anderson Nuclear Hazards Indemnity, no subcontractor may be indemnified except with the prior approval of the Senior Procurement Executive.

(m) Leasing of Motor Vehicles. Contractors shall comply with 48 CFR 8.11 and 48 CFR 908.11.

(n) *[Removed and Reserved]*

(o) Management, Acquisition and Use of Information Resources. Requirements for automatic data processing resources and telecommunications facilities, services, and equipment, shall be reviewed and approved in accordance with applicable DOE Orders and regulations regarding information resources.

(p) Priorities, Allocations and Allotments. Priorities, allocations and allotments shall be extended to appropriate subcontracts in accordance with the clause or clauses of this contract dealing with priorities and allocations.

(q) Purchase of Special Items. Purchase of the following items shall be in accordance with the following provisions of 48 CFR 908.71 and the Federal Property Management Regulations, 41 CFR Chapter 101:

(1) Motor vehicles--48 CFR 908.7101

(2) Aircraft--48 CFR 908.7102

(3) Security Cabinets--48 CFR 908.7106

(4) Alcohol--48 CFR 908.7107

(5) Helium--48 CFR 908.7108

(6) Fuels and packaged petroleum products--48 CFR 908.7109

(7) Coal--48 CFR 908.7110

(8) Arms and Ammunition--48 CFR 908.7111

(9) Heavy Water--48 CFR 908.7121(a)

(10) Precious Metals--48 CFR 908.7121(b)

(11) Lithium--48 CFR 908.7121(c)

(12) Products and services of the blind and severely handicapped--41 CFR 101-26.701

(13) Products made in Federal penal and correctional institutions--41 CFR 101-26.702

(r) Purchase vs. Lease Determinations. Contractors shall determine whether required equipment and property should be purchased or leased, and establish appropriate thresholds for application of lease vs. purchase determinations. Such determinations shall be made:

(1) at time of original acquisition;

(2) when lease renewals are being considered; and

(3) at other times as circumstances warrant.

(s) Quality Assurance. Contractors shall provide no less protection for the Government in its subcontracts than is provided in the prime contract.

(t) Setoff of Assigned Subcontractor Proceeds. Where a subcontractor has been permitted to assign payments to a financial institution, the assignment shall treat any right of setoff in accordance with 48 CFR 932.803.

(u) Strategic and Critical Materials. The contractor may use strategic and critical materials in the National Defense Stockpile.

(v) Termination. When subcontracts are terminated as a result of the termination of all or a portion of this contract, the contractor shall settle with subcontractors in conformity with the policies and principles relating to settlement of prime contracts in 48 CFR Subparts 49.1, 49.2, and 49.3. When subcontracts are terminated for reasons other than termination of this contract, the contractor shall settle such subcontracts in general conformity with the policies and principles in FAR subparts 49.1, 49.2, 49.3 and 49.4. Each such termination shall be documented and consistent with the terms of this contract. Terminations which require approval by the Government shall be supported by accounting data and other information as may be directed by the contracting officer.

(w) Unclassified Controlled Nuclear Information. Subcontracts involving unclassified uncontrolled nuclear information shall be treated in accordance with 10 CFR 1017.

(x) Subcontract Flowdown requirements. In addition to terms and conditions that are included in the prime contract which direct application of such terms and conditions in appropriate subcontracts, the contractor shall include the following clauses in subcontracts, as applicable:

(1) Davis-Bacon clauses prescribed in 48 CFR 22.407.

(2) Foreign Travel clause prescribed 48 CFR 952.247-70.

(3) Counterintelligence clause prescribed in 48 CFR 970.0404-4(a).

(4) Service Contract Act clauses prescribed in 48 CFR 22.1006.

(5) State and local taxes clause prescribed in 48 CFR 970.2904-1.

(6) Cost or pricing data clauses prescribed in 48 CFR 970.1504-3-1(b).

(y) Legal Services. Contractor purchases of litigation and other legal services are subject to the requirements in 10 CFR part 719 and the requirements of this clause.

I-136 DEAR 970.5245-1 PROPERTY (DEC 2000) (ALTERATION)

[This clause is only applicable if the selected offeror (Contractor) is other than a NonProfit Business entity that also has been granted an advance class waiver. If these conditions are not met, then the clause shall be "Reserved".]

(a) Furnishing of Government property. The Government reserves the right to furnish any property or services required for the performance of the work under this contract.

(b) Title to property. Except as otherwise provided by the contracting officer, title to all materials, equipment, supplies, and tangible personal property of every kind and description purchased by the contractor, for the cost of which the contractor is entitled to be reimbursed as a direct item of cost under this contract, shall pass directly from the vendor to the Government. The Government reserves the right to inspect, and to accept or reject, any item of such property. The contractor shall make such disposition of rejected items as the contracting officer shall direct. Title to other property, the cost of which is reimbursable to the contractor under this contract, shall pass to and vest in the Government upon (1) issuance for use of such property in the performance of this contract, or (2) commencement of processing or use of such property in the performance of this contract, or (3) reimbursement of the cost thereof by the Government, whichever first occurs. Property furnished by the Government and property purchased or furnished by the contractor, title to which vests in the Government, under this paragraph are hereinafter referred to as Government property. Title to Government property shall not be affected by the incorporation of the property into or the attachment of it to any property not owned by the Government, nor shall such Government property or any part thereof, be or become a fixture or lose its identity as personality by reason of affixation to any realty.

(c) Identification. To the extent directed by the contracting officer, the contractor shall identify Government property coming into the contractor's possession or custody, by marking and segregating in such a way, satisfactory to the contracting officer, as shall indicate its ownership by the Government.

(d) Disposition. The contractor shall make such disposition of Government property which has come into the possession or custody of the contractor under this contract as the contracting officer may direct during the progress of the work or upon completion or termination of this contract. The contractor may, upon such terms and conditions as the contracting officer may approve, sell, or exchange such property, or acquire such property at a price agreed upon by the contracting officer and the contractor as the fair value thereof. The amount received by the contractor as the result of any disposition, or the agreed fair value of any such property acquired by the contractor, shall be applied in reduction of costs allowable under this contract or shall be otherwise credited to account to the Government, as the contracting officer may direct. Upon completion of the work or the termination of this contract, the contractor shall render an accounting, as prescribed by the contracting officer, of all government property which had come into the possession or custody of the contractor under this contract.

(e) Protection of government property--management of high-risk property and classified materials.

(1) The contractor shall take all reasonable precautions, and such other actions as may be directed by the contracting officer, or in the absence of

such direction, in accordance with sound business practice, to safeguard and protect government property in the contractor's possession or custody.

(2) In addition, the contractor shall ensure that adequate safeguards are in place, and adhered to, for the handling, control and disposition of high-risk property and classified materials throughout the life cycle of the property and materials consistent with the policies, practices and procedures for property management contained in the Federal Property Management regulations (41 CFR chapter 101), the Department of Energy Property Management regulations (41 CFR chapter 109), and other applicable regulations.

(3) High-risk property is property, the loss, destruction, damage to, or the unintended or premature transfer of which could pose risks to the public, the environment, or the national security interests of the United States. High-risk property includes proliferation sensitive, nuclear related dual use, export controlled, chemically or radioactively contaminated, hazardous, and specially designed and prepared property, including property on the militarily critical technologies list.

(f) Risk of loss of Government property.

(1) (i) The contractor shall not be liable for the loss or destruction of, or damage to, Government property unless such loss, destruction, or damage was caused by any of the following:

(A) Willful misconduct or lack of good faith on the part of the contractor's managerial personnel;

(B) Failure of the contractor's managerial personnel to take all reasonable steps to comply with any appropriate written direction of the contracting officer to safeguard such property under paragraph (e) of this clause; or

(C) Failure of contractor managerial personnel to establish, administer, or properly maintain an approved property management system in accordance with paragraph (i)(1)of this clause.

(ii) If, after an initial review of the facts, the contracting officer informs the contractor that there is reason to believe that the loss, destruction of, or damage to the government property results from conduct falling within one of the categories set forth above, the burden of proof shall be upon the contractor to show that the contractor should not be required to compensate the government for the loss, destruction, or damage.

(2) In the event that the contractor is determined liable for the loss, destruction or damage to Government property in accordance with (f)(1) of this clause, the contractor's compensation to the Government shall be determined as follows:

(i) For damaged property, the compensation shall be the cost of repairing such damaged property, plus any costs incurred for temporary replacement of the damaged property. However, the value of repair costs shall not exceed the fair market value of the damaged property. If a fair market value of the property does not exist, the contracting officer shall determine the value of such property, consistent with all relevant facts and circumstances.

(ii) For destroyed or lost property, the compensation shall be the fair market value of such property at the time of such loss or destruction, plus any costs incurred for temporary replacement and costs associated with the disposition of destroyed property. If a fair market value of the property does not exist, the contracting officer shall determine the value of such property, consistent with all relevant facts and circumstances.

(3) The portion of the cost of insurance obtained by the contractor that is allocable to coverage of risks of loss referred to in paragraph (f)(1) of this clause is not allowable.

(g) Steps to be taken in event of loss. In the event of any damage, destruction, or loss to Government property in the possession or custody of the contractor with a value above the threshold set out in the contractor's approved property management system, the contractor:

(1) Shall immediately inform the contracting officer of the occasion and extent thereof,

(2) Shall take all reasonable steps to protect the property remaining, and

(3) Shall repair or replace the damaged, destroyed, or lost property in accordance with the written direction of the contracting officer. The contractor shall take no action prejudicial to the right of the Government to recover therefore, and shall furnish to the Government, on request, all reasonable assistance in obtaining recovery.

(h) Government property for Government use only. Government property shall be used only for the performance of this contract.

(i) Property Management.

(1) Property Management System.

(i) The contractor shall establish, administer, and properly maintain an approved property management system of accounting for and control, utilization, maintenance, repair, protection, preservation, and disposition of Government property in its possession under the contract. The contractor's property management system shall be submitted to the contracting officer for approval and shall be maintained and administered in accordance with sound business practice, applicable Federal Property Management regulations and Department of Energy Property Management regulations, and such directives or instructions which the contracting officer may from time to time prescribe.

(ii) In order for a property management system to be approved, it must provide for:

(A) Comprehensive coverage of property from the requirement identification, through its life cycle, to final disposition;

(B) Employee personal responsibility and accountability for Government-owned property;

(C) Full integration with the contractor's other administrative and financial systems; and

(D) A method for continuously improving property management practices through the identification of best practices established by "best in class" performers.

(iii) Approval of the contractor's property management system shall be contingent upon the completion of the baseline inventory as provided in subparagraph (i)(2) of this clause.

(2) Property Inventory.

(i) Unless otherwise directed by the contracting officer, the contractor shall within six months after execution of the contract provide a baseline inventory covering all items of Government property.

(ii) If the contractor is succeeding another contractor in the performance of this contract, the contractor shall conduct a joint reconciliation of the property inventory with the predecessor contractor. The contractor agrees to participate in a joint reconciliation of the property inventory at the completion of this

contract. This information will be used to provide a baseline for the succeeding contract as well as information for closeout of the predecessor contract.

(j) The term "contractor's managerial personnel" as used in this clause means the contractor's directors, officers and any of its managers, superintendents, or other equivalent representatives who have supervision or direction of:

(1) All or substantially all of the contractor's business; or

(2) All or substantially all of the contractor's operations at any one facility or separate location to which this contract is being performed; or

(3) A separate and complete major industrial operation in connection with the performance of this contract; or

(4) A separate and complete major construction, alteration, or repair operation in connection with performance of this contract; or

(5) A separate and discrete major task or operation in connection with the performance of this contract.

(k) The contractor shall include this clause in all cost reimbursable subcontracts.

I-137 DEAR 970.5245-1 PROPERTY (DEC 2000) ALTERNATE I (DEC 2000) (ALTERATION)

[This clause is only applicable if the selected offeror (Contractor) is a NonProfit Business entity. If this condition is not met, then this clause shall be "Reserved".]

(a) Furnishing of Government property. The Government reserves the right to furnish any property or services required for the performance of the work under this contract.

(b) Title to property. Except as otherwise provided by the contracting officer, title to all materials, equipment, supplies, and tangible personal property of every kind and description purchased by the contractor, for the cost of which the contractor is entitled to be reimbursed as a direct item of cost under this contract, shall pass directly from the vendor to the Government. The Government reserves the right to inspect, and to accept or reject, any item of such property. The contractor shall make such disposition of rejected items as the contracting officer shall direct. Title to other property, the cost of which is reimbursable to the contractor under this contract, shall pass to and vest in the Government upon (1) issuance for use of such property in the performance of this contract, or (2) commencement of processing or use of such property in the performance of this contract, or (3) reimbursement of the cost thereof by the Government, whichever first occurs.

Property furnished by the Government and property purchased or furnished by the contractor, title to which vests in the Government, under this paragraph are hereinafter referred to as Government property. Title to Government property shall not be affected by the incorporation of the property into or the attachment of it to any property not owned by the Government, nor shall such Government property or any part thereof, be or become a fixture or lose its identity as personality by reason of affixation to any realty.

(c) Identification. To the extent directed by the contracting officer, the contractor shall identify Government property coming into the contractor's possession or custody, by marking and segregating in such a way, satisfactory to the contracting officer, as shall indicate its ownership by the Government.

(d) Disposition. The contractor shall make such disposition of Government property which has come into the possession or custody of the contractor under this contract as the contracting officer may direct during the progress of the work or upon completion or termination of this contract. The contractor may, upon such terms and conditions as the contracting officer may approve, sell, or exchange such property, or acquire such property at a price agreed upon by the contracting officer and the contractor as the fair value thereof. The amount received by the contractor as the result of any disposition, or the agreed fair value of any such property acquired by the contractor, shall be applied in reduction of costs allowable under this contract or shall be otherwise credited to account to the Government, as the contracting officer may direct. Upon completion of the work or the termination of this contract, the contractor shall render an accounting, as prescribed by the contracting officer, of all government property which had come into the possession or custody of the contractor under this contract.

(e) Protection of government property--management of high-risk property and classified materials.

(1) The contractor shall take all reasonable precautions, and such other actions as may be directed by the contracting officer, or in the absence of such direction, in accordance with sound business practice, to safeguard and protect government property in the contractor's possession or custody.

(2) In addition, the contractor shall ensure that adequate safeguards are in place, and adhered to, for the handling, control and disposition of high-risk property and classified materials throughout the life cycle of the property and materials consistent with the policies, practices and procedures for property management contained in the Federal Property Management regulations (41 CFR chapter 101), the Department of Energy Property Management regulations (41 CFR chapter 109), and other applicable regulations.

(3) High-risk property is property, the loss, destruction, damage to, or the unintended or premature transfer of which could pose risks to the public, the environment, or the national security interests of the United States. High-risk property includes proliferation sensitive, nuclear related dual use, export controlled, chemically or radioactively contaminated, hazardous, and specially designed and prepared property, including property on the militarily critical technologies list.

(f) Risk of loss of Government property.

(1) (i) The contractor shall not be liable for the loss or destruction of, or damage to, Government property unless such loss, destruction, or damage was caused by any of the following:

(A) Willful misconduct or lack of good faith on the part of the contractor's managerial personnel;

(B) Failure of the contractor's managerial personnel to take all reasonable steps to comply with any appropriate written direction of the contracting officer to safeguard such property under paragraph (e) of this clause; or

(C) Failure of contractor managerial personnel to establish, administer, or properly maintain an approved property management system in accordance with paragraph (i)(1)of this clause.

(ii) If, after an initial review of the facts, the contracting officer informs the contractor that there is reason to believe that the loss, destruction of, or damage to the government property results from conduct falling within one of the categories set forth above, the burden of proof shall be upon the contractor to show that the contractor should not be required to compensate the government for the loss, destruction, or damage.

(2) In the event that the contractor is determined liable for the loss, destruction or damage to Government property in accordance with (f)(1) of this clause, the contractor's compensation to the Government shall be determined as follows:

(i) For damaged property, the compensation shall be the cost of repairing such damaged property, plus any costs incurred for temporary replacement of the damaged property. However, the value of repair costs shall not exceed the fair market value of the damaged property. If a fair market value of the property does not

exist, the contracting officer shall determine the value of such property, consistent with all relevant facts and circumstances.

(ii) For destroyed or lost property, the compensation shall be the fair market value of such property at the time of such loss or destruction, plus any costs incurred for temporary replacement and costs associated with the disposition of destroyed property. If a fair market value of the property does not exist, the contracting officer shall determine the value of such property, consistent with all relevant facts and circumstances.

(3) The portion of the cost of insurance obtained by the contractor that is allocable to coverage of risks of loss referred to in paragraph (f)(1) of this clause is not allowable.

(g) Steps to be taken in event of loss. In the event of any damage, destruction, or loss to Government property in the possession or custody of the contractor with a value above the threshold set out in the contractor's approved property management system, the contractor:

(1) Shall immediately inform the contracting officer of the occasion and extent thereof,

(2) Shall take all reasonable steps to protect the property remaining, and

(3) Shall repair or replace the damaged, destroyed, or lost property in accordance with the written direction of the contracting officer. The contractor shall take no action prejudicial to the right of the Government to recover therefore, and shall furnish to the Government, on request, all reasonable assistance in obtaining recovery.

(h) Government property for Government use only. Government property shall be used only for the performance of this contract.

(i) Property Management.

(1) Property Management System.

(i) The contractor shall establish, administer, and properly maintain an approved property management system of accounting for and control, utilization, maintenance, repair, protection, preservation, and disposition of Government property in its possession under the contract. The contractor's property management system shall be submitted to the contracting officer for approval and shall be maintained and administered in accordance with sound business practice, applicable Federal Property Management regulations and

Department of Energy Property Management regulations, and such directives or instructions which the contracting officer may from time to time prescribe.

(ii) In order for a property management system to be approved, it must provide for:

(A) Comprehensive coverage of property from the requirement identification, through its life cycle, to final disposition;

(B) Employee personal responsibility and accountability for Government-owned property;

(C) Full integration with the contractor's other administrative and financial systems; and

(D) A method for continuously improving property management practices through the identification of best practices established by "best in class" performers.

(iii) Approval of the contractor's property management system shall be contingent upon the completion of the baseline inventory as provided in subparagraph (i)(2) of this clause.

(2) Property Inventory.

(i) Unless otherwise directed by the contracting officer, the contractor shall within six months after execution of the contract provide a baseline inventory covering all items of Government property.

(ii) If the contractor is succeeding another contractor in the performance of this contract, the contractor shall conduct a joint reconciliation of the property inventory with the predecessor contractor. The contractor agrees to participate in a joint reconciliation of the property inventory at the completion of this contract. This information will be used to provide a baseline for the succeeding contract as well as information for closeout of the predecessor contract.

(j) The term "contractor's managerial personnel" as used in this clause means the contractor's directors, officers and any of its managers, superintendents, or other equivalent representatives who have supervision or direction of all or substantially all of:

(1) The contractor's business; or

(2) The contractor's operations at any one facility or separate location at which this contract is being performed; or

(3) The contractor's Government property system and/or a Major System Acquisition or Major Project as defined in DOE Order 4700.1 (Version in effect on effective date of contract).

(k) The contractor shall include this clause in all cost reimbursable subcontracts.

I-138 FAR 52.222-6 DAVIS-BACON ACT (JUL 2005) [Modified by Modification No. M055]

(a) *Definition.*—"Site of the work"—

(1) Means—

(i) *The primary site of the work.* The physical place or places where the construction called for in the contract will remain when work on it is completed; and

(ii) *The secondary site of the work, if any.* Any other site where a significant portion of the building or work is constructed, provided that such site is—

(A) Located in the United States; and

(B) Established specifically for the performance of the contract or project;

(2) Except as provided in paragraph (3) of this definition, includes any fabrication plants, mobile factories, batch plants, borrow pits, job headquarters, tool yards, etc., provided—

(i) They are dedicated exclusively, or nearly so, to performance of the contract or project; and

(ii) They are adjacent or virtually adjacent to the "primary site of the work" defined in paragraph (a) (1) (i), or the "secondary site of the work" as defined in paragraph (a)(1)(ii) of this definition;

(3) Does not include permanent home offices, branch plant establishments, fabrication plants, or tool yards of a Contractor or subcontractor whose locations and continuance in operation are determined wholly without regard to a particular Federal contract or project. In addition, fabrication plants, batch plants, borrow pits, job headquarters, yards, etc., of a commercial or material supplier which are established by a supplier of materials for the project before opening of bids and not on the Project site, are not included in the "site of the work." Such permanent, previously established facilities are not a part of the "site of the work" even if the operations for a period of time may be dedicated exclusively or nearly so, to the performance of a contract.

(b) (1) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent

deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, or as may be incorporated for a secondary site of the work, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Any wage determination incorporated for a secondary site of the work shall be effective from the first day on which work under the contract was performed at that site and shall be incorporated without any adjustment in contract price or estimated cost. Laborers employed by the construction Contractor or construction subcontractor that are transporting portions of the building or work between the secondary site of the work and the primary site of the work shall be paid in accordance with the wage determination applicable to the primary site of the work.

(2) Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b) (2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (e) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period.

(3) Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

(4) The wage determination (including any additional classifications and wage rates conformed under paragraph (c) of this clause) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the primary site of the work and the secondary site of the work, if any, in a prominent and accessible place where it can be easily seen by the workers.

(c) (1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the:

Wage and Hour Division
Employment Standards Administration
U.S. Department of Labor
Washington, DC 20210

The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to paragraphs (c)(2) and (c)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(d) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(e) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the

Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

I-139 FAR 52.222-7 WITHHOLDING OF FUNDS (FEB 1988) [Modified by Modification No. M055]

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other federally assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

I-140 FAR 52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988) [Modified by Modification No. M055]

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis- Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Davis-Bacon Act, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b) (1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired.

Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the—

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402

The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify—

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

I-141 FAR 52.222-9 APPRENTICES AND TRAINEES (JUL 2005) [Modified by Modification No. M055]

(a) *Apprentices.*

(1) An apprentice will be permitted to work at less than the predetermined rate for the work performed when employed—

(i) Pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer, and Labor Services (OATELS) or with a State Apprenticeship Agency recognized by the OATELS; or

(ii) In the first 90 days of probationary employment as an apprentice in such an apprenticeship program, even though not individually registered in the program, if certified by the OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program.

(3) Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph (a)(1) of this clause, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination.

(5) Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(6) In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, withdraws approval of an apprenticeship program, the Contractor will no longer be

permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) *Trainees.*

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer, and Labor Services (OATELS). The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by OATELS.

(2) Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the OATELS shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed.

(3) In the event OATELS withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) *Equal employment opportunity.* The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

I-142 FAR 52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988) [Modified by Modification No. M055]

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

I-143 FAR 52.222-11 SUBCONTRACTS (LABOR STANDARDS) (JUL 2005)

[Modified by Modification No. M055]

(a) *Definition.* "Construction, alteration or repair," as used in this clause, means all types of work done by laborers and mechanics employed by the construction Contractor or construction subcontractor on a particular building or work at the site thereof, including without limitation—

(1) Altering, remodeling, installation (if appropriate) on the site of the work of items fabricated off-site;

(2) Painting and decorating;

(3) Manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work;

(4) Transportation of materials and supplies between the site of the work within the meaning of paragraphs (a)(1)(i) and (ii) of the "site of the work" as defined in the FAR clause at 52.222-6, Davis-Bacon Act of this contract, and a facility which is dedicated to the construction of the building or work and is deemed part of the site of the work within the meaning of paragraph (2) of the "site of work" definition; and

(5) Transportation of portions of the building or work between a secondary site where a significant portion of the building or work is constructed, which is part of the "site of the work" definition in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Davis-Bacon Act, and the physical place or places where the building or work will remain (paragraph (a)(1)(i) of the FAR clause at 52.222-6, in the "site of the work" definition).

(b) The Contractor shall insert in any subcontracts for construction, alterations and repairs within the United States the clauses entitled—

(1) Davis-Bacon Act;

(2) Contract Work Hours and Safety Standards Act— Overtime Compensation (if the clause is included in this contract);

(3) Apprentices and Trainees;

(4) Payrolls and Basic Records;

(5) Compliance with Copeland Act Requirements;

(6) Withholding of Funds;

(7) Subcontracts (Labor Standards);

(8) Contract Termination—Debarment;

(9) Disputes Concerning Labor Standards;

(10) Compliance with Davis-Bacon and Related Act Regulations; and

(11) Certification of Eligibility.

(c) The prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor performing construction within the United States with all the contract clauses cited in paragraph (b).

(d) (1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Standard Form (SF) 1413, Statement and Acknowledgment, for each subcontract for construction within the United States, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (b) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

(e) The Contractor shall insert the substance of this clause, including this paragraph (e) in all subcontracts for construction within the United States.

I-144 FAR 52.222-12 CONTRACT TERMINATION-DEBARMENT (FEB 1988) [Modified by Modification No. M055]

A breach of the contract clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act—Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Davis-Bacon and Related Act Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

I-145 FAR 52.222-13 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988) [Modified by Modification No. M055]

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are hereby incorporated by reference in this contract.

I-146 FAR 52.222-14 DISPUTES CONCERNING LABOR STANDARDS (FEB 1988) [Modified by Modification No. M055]

The United States Department of Labor has set forth in 29 CFR parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors)

and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

I-147 FAR 52.222-15 CERTIFICATION OF ELIGIBILITY (FEB 1988) [Modified by Modification No. M055]

(a) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

I-148 FAR 52.222-16 APPROVAL OF WAGE RATES (FEB 1988) [Modified by Modification No. M055]

All straight time wage rates, and overtime rates based thereon, for laborers and mechanics engaged in work under this contract must be submitted for approval in writing by the head of the contracting activity or a representative expressly designated for this purpose, if the straight time wages exceed the rates for corresponding classifications contained in the applicable Davis-Bacon Act minimum wage determination included in the contract. Any amount paid by the Contractor to any laborer or mechanic in excess of the agency approved wage rate shall be at the expense of the Contractor and shall not be reimbursed by the Government. If the Government refuses to authorize the use of the overtime, the Contractor is not released from the obligation to pay employees at the required overtime rates for any overtime actually worked.

I-149 DEAR 952.204-77 COMPUTER SECURITY (AUG 2006) [Modified by Modification No. M067]

(a) Definitions.

(1) Computer means desktop computers, portable computers, computer networks (including the DOE Network and local area networks at or controlled by DOE organizations), network devices, automated information systems, and or other related computer equipment owned by, leased, or operated on behalf of the DOE.

(2) Individual means a DOE contractor or subcontractor employee, or any other person who has been granted access to a DOE computer or to information on a DOE computer, and does not include a member of the public who sends an e-mail message to a DOE computer or who obtains information available to the public on DOE Web sites.

(b) Access to DOE computers. A contractor shall not allow an individual to have access to information on a DOE computer unless:

(1) The individual has acknowledged in writing that the individual has no expectation of privacy in the use of a DOE computer; and,

(2) The individual has consented in writing to permit access by an authorized investigative agency to any DOE computer used during the period of that individual's access to information on a DOE computer, and for a period of three years thereafter.

(c) No expectation of privacy. Notwithstanding any other provision of law (including any provision of law enacted by the Electronic Communications Privacy Act of 1986), no individual using a DOE computer shall have any expectation of privacy in the use of that computer.

(d) Written records. The contractor is responsible for maintaining written records for itself and subcontractors demonstrating compliance with the provisions of paragraph (b) of this section. The contractor agrees to provide access to these records to the DOE, or its authorized agents, upon request.

(e) Subcontracts. The contractor shall insert this clause, including this paragraph (e), in subcontracts under this contract that may provide access to computers owned, leased or operated on behalf of the DOE.

I-150 FAR 52.222-54 EMPLOYMENT ELIGIBILITY VERIFICATION (JAN 2009)

[Modified by Modification No.M110]

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

"Commercially available off-the-shelf (COTS) item"—

(1) Means any item of supply that is—

(i) A commercial item (as defined in paragraph (1) of the definition at 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702), such as agricultural products and petroleum

products. Per 46 CFR 525.1 (c)(2), "bulk cargo" means cargo that is loaded and carried in bulk onboard ship without mark or count, in a loose unpackaged form, having homogenous characteristics. Bulk cargo loaded into intermodal equipment, except LASH or Seabee barges, is subject to mark and count and, therefore, ceases to be bulk cargo.

"Employee assigned to the contract" means an employee who was hired after November 6, 1986, who is directly performing work, in the United States, under a contract that is required to include the clause prescribed at 22.1803. An employee is not considered to be directly performing work under a contract if the employee—

(1) Normally performs support work, such as indirect or overhead functions; and

(2) Does not perform any substantial duties applicable to the contract.

"Subcontract" means any contract, as defined in 2.101, entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

"Subcontractor" means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

"United States", as defined in 8 U.S.C. 1101(a)(38), means the 50 States, the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands.

(b) *Enrollment and verification requirements*.

(1) If the Contractor is not enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall—

(i) *Enroll*. Enroll as a Federal Contractor in the E-Verify program within 30 calendar days of contract award;

(ii) *Verify all new employees*. Within 90 calendar days of enrollment in the E-Verify program, begin to use E-Verify to initiate verification of employment eligibility of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); and

(iii) *Verify employees assigned to the contract*. For each employee assigned to the contract, initiate verification within 90 calendar days after date of enrollment or within 30 calendar days of the employee's assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(2) If the Contractor is enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall use E-Verify to initiate verification of employment eligibility of—

(i) *All new employees*.

(A) *Enrolled 90 calendar days or more*. The Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(B) *Enrolled less than 90 calendar days*. Within 90 calendar days after enrollment as a Federal Contractor in E-Verify, the Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(ii) *Employees assigned to the contract*. For each employee assigned to the contract, the Contractor shall initiate verification within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(3) If the Contractor is an institution of higher education (as defined at 20 U.S.C. 1001(a)); a State or local government or the government of a Federally recognized Indian tribe; or a surety performing under a takeover agreement entered into with a Federal agency pursuant to a performance bond, the Contractor may choose to verify only employees assigned to the contract, whether existing employees or new hires. The Contractor shall follow the applicable verification requirements at (b)(1) or (b)(2) respectively, except that any requirement for verification of new employees applies only to new employees assigned to the contract.

(4) *Option to verify employment eligibility of all employees*. The Contractor may elect to verify all existing employees hired after November 6, 1986, rather than just those employees assigned to the contract. The Contractor shall initiate verification for each existing employee working in the United States who was hired after November 6, 1986, within 180 calendar days of—

(i) Enrollment in the E-Verify program; or

(ii) Notification to E-Verify Operations of the Contractor's decision to exercise this option, using the contact information provided in the E-Verify program Memorandum of Understanding (MOU).

(5) The Contractor shall comply, for the period of performance of this contract, with the requirements of the E-Verify program MOU.

(i) The Department of Homeland Security (DHS) or the Social Security Administration (SSA) may terminate the Contractor's MOU and deny access to the E-Verify system in accordance with the terms of the MOU. In such case, the Contractor will be referred to a suspension or debarment official.

(ii) During the period between termination of the MOU and a decision by the suspension or debarment official whether to suspend or debar, the Contractor is excused from its obligations under paragraph (b) of this clause. If the suspension or debarment official determines not to suspend or debar the Contractor, then the Contractor must reenroll in E-Verify.

(c) *Web site*. Information on registration for and use of the E-Verify program can be obtained via the Internet at the Department of Homeland Security Web site: *http://www.dhs.gov/E-Verify*.

(d) *Individuals previously verified*. The Contractor is not required by this clause to perform additional employment verification using E-Verify for any employee—

(1) Whose employment eligibility was previously verified by the Contractor through the E-Verify program;

(2) Who has been granted and holds an active U.S. Government security clearance for access to confidential, secret, or top secret information in accordance with the National Industrial Security Program Operating Manual; or
(3) Who has undergone a completed background investigation and been issued credentials pursuant to Homeland Security Presidential Directive (HSPD)-12, Policy for a Common Identification Standard for Federal Employees and Contractors.

(e) *Subcontracts*. The Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for identification of the parties), in each subcontract that—

(1) Is for—

(i) Commercial or noncommercial services (except for commercial services that are part of the purchase of a COTS item (or an item that would be a COTS item, but for minor modifications), performed by the COTS provider, and are normally provided for that COTS item); or

(ii) Construction;

(2) Has a value of more than $3,000; and

(3) Includes work performed in the United States.

I-151 FAR 52.204-9 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (JAN 2011) [Modified by Modification No.M187]

(a) The Contractor shall comply with agency personal identity verification procedures identified in the contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24, and Federal Information Processing Standards Publication (FIPS PUB) Number 201.

(b) The Contractor shall account for all forms of Government-provided identification issued to the Contractor employees in connection with performance under this contract. The Contractor shall return such identification to the issuing agency at the earliest of any of the following, unless otherwise determined by the Government;

(1) When no longer needed for contract performance.

(2) Upon completion of the Contractor employee’s employment.

(3) Upon contract completion or termination.

(c) The Contracting Officer may delay final payment under a contract if the Contractor fails to comply with these requirements.

(d) The Contractor shall insert the substance of clause, including this paragraph (d), in all subcontracts when the subcontractor's employees are required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system. It shall be the responsibility of the prime Contractor to return such identification to the issuing agency in accordance with the terms set forth in paragraph (b) of this section, unless otherwise approved in writing by the Contracting Officer.

(End of Clause)

PART III – SECTION J

APPENDIX A

PERSONNEL APPENDIX

[Modified by Modification No. A011, A029, M138, M174]

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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) LANL CHRM Programs objective will comply with applicable Federal Acquisition Regulation (FAR) cost principles and FAR contract clauses, as supplemented by the Department of Energy Acquisition Regulation (DEAR), for all Human Resources (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. Parties hereto agree to negotiate in good faith concerning any requested revision. Revisions to this Appendix A shall be accomplished by executing a Reimbursement Authorization as approved by the Contracting Officer.

(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. Such Laboratory Director exceptions must be approved in advance by the Contracting Officer and include as a modification to this Appendix A prior to the Contractor implementation.

(e) The Laboratory Director, or designated representative, shall promptly furnish all reports and information required or otherwise indicated herein to the Contracting Officer. The Contractor recognizes that the Contracting Officer or Contracting Officer's Representative may make other data requests from time to time and the Contractor agrees to cooperate in meeting such requests.

(f) All of the Contractor's personnel policies, practices and plans, at the time of contract assumption, have been found acceptable to the CO, where the contractor has informed the DOE Contracting Officer of the changes to the policies.

SECTION II - HUMAN RESOURCES STRATEGY, BUSINESS PLANNING AND PERFORMANCE MANAGEMENT

(a) The Institutional Plan highlights areas important to DOE/NNSA and aligns with critical DOE/NNSA missions. The HR Strategic Plan, which is subordinate to the Institutional Plan, will be reviewed with DOE/NNSA representatives at least annually. Contract performance metrics and measures will be developed in partnership with DOE/NNSA.

(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; 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/NNSA and Laboratory mission, strategy and objectives.

SECTION III – COMPENSATION [Modified by Modification No. M182]

(a) (1) Compensation Standards. The Contractor and DOE/NNSA agree that the elements below will be included in Laboratory compensation systems and will be the basis upon which DOE/NNSA will evaluate the Contractor's self-assessment required under the Contract's Section H Clause entitled "Workforce Transition, Contractor Compensation, Benefits And Pension." The elements are:

(i) philosophy and strategy for all pay delivery programs;

(ii) method for establishing the internal value of jobs;

(iii) method for relating the internal value of jobs to the external market;

(iv) system that links individual and/or group performance to compensation decisions;

(v) method for planning and monitoring the expenditure of funds;

(vi) method for ensuring compliance with applicable laws and regulations;

(vii) system for communicating the program to employees; and

(viii) system for internal controls and self-assessment.

(2) Compensation for Key Personnel. The Contractor shall include in the Contractor's employment contract with each of its Key Personnel the following: (i) a requirement that the key person's employment is for a term of not less than two years, (ii) a condition that provides for incentives for longevity of service as a key person, and (iii) a condition that provides for disincentives for early departure.

(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 Compensation Increase Plan (CIP) 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) Administrative stipend for temporary assignments. An administrative stipend may be paid to an employee who is temporarily assigned responsibilities of a higher level position or other significant duties within the Laboratory 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.

(c) Compensation Increase Plan.

(1) The Contractor shall submit the CIP proposal 90 days prior to the beginning of the succeeding fiscal 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 1st, the midpoint of the fiscal year.

(3) The CIP shall be expressed as a percentage of the projected September 30th base payroll.

(4) Unless otherwise approved by the Contracting Officer, CIP funding will be requested and authorized for expenditure as justified for each employee group structure in the supporting market analysis.

(d) Additional Bonus for Non-Key Personnel. The Contractor may provide one-time non base lump sum payments as a form of bonus to non-key personnel in accordance with the cost reduction clause (DEAR 970.5212-4, NNSA Deviation dated March 2011) from resulted shared savings earned and negotiated cost reduction proposals.

SECTION IV - ANCILLARY PAY COMPONENTS **[Modified by Modification No. M138]**

(a) Modified work week. The Laboratory Director may designate a work week of less than five days within a pay week for selected employees, or groups of employees, when warranted.

(b) Extended work week.

(1) An extended work week is an established work week which exceeds 40 hours each week for a period which it is anticipated will extend beyond four consecutive weeks.

(2) 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.

(c) Operational work week.

(1) An "operational work week" is a work week established when overtime is required for field or test activities away from regular Laboratory sites. Such work weeks are normally for 54 hours per week, but may be for more.

(2) An exempt employee assigned to an extended work week or an operational work week may be paid supplemental pay calculated at a prorated percentage of the monthly base salary.

(d) Shift differential.

(1) An employee who is assigned to an evening shift (normally 4 p.m. – 12 midnight) or a night shift (normally 12 midnight – 8 a.m.) shall receive, in addition to his/her basic hourly rate, or hourly equivalent, a shift premium of 12% for evening shift or 15% for night shift. This shift premium shall be based on the basic hourly rate, or hourly equivalent, for each hour worked during such scheduled shifts. Where a day shift begins early, or ends late, therefore overlapping either night or evening shifts, the applicable shift premium may be paid for hours worked during the shift.

(2) An employee regularly assigned to work during the sixth or seventh day of the workweek may receive a 5% differential for hours worked on those days, in addition to any applicable shift premiums. This 5% differential is not applicable to sick leave, vacations, or other authorized paid leave.

(3) Any employee who is assigned to a split shift shall be paid, in addition to his/her basic hourly rate or hourly equivalent, a shift premium for each hour worked during the hours of evening shift and night shift at the rate provided for in this Section, except that if the entire shift is scheduled between the hours of 7 a.m. and 6 p.m., no shift premium shall be paid.

(4) Any employee who is assigned to a rotating shift shall be paid, in addition to his/her basic hourly rate, or hourly equivalent, a shift premium for each hour worked during the hours of evening and night shifts computed at the rate provided for in this Section.

(5) The shift differential shall be included in payments for all types of paid leave if the shift assignment is for a period which extends or is expected to extend beyond eight consecutive weeks.

(e) Call-in pay. Any nonexempt employee called in for emergency work outside of his/her regularly scheduled hours shall be paid at least four hours at his/her straight-time hourly rate or for all hours worked at the applicable overtime rate, whichever is greater.

(f) On-call pay.

(1) On-call is time during which an employee is not required to be at the work location or at the employee's residence but is required to restrict activities so as to be readily contacted and be available for return to work if called.

(2) Non-exempt employees assigned to on-call duty shall be paid an amount not to exceed 14% of their hourly base rate for each on-call duty hour.

(3) Exempt employees who are assigned to on-call duty shall be paid a flat rate amount not to exceed $80 for each 24 hour period and must be on-call for a minimum of 15 hours (or 13 hours for eligible employees on a four-day, ten hour alternate work schedule or 14 hours for eligible employees on the nine hour day of their nine-day 9/80 work schedule) within a 24 hour period during the employee's normal workweek. Any increase shall be discussed with the contracting officer prior to implementation.

(4) Duty officers are Contractor employees required to remain on site outside of normally scheduled working hours so as to be promptly available. Exempt employees assigned as on-site duty officers shall be paid $115.00 for each 24-hour weekend or holiday shift worked.

(g) Special allowances.

(1) Uniform allowance. To be eligible for a uniform allowance or allocation, an employee must be required to wear a uniform authorized for use in an official capacity only. Regular full-time, part-time, and limited term employees in health services at the Laboratory who are required to wear uniforms shall be provided a reasonable allowance to assist in the purchase, laundering, and maintenance of the required uniform. This allowance shall not exceed $300 per year for health service employees.

(2) Isolation allowance. The Laboratory Director may designate an isolation allowance up to a maximum of 25% of the employee's basic salary or monthly equivalent for work performed in remote geographical areas. Extended work weeks for isolation duty posts may be established in accordance with pertinent sections of this Appendix.

(3) Dislocation allowance. Laboratory employees may be assigned to temporary duty at other locations on a change-of-station basis. With the approval of the Laboratory Director, for relocations that exceed six months, payment of actual and reasonable costs associated with the temporary assignments may be made and shall include an apartment or house rental differential, the shipment of household goods (or storage thereof), and a miscellaneous cost of living adjustment based upon accepted industry standards to be paid as a supplement to base salary. The Contractor shall provide a semiannual report to the Contracting Officer of assignments subject to these provisions.

(4) Nevada Test Site (NTS) allowance.

(a) Employees whose permanent work assignment is at the Mercury location shall be paid, in addition to their regular pay, a daily allowance of $12.50 for each day worked at Mercury.

(b) Employees whose permanent work assignment is other than Mercury but within NTS shall be paid, in addition to their regular pay, a daily allowance of $15 for each day worked at the assigned work place.

(c) In addition to the daily allowance prescribed above in this paragraph, an overnight allowance of $10.00 shall be allowed for each day worked for individuals whose work schedule requires them to remain overnight at NTS.

(d) Employees assigned to duty at the NTS on a temporary basis shall be compensated in accordance with the Section entitled "Travel & Relocation"; however, they shall not be entitled to the allowances described in subparagraph (g)(4)(a) to (c) above.

(5) 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 – COMPANY SERVICE CREDIT

LANS employees transferring directly from University of California (excluding UC LANL), Bechtel, BWXT, and the Washington Group (LANS Parent Companies) or directly from Affiliates of LANS Parent Companies will retain the continuous or credited service date recognized by the LANS Parent Companies or the Affiliates of LANS Parent Companies from which they transfer for the purpose of eligibility for TCP2 benefits including service awards, vacation, sick leave, the TCP2 401K savings plan and access-only retirement medical plan.

In addition, employees transferring directly from LANS Parent Companies or Affiliates of LANS Parent Companies will retain credited service for years of work performed on DOE Management & Operating, Environmental Management and other DOE Prime contracts, with their parent company or affiliate (including predecessor contractors), for purposes of determining eligibility for TCP1 retiree medical benefits and severance pay. For purposes of determining eligibility for TCP1 retiree medical benefits and the earned benefit level, such service credit will be frozen upon transfer to LANS. For purposes of determining severance pay, years of service will continue to accrue after transfer to LANS up to a maximum benefit allowance of 26 weeks.

For purposes of this clause, "DOE" represents the Department of Energy, including the National Nuclear Security Administration and Naval Reactors. Additionally "Affiliates of LANS Parent Companies" represents any company partially or fully owned by the University of California (excluding UC LANL), Bechtel, BWXT, or the Washington Group.

SECTION VI – 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 to the extent permitted by law. Accumulated vacation credit is also paid.

(2) Severance pay benefit. Any employee who is laid off or terminated due to a RIF shall be given severance pay as calculated in Schedule A or B.

Severance Payment Schedule A
For those LANL employees that transferred from U.C. to LANS on June 1, 2006

Length of Service	Benefit Allowance
Up to and including 2 years	2 weeks of pay
Over 2 years but less than 6 years	1 week of pay for each year of service
6 years +	1 week of pay for each year of service through 6 years, plus 2 weeks of pay for each year of service in excess of 6 years, not to exceed a total of 39 weeks.

Severance Payment Schedule B
Schedule B is applicable for new LANS employees hired on or after June 1, 2006.

Length of Service	Benefit Allowance
6 months up to 1 year of service	1 week of pay
1 year +	1 week of pay for each year of service, not to exceed a total of 26 weeks of pay.

(b) Payments upon termination other than RIF

(1) Pay in lieu of notice of termination. When approved by the Laboratory Director, up to 15 calendar days' pay may be paid in lieu of notice.

(2) Sick leave. Accumulated sick leave is not payable upon termination and may not be used beyond a predetermined date of termination.

(3) Vacation. Accumulated vacation is payable at termination or upon extended military leave at the rate in effect as of the date of termination, including any shift differential.

(4) Termination upon death. Upon the death of an employee who has been employed for at least six months or more at 50% time or more, a sum equal to the normal salary of the deceased for one month shall be paid to the surviving spouse, or if there is no surviving spouse, to the deceased's eligible dependent(s), or if there is neither a surviving spouse nor eligible dependent(s), to the beneficiary designated in the deceased's Contractor-paid life insurance. If there is no Contractor-paid life insurance policy or no designated beneficiary of any such policy, the death payment shall be made to the estate of the deceased.

SECTION VII – LABOR RELATIONS

(a) Collective bargaining. Costs of fringe benefits consistent with approved plans and wages paid to employees, and all other costs and expenses pursuant to applicable collective bargaining agreements and revisions thereto, are allowable. The Contractor shall meet with the Contracting Officer or Contracting Officer's Representative(s) for the purpose of reviewing bargaining objectives prior to negotiation of any collective bargaining agreement or revision. The Contractor shall keep the Contracting Officer advised of significant developments during any negotiations.

(b) Grievance and complaint costs.

(1) The Contractor is authorized to settle internal employee grievances up to $60,000 without the advance approval of the Contracting Officer. Settlements of internal employee grievances in excess of $60,000 require advance approval of the Contracting Officer.

(2) The Contractor may pay as an allowable cost the entire costs or some portion thereof for services rendered by a non-Laboratory hearing officer.

SECTION VIII - WORKERS' COMPENSATION AND INJURY LEAVE

(a) An employee suffering a job-incurred injury or disability may be paid the straight-time hourly rate or monthly pay rate during the waiting period before workers' compensation begins, or the difference between the workers' compensation payment and such rate if the employee later becomes eligible for workers' compensation during the waiting period.

(b) An employee entitled to receive workers' compensation may be paid injury leave, which is the difference between the workers' compensation payments and the straight-time hourly rate or monthly pay rate for the period such compensation is payable, not to exceed a period of 26 weeks. The total amount of all payments received shall not exceed 80% of the employee's regular rate of pay for the period such compensation is payable.

(c) Injury leave constitutes an advance against permanent disability payments.

SECTION IX - MILITARY LEAVE

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

SECTION X - TRIBAL LEAVE

With respect to the New Mexico Tribal Governments, an eligible regular employee may be granted leave by the Laboratory Director and paid a portion of their salary to hold the positions of Tribal Governor, Tribal Lieutenant Governor, or Tribal Secretary. Tribal Leave promotes understanding and cooperation between the Laboratory and Native American tribes.

(1) To be eligible, an employee must have completed the new employee evaluation period, possess fully satisfactory performance, and have been elected to an office that was not voluntarily sought and for which acceptance cannot be reasonably declined.

(2) The period of the Tribal Leave should be consistent with the term of office as specified below:

(a) One-year term - the leave is renewable for one term, for a total of two years; or

(b) Two-year term - the leave is renewable for one term, for a total of four years.

(3) An employee on Tribal Leave receives a portion of regular salary, depending on length of Laboratory service, according to the following schedule:

Length of Laboratory Service	% of Full-time Salary
Up to 2 years	50%
More than 2 years, but less than 6 years	Up to 55%*
6 years and over	Up to 60%*

* Part-time employees receive the lesser of their regular percentage of full-time pay, or pay according to the above schedule. For example, a 10-year employee with an 80% schedule would have his/her appointment reduced to 60%, but a 55% time 10-year employee would stay at 55%.

(4) Employees on Tribal Leave may not use and do not accrue vacation or sick leave. Vacation and sick leave balances are carried over for use upon return from leave. An employee may choose to exhaust accrued vacation before beginning a period of Tribal Leave.

(5) An employee on Tribal Leave may continue insurance coverages in effect within the specified terms at the time the leave begins.

(6) An employee on Tribal Leave earns retirement service credit based upon the percentages specified in the table above.

SECTION XI - SECURITY LEAVE

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

(a) 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.

(b) Leave with pay requires the Contracting Officer's concurrence that no position is available to which the employee might reasonably be transferred.

SECTION XII - TRAINING AND EDUCATION

(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 programs and the dollars spent.

(b) Professional research or teaching leave. To promote the continuing professional growth and competence of employees, the Laboratory Director may grant partially subsidized leave, as described below, to a limited number of exempt employees. Such leave, to be

known as professional research or teaching leave, may be spent at appropriate institutions within the United States or abroad.

(1) The period of leave may not exceed twelve months.

(2) Salary payments to an employee on professional research or teaching leave may not exceed the following schedule:

Years of Service or Years Since Last PR or T Leave	PR or T Leave Up to Six months	PR or T Leave 6-12 Months
4 years	.89 salary	.44 salary
4 1/2 years	Regular salary	.50 salary
5 years	Regular salary	.56 salary
5 1/2 years	Regular salary	.61 salary
6 years	Regular salary	.67 salary
7 years	Regular salary	.78 salary
8 years	Regular salary	.89 salary
9 years	Regular salary	Regular salary

(3) Cost of travel shall not be reimbursed by the Contractor.

(4) Vacation and sick leave shall not accrue to the individual while on professional research or teaching leave.

SECTION XIII - EMPLOYEE PROGRAMS

(a) Service and retirement awards.
The contractor may recognize employees' service and retirement through award programs. The cost of the awards for these programs is based on an average of $240 per service event multiplied by the total population eligible for awards during the fiscal year, and an average of $400 per retirement.

(b) Performance award programs.

(1) 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.

(2) Up to 0.15%, of the total salary base may be spent to fund performance award programs. Costs in excess of the authorized amounts shall require Contracting Officer advance approval. Annually, the Contractor shall provide the Contracting Officer with appropriate reports on the individual award program expenditures.

(c) Employee Referral and Hire-on Incentive Program. The Laboratory Director is authorized to implement an Employee Referral and Hire-on Incentive Program. Contracting Officer approval is required for initial program implementation and all changes to policy impacting bonus maximums. The Laboratory will provide the Contracting Officer an annual report addressing cost and program effectiveness.

(d) 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

(2) The Contractor may provide reasonable, support for the operation of employee programs. This may include administrative oversight and support. Appropriate facilities, utilities, and maintenance may be provided by the Laboratory.

(3) Employee morale activities. The Laboratory may develop, administer, and support a variety of employee programs that will enhance employee morale. The level of Laboratory financial support for this program is not to exceed $16 per employee (full-time or part-time), per fiscal year. Expenditures under this program shall require the approval of the Laboratory Director.

(4) 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.

SECTION XIV - COSTS OF RECRUITING PERSONNEL

The Contractor may incur costs for the recruitment of personnel, as follows:

(1) Costs of advertising and agency and consultant fees shall not exceed $1,000,000 annually without prior Contracting Officer approval shall be reported annually to the Contracting Officer.

(2) Travel and subsistence for interviewee, interviewer, and recruiting contact paid in accordance with this Appendix.

(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.

(5) New employees, or transferees, shall be reimbursed for costs of travel and shipment of household goods in accordance with paragraph (a) of the Section

entitled "Travel & Relocation." A relocation service provider may be used to assist with the transition.

SECTION XV – TRAVEL & RELOCATION

(a) Travel costs shall be allowable to the extent they are incurred in accordance with DEAR 970.3102-05-46 and FAR 31.205-46. Travel-related costs and travel cost with relocation for lodging, meals, and incidental expenses shall be reasonable and allowable to the extent they do not exceed the maximum per diem rates in effect at the time of travel set forth in the Federal Travel Regulations, prescribed by the General Services Administration.

(b) Relocation expenses shall be incurred in accordance with the provisions, limitations and exclusions of FAR 31.205-35.

SECTION XVI - SPECIAL PROGRAMS

(a) Academic cooperation program. The Laboratory Director may approve the assignment of certain selected individuals at the graduate or undergraduate level, who are currently enrolled in recognized colleges or universities, to projects proposed by the college or university and approved by the Contractor. Such assignments are to be made primarily to further the individual's training, experience and education. The training the individual receives will be credited by the academic institution. Individuals approved by the Laboratory Director under this program may be reimbursed a daily subsistence allowance in accordance with this Appendix for each day of Laboratory attendance.

(b) Special employment programs. The Laboratory Director may authorize the administration of special employment programs for students at the postgraduate, graduate, undergraduate, and pre-college levels. The Laboratory Director may also authorize the administration of special employment programs for school teachers to advance science curriculum development in the schools. Costs associated with salaries, transportation, and relocations shall be in accordance with Contractor policies and paragraph (b) of the Section entitled "Introduction" and shall be reported annually to the Contracting Officer. Internship or membership fees associated with nationally recognized programs that are paid to other institutions in support of these programs are allowable. A description of the Contractor's special employment programs shall be provided to the Contracting Officer annually.

(c) Fellowship programs. The Contractor may incur costs associated with participation in programs (e.g., consortium arrangements such as the National Physical Sciences Consortium for Graduate Degrees for Minorities and Women and the National Consortium for Graduate Degrees for Minorities in Engineering, DOE/NNSA/Contractor academy/leadership programs, Laboratory science education initiatives) to provide graduate fellowships to students in science and engineering. Costs associated with employment of students shall include salaries, transportation, and relocation. A description of these programs shall be provided annually to the Contracting Officer.

(d) Lectures - honoraria - travel and subsistence.

(1) The Laboratory Director may approve the payment of either a stipend, or an honorarium and costs of travel and subsistence, for a person chosen to give a lecture to or discuss problems of interest with Laboratory employees.

(2) When payment of travel, subsistence, and honorarium is authorized, an honorarium in excess of $1,500 shall require the Laboratory Director's approval. When payment of a stipend, in lieu of transportation, subsistence, and honorarium, is authorized, payment in excess of $2,000 shall require the Laboratory Director's approval. Travel and subsistence reimbursement shall be in accordance with this Appendix.

(e) Service academy research program. The Contractor may participate in a cooperative summer program with military academies by assigning members of the faculty (officers) and cadets/midshipmen to work in various Laboratory programs. During these periods of assignment the individuals shall continue to receive their military salary. The Contractor may reimburse the individuals for their round trip transportation costs and subsistence during their period of assignment at the Laboratory.

SECTION XVII – PERSONNEL LOANED

The Contractor may loan, at no cost to the government, individuals working under this Prime Contract to other operations as long as it does not interfere with the performance of contract work. Each loan arrangement will be reviewed to assure no conflict of interest exists and must be approved by the Contractor's Principal Associate Director Level or higher. A cumulative report showing all employees loaned, along with the total days loaned and services provided, will be submitted to the Contracting Officer on an annual basis. With regard to the loan of key personnel, refer to Part II - Contract Clauses, 1-119, DEAR 952.215-70 Key Personnel (DEC 2000).

PART III - SECTION J

APPENDIX B

STATEMENT OF WORK

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1.0 General.

Inasmuch as the assigned missions of the Los Alamos National Laboratory (Laboratory) are dynamic, this Statement of Work (SOW) is not intended to be all-inclusive or restrictive, but is intended to provide a broad framework and general scope of the work to be performed at the Laboratory. This SOW does not represent a commitment to, or imply funding for, specific projects or programs. The National Nuclear Security Administration (NNSA) and Department of Energy (DOE) work requirements are developed through strategic planning and program plans. All Laboratory programs and projects will be authorized individually by NNSA in accordance with the Contract Section H clause entitled "Performance Direction" and shall be performed in accordance with the provisions of this Contract.

The Contractor shall, in accordance with the provisions of this Contract, provide the intellectual leadership and management expertise necessary and appropriate to: (1) manage and operate the Laboratory; (2) accomplish the missions assigned by the National Nuclear Security Administration (NNSA) to the Laboratory; (3) enhance communications, cooperation and integration across the Nuclear Weapons Complex (NNSA Headquarters/Site Offices/Service Center, Weapons Laboratories, Production Plants and Test Site) that will result in improvements in performance of the Nuclear Weapons Complex; and, (4) foster and strengthen the Laboratory's role as a lead element in the nuclear weapons complex supply-chain. Particular emphasis shall be given on ensuring cross-site coordination with Lawrence Livermore National Laboratory. The Contractor shall integrate excellence in Laboratory operations, business operations, and laboratory management with the performance of world-class science and technology.

Work under this Contract shall be conducted in a manner that will protect the environment; assure the safety and health of employees and the public; safeguard classified information; and, protect special nuclear material. In performing the Contract work, the Contractor shall (1) assure and maintain through its Management Systems that products and services meet or exceed customer expectations, including using an integrated and effective Quality Assurance Program; (2) use a certified earned-value management system for projects across the Laboratory to track progress and increase cost effectiveness of work activities; (3) use integrated, resource-loaded plans and schedules to achieve program objectives; incorporate input from NNSA, DOE and stakeholders; (4) maintain sufficient technical depth to manage activities and projects throughout the life of a program; (5) use appropriate technologies to reduce costs and improve performance; (6) maintain a system of management and business internal controls to assure the safeguarding of government funds and assets; and, (7) maintain Laboratory facilities to accomplish assigned missions.

2.0 Laboratory Mission.

The Contractor shall manage, operate, protect, sustain and enhance the Laboratory's ability to function as a NNSA Multi-Program Laboratory, while assuring accomplishment of the Laboratory's primary mission - strengthening the United States' security through development and application of world-class science and technology to enhance the nation's defense and to reduce the global threat from terrorism and weapons of mass destruction. The Contractor shall, with the highest degree of vision, quality, integrity and technical excellence, maintain a strong, multi-disciplinary scientific and engineering base responsive to scientific issues of national importance in addition to national security responsibilities, including broadly based programs in such areas as the environment, national infrastructure, health, energy, economic and industrial competitiveness, and science education. The scope of work of this Contract generally includes:

- Providing research and development and scientific capabilities that enable safe nuclear explosive operations;
- Assuring the safety, security, reliability, and performance of the national nuclear weapons stockpile pursuant to national security policy and Presidential and Congressional directives;
- Providing scientific and engineering capabilities that support assessment, dismantlement, manufacturing and refurbishment of the enduring stockpile at a number of sites;
- Manufacturing selected stockpile components, ranging from high explosive pellets to the primaries (pits), for use in the nuclear weapon stockpile;
- Ensuring the secure handling and safe disposition of plutonium, highly enriched uranium, and tritium;
- Helping to deter, detect, and respond to the proliferation of weapons of mass destruction;
- Conducting fundamental science research, nuclear energy development, and nuclear waste management technology in support of other DOE programs.
- Contributing to civilian, Homeland Security, and industrial needs and other defense activities by using the scientific and technical expertise that derives from carrying out the Laboratory mission;
- Advancing of science, mathematics, and engineering education;
- Performing technology transfer and work for others including programs designed to enhance national competitiveness in the global economy;
- Managing and operating the Laboratory facilities and infrastructure in an efficient, cost effective, innovative manner;
- Remediating and restoring the Los Alamos National Laboratory site;
- Managing waste minimization, treatment, storage, and disposal of newly generated and legacy wastes; and
- Assisting the nuclear weapons complex in waste stabilization, storage and disposition technologies.

The Contractor shall engage in the strategic and institutional planning necessary to assure that the Laboratory maintains a posture aimed at anticipating the national technical and scientific needs and is dedicated to providing practical solutions. The Contractor shall

carry out these plans consistent with NNSA planning guidance and strategic planning material to assure uniformity with DOE and NNSA missions and goals. The Contractor shall also study and explore innovative concepts to minimize or mitigate possible national security threats, current and future.

The Contract's Scope of Work activities are in support of scientific and technical programs sponsored by major NNSA and DOE organizations. Primary NNSA and DOE sponsors include:

- Defense Programs
- Defense Nuclear Nonproliferation
- Emergency Operations
- Infrastructure and Environment
- Nuclear Safeguards and Security
- Environmental Management
- Science
- Nuclear Energy, Science and Technology
- Energy Efficiency and Renewable Energy
- Fossil Energy

Additionally, the Contractor will pursue other DOE and non-DOE science and technology initiatives that derive from the Laboratory missions and use the Laboratory's core competencies in nuclear weapons science and technology, earth and environmental science, nuclear and atomic physics, materials, bioscience and biotechnology, nuclear science, plasmas and beams, complex experimentation and measurements, theory, modeling, high-performance computing, and analysis and assessment.

This SOW covers four general Performance Group activities critical to the Laboratory's management of corresponding programs, projects and processes. These Performance Groups are: Science & Technology, Laboratory Operations, Business Operations and Laboratory Management.

3.0 Science & Technology.

3.1 Defense Programs.

The Contractor shall support the NNSA's Office of Defense Programs (DP) in the development of an overall strategic plan and shall execute those plans as they pertain to the Laboratory. The goal of the DP strategic plan is to integrate programmatic work to maximize scientific and technical work accomplishment, while minimizing duplication between programs and sites and while providing for major investments in facilities.

3.1.1 Nuclear Weapons.

3.1.1.1 Stockpile Certification.

The Contractor shall provide elements of Stockpile Certification to include the following:

1. Laboratory Director's annual assessment of the stockpile;

2. A nuclear weapons quality assurance and stockpile evaluation program to detect defects and determine their effect on safety, security and reliability of the stockpile, support joint Department of Defense (DOD)/NNSA weapons system testing, perform reliability assessments and calculations, prepare reliability reports for all Laboratory assigned nuclear weapons in the stockpile; and

3. Continue technical support, and military liaison and training programs for the DOD in support of Laboratory assigned nuclear weapons in the stockpile.

3.1.1.2 Stockpile Stewardship.

The Contractor shall meet the near-term scientific and technical demands of the Laboratory's stockpile stewardship goals while strengthening its longer-term, technical, capability-based deterrent posture. The Contractor shall support the science-based Stockpile Stewardship Program that underpins the scientific and technical basis for all nuclear warheads in the United States stockpile. Under this Program, the Contractor shall conduct the fundamental research, the development of physical models, the integration of these models into computer simulation codes, the experimental validation, and the engineering that are required to maintain the stockpile in a safe, secure and reliable manner. The Contractor shall provide technical specifications, engineering drawings and releases that direct planned and corrective activities both by NNSA production activities and by the DOD depots that support warhead and bomb component weapon manufacturing, maintenance, assembly and surveillance operations. The Program relies on three interconnected areas of surveillance activity which examine and diagnose aging phenomena in stockpile weapons, assess physical observations by calculations and experiments to evaluate safety and performance, and develop responses to assessments to provide the basis for continued stockpile certification and reliability assurance.

The Contractor shall conduct elements of stockpile stewardship to include the following:

A. Simulation Codes and Computational Resources

1. Development of high-performance computing and computational simulations to validate and certify the safety, reliability, and performance of the nuclear package in the absence of nuclear testing;
2. Conduct stockpile assessment of nuclear weapons components and the analysis of surveillance findings through the use of nuclear weapon simulation codes, computational resources, full-scale flight tests, and experiments;
3. Core stockpile computing and participation in the Advanced Simulation and Computing initiative to enable model-and simulation-based life-cycle engineering that meets the NNSA vision for responsiveness; and
4. Archiving of previously recorded nuclear weapons data for assessment of stockpile weapons systems and improving models and codes.

B. Surveillance and Surety

1. Participation in the Enhanced Surveillance Campaign to develop a capability to predict age-related phenomena in stockpile warheads and provide enhanced diagnostic tools;
2. Conduct core stockpile surveillance to evaluate safety, security, and reliability of the stockpile and develop design changes to correct findings; and
3. Surety efforts to address the safety, security, and control of nuclear warheads that extend over the entire weapons life cycle.

C. Scientific Capabilities, Experiments and Tests

1. Improving the scientific basis for stockpile assessment through a balanced experimental and theoretical approach. This includes developing new scientific tools and capabilities that address fundamental questions relating to the stockpile.
2. Above ground experiments including hydrodynamic tests at the Nevada Test Site that provide non nuclear testing capability to address the functionality and safety of the nuclear weapon primary and capability to study and understand high-energy density physics of nuclear devices;
3. Experiments at the Nevada Test Site, consistent with U.S. policy, to improve knowledge of the dynamic properties of nuclear materials; and,
4. Preparations necessary to maintain nuclear underground test readiness according to defined National timelines.

D. Production and Manufacturing

1. Maintain manufacturing capability for plutonium-based pits of various designs for the primary of nuclear weapons. This activity implements specialized manufacturing and testing techniques for this warhead component. The Contractor shall manufacture pits for the stockpile in quantities specified by NNSA. Further, the Contractor shall provide engineering testing and production process development guidance for plutonium-based pits to other contractors as directed by the Contracting Officer.
2. Maintain and enhance Laboratory facilities to perform small quantity production of selected non-nuclear components and the manufacture of selected components and related items used in the Nuclear Weapons program, including associated product and process engineering.
3. Develop specialized techniques and processes for manufacturing and testing warhead components including plutonium pits, detonators and high explosives, and other special materials that influence nuclear performance.
4. Support the Advanced Design and Production Technologies (ADAPT) initiative for development and deployment of advanced design and manufacturing processes for weapon components.
5. Design, develop, and certify to support assigned activities for Life Extension Programs.
6. Support production to ensure the safety, security, reliability and maintenance of the enduring stockpile.
7. Perform all life cycle management responsibilities in design, engineering development, component acceptance and stockpile certification to support weapon alterations, modifications, refurbishments and replacements.

3.1.1.3 Research and Development (R&D).

The Contractor shall develop program plans, in conjunction with NNSA, for nuclear weapons R&D activities, and perform nuclear weapons R&D in accordance with program plans approved by the NNSA. The Contractor shall explore and document nuclear weapons technology and systems concepts and perform and document feasibility studies and engineering development of nuclear weapons to meet NNSA and DOD requirements. The Contractor shall formulate and document nuclear weapon concepts that will meet DOD mission requirements. The Contractor shall perform and document R&D to support the NNSA technology base and engineering that will assure nuclear competency and

effectively support the varied demands of nuclear weapon activities and minimize the possibility of failing to anticipate significant scientific or technological advances that impact national security. The Contractor shall provide R&D and engineering support related to international mutual defense agreements.

The Contractor shall maintain state-of the art technologies and capabilities to support high-performance computing, modeling, and simulation; communications; and information management. The Contractor shall participate in the Advanced Simulation and Computing Campaign and other associated research on complex and large-scale national problems in computational science.

3.1.1.4 Production Support to Nuclear Weapons Complex (NWC).

The Contractor shall provide technical production support to the NNSA at nuclear weapon production plants, and modify and enhance the non-nuclear component production hardware qualification program consistent with production assignments and production rates. The Contractor shall support the NWC production plants by:

1. providing expertise in specialized technologies necessary for nuclear and non-nuclear component manufacturing;
2. providing safe storage, transportation of nuclear weapons and special materials, weapon design and performance information, and establishment of technical requirements for production processes;
3. participating in the development of the Documented Safety Analyses to support safe operations at the Pantex Plant;
4. providing development of specialized facility criteria; recommending and managing R&D and testing for emerging technologies;
5. providing technical support and independent technical oversight for needed physical rearrangements;
6. establishing testing and acceptance criteria; participating in approval of test procedures and results;
7. contributing to the development of training requirements;
8. evaluating weapon response to hazard analysis scenarios in support of the Seamless Safety for the 21st Century (SS-21) activity;
9. providing technical support in developing and implementing necessary tooling and procedures to perform production that meets SS-21 standards;
10. supporting the implementation of steps that support the NNSA responsive infrastructure vision that supports the complex of the future; and

11. providing the necessary documentation for the items listed above to support nuclear weapons production.

3.1.1.5 Nuclear Materials Management and Dismantlement.

The Contractor shall conduct a Nuclear Materials and Stockpile Management Program that has four strategic thrusts: nuclear materials; manufacturing and surveillance; materials and process technologies; and stabilization technologies. The Program includes: ensuring, through a nuclear-materials-based approach, stockpile evaluation; weapons dismantlement and component disassembly; nuclear materials storage, processing, and disposition; residue elimination, waste minimization, and environmental and mixed-waste management; test-component remanufacture; materials characterization; site cleanup and materials stabilization; contamination control; health and safety issues; managing and operating highly specialized facilities that are key to Laboratory efforts in this program; and, providing support to DOE/NNSA for stabilizing nuclear materials and overseeing a core technology program that will improve the understanding of underlying material interactions.

The Contractor shall support dismantlement program activities, including weapon component material characterization, material disposition processes, technical assistance in material disposition analysis of the functionality of safety of disassembly techniques and tools, and prescriptions for material recovery and reuse.

3.1.2 Criticality Safety and Analysis.

The Contractor shall conduct experiments, training and analysis on criticality safety, materials detection and improvised nuclear devices in support of a broad range of national programs. The Contractor shall lead, unless otherwise directed by the Contracting Officer, construction of the Criticality Experiments Facility at the Device Assembly Facility located at the Nevada Test Site.

3.1.3 Closure of Technical Area-18.

The Contractor shall support the closure of Technical Area (TA)-18 and transition all remaining missions out of TA-18 in accordance with NNSA Program Plans.

3.1.4 Long-Range Planning and Systems Integration.

The Contractor shall support the defense systems integration function coordinated by Sandia National Laboratories in long-range planning and systems integration activities for the Nuclear Weapons Complex. This will include independent research, trade-off studies, cost analyses, systems analyses.

3.1.5 Inertial Confinement Fusion.

The Contractor shall conduct an inertial confinement fusion program that maintains United States leadership in high energy density physics. This includes achieving ignition and using ignition facilities to gather information relevant to stockpile stewardship. The program of ignition is a national effort that depends on cooperation and collaboration with multiple NNSA contractors and includes major experimental activities at the National Ignition Facility and other NNSA sites. As part of this effort, the contractor will participate as a member of a national team that supports all aspects of the national program; including target physics, target fabrication, diagnostics, experimental planning, and any other activities necessary to achieve the ignition program goals.

3.2 Defense Nuclear Nonproliferation.

The Contractor shall develop and apply the science and technology, and perform appropriate related analytical tasks required to detect, deter, prevent and respond to proliferation of weapons of mass destruction worldwide.

3.2.1 Global Threat Reduction Programs.

The Contractor shall develop and apply the science and technology, and perform appropriate related analytical tasks required to reduce inventories of weapons-useable nuclear materials and dangerous radiological materials, including (1) converting U.S. and foreign research reactors to the use of low enriched uranium fuel or other proliferation-resistant technologies, (2) repatriating Highly Enriched Uranium and Low Enriched Uranium to countries of origin for secure storage, disposition or blend-down, and (3) securing, transporting, storing or dispositioning radiological materials.

3.2.2 Nonproliferation Research and Engineering.

The Contractor shall develop and apply the science and technology, and perform appropriate related analytical tasks required to develop advanced remote sensing, monitoring and assessment technologies to address the most challenging problems related to detection, location, and analysis of

global proliferation of nuclear weapon technology, and the diversion of special nuclear materials. This includes detecting and identifying emanations, effluents, and other distinctive signatures of potential nuclear weapons research and development efforts.

3.2.3 Nuclear Risk Reduction.

The Contractor shall develop and apply the science and technology, and perform appropriate related analytical tasks required to eliminate surplus inventories of weapons-useable materials, including materials from dismantled weapons and production reactors and facilities, to support verification of international agreements, and to strengthen foreign and international efforts to respond effectively to nuclear emergencies.

3.2.4 Nonproliferation and International Security.

The Contractor shall develop and apply the science and technology, and perform appropriate related analytical tasks required to support the application and strengthening of international nuclear safeguards, support United States (U.S.) Government negotiations and policy analysis, strengthen U.S. and allied export control diplomacy and policy development, improve workforce transition and scientist engagement efforts around the world, improve regional and international security, permit intelligence monitoring and arms control treaty verification, strengthen global controls on nuclear materials and weapons, protect nuclear materials from theft or diversion, assess foreign Weapons of Mass Destruction programs, and develop tools and techniques to encourage proliferation-resistant fuel cycle technologies.

3.2.5 International Material Protection and Cooperation.

The Contractor shall develop and apply the science and technology, and perform appropriate related analytical tasks required to secure nuclear weapons and materials in Russia and other weapons states, including both military and civilian facilities, support the blenddown of excess weapons-useable Highly Enriched Uranium to Low Enriched Uranium, deploy radiation detection monitors at strategic border crossings and transit points, and to expand the capacity of other countries to properly secure their nuclear weapons and materials.

3.2.6 Fissile Materials Disposition.

The Contractor shall develop and apply the science and technology, and perform appropriate related analytical tasks required to eliminate surplus plutonium and Highly Enriched Uranium.

3.2.7 Nonproliferation, National Security and Verification Technology.

The Contractor shall conduct a nonproliferation, national security, treaty verification technology program, and dismantlement verification program; including the development of methods for detection/verification of

underground nuclear testing and of undeclared enrichment and reprocessing activities. The Contractor shall perform R&D for nuclear security, nonproliferation of weapons of mass destruction (nuclear, chemical and biological, and of missile delivery systems), and treaty verification technologies; including application of remote sensing technology to the detection of nuclear explosions and other national security applications. Also perform and assist with the application of security technology to international nuclear materials and weapons protection.

3.3 Science Programs.

3.3.1 Basic Science Programs.

The Contractor shall conduct research in the areas of materials sciences, chemistry, and geosciences, providing knowledge essential to defense, energy efficiency, industrial competitiveness, engineering sciences, atomic physics, computational sciences, biological sciences, nanoscience, and other areas of national interest, including scientifically tailored materials and mathematics, and advancing the state of science for the benefit of DOE/NNSA.

3.3.2 Biological and Environmental Research.

The Contractor shall conduct research in structural biology, genomics, cellular response to low doses of radiation, climate change research, environmental remediation, advanced medical imaging, and other health and environmental sciences.

3.3.3 High Energy and Nuclear Physics.

The Contractor shall conduct high energy and nuclear physics research involving experimental and theoretical programs in nuclear and particle physics.

3.3.4 Fusion Energy Sciences.

The Contractor shall conduct fusion energy efforts aimed at modest scale experimental, theoretical, and technological studies to advance plasma science, fusion science, and fusion technology.

3.3.5 Advanced Scientific Computing Research (ASCR).

The Contractor shall conduct the ASCR program by supporting research in applied mathematics, computer science and high-performance networks and providing high-performance computational and networking resources.

3.4 Energy Technology Programs.

The Contractor shall conduct research and studies to address national energy needs in fundamental areas including integrated chemical and materials processing, energy supply and the environment, and transportation and infrastructure.

3.4.1 High-Temperature Superconductivity.

The Contractor shall develop practical high-temperature, high-current-density superconductors and form partnerships with U.S. industry to expedite the development of commercially feasible high-temperature superconductor technology.

3.4.2 Radioisotope Power System Program.

The Contractor shall sustain the technical capabilities to process and encapsulate the isotope plutonium-238 into fuel forms that will be provided for use in the development and fabrication of radioisotope power systems that are delivered to other agencies for space exploration and national security missions.

3.4.3 Energy Supply.

The Contractor shall conduct research that addresses energy supply issues by applying capabilities in the areas of exploration, reservoir modeling, integrated assessments, and environmental transport. The Contractor shall support DOE/NNSA's efforts in the broad areas of energy efficiency, renewable energy, fossil energy, and nuclear energy.

3.4.4 Yucca Mountain Project.

The Contractor shall support the Yucca Mountain Project by conducting studies to characterize the site, particularly in the areas of radionuclide migration, volcanic risk assessment, and exploratory studies relating to facility test coordination.

3.4.5 Transportation and Infrastructure.

The Contractor shall conduct research, development, and demonstration of fuel cell and hydrogen production, delivery, and storage technologies to accelerate the introduction of hydrogen-powered fuel cell vehicles into the transportation sector.

3.5 Environmental Technologies Development.

The Contractor shall apply scientific and engineering capabilities to facilitate the development of new technologies for timely, cost-effective, and comprehensive solutions for local, regional, and global environmental problems. This includes waste management, environmental stewardship, and environmental resource problems. This also includes new approaches to treatment, disposal, storage, and reduced generation of waste and the safety, security, reliability and sustainability of environmental resources, technologies, engineered systems, and public policies to produce, deliver and use the resources where needed. The Contractor shall apply, with Contracting Officer approval, capabilities to waste management, environmental restoration, and facility stabilization problems at the Laboratory, within the NNSA Nuclear Weapons Complex and other locations.

3.6 U.S. Department of Homeland Security Programs.

The Contractor shall make Laboratory resources available and perform work for the U.S. Department of Homeland Security.

3.7 Work for Others.

The Contractor shall conduct a Work for Others (WFO) Program, as approved by the Contracting Officer. Some of the major WFO sponsors include DOD, National Aeronautics and Space Administration, National Institutes of Health, and the Department of State and non- federal entities.

3.8 Laboratory-Directed Research and Development.

The Contractor shall conduct an NNSA approved Laboratory Directed Research and Development program that encourages multidisciplinary and multidivisional research on complex scientific and engineering problems and on individual basic and applied research projects to enhance the core capabilities and competencies required to fulfill the Laboratory's missions.

3.9 Industrial Partnerships and Technology Transfer Programs.

The Contractor shall, as approved by the Contracting Officer, establish industrial partnerships that transfer new technologies from the Laboratory to private industry and make available to private industry the unique capabilities of the

Laboratory in order to enhance the Laboratory's ability to meet mission requirements and improve the industrial competitiveness and national security of the U.S.

4.0 Laboratory Operations.

The Contractor shall manage, operate, protect, maintain and enhance the Laboratory's ability to function as a DOE multi-program laboratory, provide the infrastructure and support activities, support the accomplishment of the Laboratory's missions, and assure the accountability to the NNSA under the results-oriented, performance-based provisions of this Contract.

4.1 Safeguards and Security.

The Contractor shall conduct a safeguards and security program that fosters an institutionalized security conscious culture that performs work securely and assigns unambiguous roles, responsibilities, authorities, and accountability while integrating excellence in safeguards and security into all Laboratory activities. The safeguards and security program includes Integrated Safeguards and Security Management (ISSM); physical security; protection of Government property; classification, declassification and protection of information; cyber security; nuclear materials protection, control and accountability; and, personnel security including access control for Laboratory staff and visitors. The Contractor shall support NNSA and DOE overarching security initiatives including safeguards and security technology deployment efforts.

4.2 Environment, Safety and Health.

The Contractor shall conduct an Environment, Safety and Health (ES&H) program, including environmental protection and compliance, and safety and health management that (1) achieves an institutionalized ES&H conscious culture that embraces Conduct of Operations and allows work to be performed safely, (2) assigns unambiguous roles, responsibilities, authorities, develops appropriate work controls and ensures accountability for the performance of work in a manner that ensures protection of workers, the public and the environment, and (3) integrates excellence in ES&H into all Laboratory activities. The Contractor shall implement an environmental management system (waste minimization, pollution prevention, etc.) within the Integrated Safety Management system. The Contractor shall conduct cultural resource compliance and protection programs including monitoring, surveillance, and reporting with respect to all natural and cultural resources; obtaining and maintaining required permits and licenses from regulatory agencies; and, certification and training programs. Through an Integrated Safety Management System, ES&H management processes, formal work control and work performance processes, the Contractor shall ensure the safe performance of all Laboratory work. The Integrated Safety Management System shall be applied to all Contractor, including subcontractors or other entities, activities conducted at the Laboratory.

The safety management program shall be comprehensive in nature covering all work performed under this Contract. The Contractor shall ensure implementation of a safety management system addressing nuclear safety requirements including (1) a robust safety authorization basis process, (2) system engineering and configuration management of structures, systems and components important to safety, (3) quality assurance, (4) stabilization and disposition of nuclear materials, and (5) startup and restart of nuclear facilities.

The Contractor shall also conduct activities in accordance with those DOE commitments to the Defense Nuclear Facilities Safety Board (DNFSB) contained in Secretary of Energy's implementation plans and other DOE correspondence to the DNFSB. The Contractor shall support, as directed by the Contracting Officer, preparation of DOE responses to DNFSB issues and recommendations accepted by the Secretary of Energy which affect Contract work. The Contractor shall fully cooperate with the DNFSB and provide access to facilities, information and Contractor personnel. The Contractor shall maintain a document process consistent with the DOE Manual on interfacing with the DNFSB. The Contractor shall ensure that subcontractors adhere to these requirements.

The Contractor shall implement a hazard categorization and analysis process, a startup and restart process, as well as a safety authorization basis process for non-nuclear facilities that includes approval by the Contracting Officer for moderate hazard facilities/operations and high hazard facilities/operations. The Contractor shall ensure implementation of a formal ES&H performance based self-assessment process addressing both ES&H program and line management implementation that is (1) risk based and has the requisite depth, breadth, rigor and defensibility, (2) conducted with the appropriate subject matter expertise, (3) performance and behavior based, and (4) tied to an institutional issues management program that ensures closure of findings and opportunities for improvement.

The Contractor shall ensure implementation of an ES&H performance measurement program that ensures comprehensive gathering of operational data, adequate causal analysis, risk analysis, trending, comparison to metrics, includes leading and lagging indicators, dissemination of operational data, and measures both worker and subcontractor performance. The Contractor shall perform ES&H occurrence/event investigation ensuring that root cause analysis is performed, corrective actions address the systemic problems identified at the Laboratory, and use a Lessons Learned program to implement improvements to the Laboratory operations. The Contractor shall provide oversight of contractual ES&H standards and requirements appropriate to subcontractors and other entities performing work at the Laboratory.

The Contractor shall cooperate with worker health studies conducted by other Federal agencies and contract researchers under NNSA/DOE sponsorship.

4.3 Counterintelligence and Counter Terrorism.

The Contractor shall conduct an ongoing and comprehensive counterintelligence and counter terrorism program to assess, detect and deter foreign intelligence and terrorist threats to the personnel, facilities, and technologies within the Contractor's purview.

4.4 Emergency Operations.

The Contractor shall conduct an emergency operations program to include emergency preparedness plans and procedures, an occurrence notification and reporting system, operation of an Emergency Operations Center (which includes a Joint Emergency Operations Center with the County of Los Alamos), and emergency response capabilities for local, regional, and national missions to include a Radiological Assistance Program, and support to the NNSA Nuclear Emergency Support Team and Accident Response Group in the areas of nuclear weapons expertise, nuclear weapon surety, environment, safety and health, waste management, transportation and other areas requiring specialized planning, training, and responses to nuclear weapon accidents or incidents.

4.5 Environmental Management.

For all Laboratory sites, the Contractor shall: (1) conduct compliant environmental restoration activities including characterization and remediation in accordance with regulatory and enforceable agreements requirements and milestones; (2) complete legacy waste disposition including cooperation and coordination with the Carlsbad Field Office for transuranic waste activities; (3) manage newly generated waste to support Laboratory missions including treatment, storage, and disposal of solid, hazardous, mixed, and radioactive wastes; (4) decontaminate and decommission facilities and infrastructure; (5) coordinate and implement waste minimization and pollution prevention initiatives; (6) implement an Environmental Management System under Integrated Safety Management; (7) commission and manage the necessary waste management facilities and equipment to ensure uninterrupted waste management operations; and, (8) facilitate the remediation and conveyance of Land Transfer parcels pursuant to applicable law.

4.6 Facility Operations, Infrastructure, Design and Project Management.

4.6.1 Facility Operations and Infrastructure.

The Contractor shall manage Government-owned facilities and infrastructure, both provided and acquired, to further national interests and to perform NNSA/DOE statutory missions. The Contractor shall use a performance-based approach to real property life-cycle asset management to perform overall integrated planning, acquisition, upgrades, and management of Government-owned, leased or controlled facilities and real property accountable to the Laboratory. The Contractor shall employ facilities management practices that are best-in-class and integrated with mission assignments and business operations. The Contractor's

maintenance management program shall be based on best practices to maintain Government property in a manner which: (1) promotes and continuously improves operational safety, environmental protection and compliance, property preservation and cost effectiveness, (2) ensures continuity and reliability of operations, fulfillment of program requirements and protection of life and property from potential hazards, and (3) ensures the condition of all assets will continuously improve over the period of performance.

4.6.2 Facility Design and Project Management.

The Contractor shall effectively use an Earned-Value/resource loaded Project Management System across the Laboratory to deliver projects on schedule, within budget, and to meet mission performance. The Contractor shall provide design and risk analysis, value engineering, configuration management, conceptual designs, preliminary designs, material testing, and surveying in support of engineering designs (Title I); final designs and construction drawings (Title II); and as-built drawings pursuant to construction inspections, surveying, and material testing (Title III) services for activities supporting NNSA and its programmatic customers. The Contractor shall provide the skills necessary to accomplish this work to the safety and quality levels required for all facilities up to and including nuclear facilities, as applicable, while meeting demanding customer time constraints and milestones.

4.7 User Facilities.

The Contractor shall manage all Laboratory User Facilities. With approval of the Contracting Officer, the Contractor shall make available for use by the private sector the Laboratory research facilities that are designated by NNSA as Technology Deployment Centers or User Facilities. These consist of physical facilities, equipment, instrumentation, scientific expertise and necessary operational personnel. These facilities are available to U.S. industry, universities, academia, other laboratories, state and local governments, and the scientific community in general. User Facilities are a unique set of scientific research capabilities and resources whose primary function is to satisfy DOE/NNSA programmatic needs, while being accessible to outside users.

5.0 Business Operations.

The Contractor shall manage and administer a system of internal controls for all business and administrative operations. Management of the Laboratory business and administrative operations shall include (1) integrating common systems of internal controls across the Laboratory and implementing business processes that are risk-based, cross-functional, cost effective, optimize and streamline operations, increase efficiency and enhance productivity; and, (2) supporting NNSA in the identification and application of enterprise-wide electronic processes throughout the Nuclear Weapons Complex to streamline business practices.

5.1 Human Resources Management.

The Contractor shall maintain a human resources management system to attract and retain a world-class workforce and promote workforce diversity. The Contractor shall conduct comprehensive pre-employment screening as part of its human resources management system.

5.2 Financial Management.

The Contractor shall maintain a financial management system that provides sound financial stewardship and public accountability. The overall system shall be suitable to collect, record, and report all financial activities; include a budgeting system for the formulation and execution of all resource requirements; include a disbursements system for employee payroll and supplier payments; and contain an effective internal control system for all expenditures.

5.3 Purchasing Management.

The Contractor shall maintain a NNSA-approved purchasing system to provide purchasing support and subcontract administration. The Contractor shall, when directed by NNSA and may, but only when authorized by NNSA, enter into subcontracts for the performance of any part of the work under this Contract.

5.4 Personal Property Management.

The Contractor shall have a NNSA-approved management system for overall integrated planning, acquisition, maintenance, operation, control, accountability, utilization, and disposal of Government owned personal property.

5.5 Real Property Management.

The Contractor shall manage Government-owned and Contractor-leased real property, to further national interests and to perform NNSA statutory missions. The Contractor shall perform overall integrated planning, acquisition, maintenance, operation, management and disposition of Government-owned real property and Contractor-leased facilities and infrastructure used by the Laboratory. Real property may also be made available to private and public sector entities, including universities, industry, and local, state, and other government agencies, subject to the Contracting Officer's approval. Real property management shall include providing appropriate office space for the NNSA Los Alamos Site Office as requested by the Contracting Officer.

5.6 Information Resources Management.

The Contractor shall maintain the inter-site and intra-site classified and unclassified information system for technical programs, organizational, business and operations functions and for activities including general purpose programming, data collection, data processing, report generation, software, electronic and telephone communications. The Contractor shall provide computer resource capacity and capability sufficient to support (1) Laboratory-wide information management requirements and (2) Laboratory wide classified computing infrastructure. The Contractor shall also maintain a records

management program. The Contractor shall, with Contracting Officer approval, standardize non-scientific software and hardware programs/platforms within the Laboratory for generating and storing electronic information.

5.7 Legal Affairs.

The Contractor shall maintain a legal program to support contract activities including those related to patents, licenses, and other intellectual property rights; subcontracts; technology transfer; environmental compliance and protection; labor relations; and litigation and claims.

6.0 Laboratory Management.

6.1 Self-Assessment Program.

The Contractor shall conduct a self-assessment program that will be used, in part, to assess: (1) the overall performance in Laboratory operations and administration, (2) delivery of scheduled nuclear weapons components and capabilities, and (3) science and technology programs performance. The Contractor's self-assessment program shall be a key element of the Contractor's Assurance System and supports the self assessment report required by the Contract Section H clause entitled "Performance Based Management."

6.2 Audits and Assessments.

The Contractor shall conduct an audit program which provides capabilities for both internal and subcontractor audits and supports external audits, reviews, and appraisals.

6.3 Community Support.

The Contractor shall, with Contracting Officer approval, provide community support to facilitate Laboratory operations, including coordination with the County of Los Alamos. The Contractor shall perform a periodic needs assessment to determine what support to the community is necessary to facilitate Laboratory operations.

6.4 Science and Math Education.

The Contractor shall conduct a science and mathematics education program at the K-12 (precollege) and university levels to increase the nation's competitiveness in the global market, to contribute to developing a diverse, well-educated, and scientifically literate workforce, and to help maintain the nation's world technical leadership. This support may include, with the Contracting Officer's approval, technical assistance; loans of scientific equipment; programs of "hands on" research experience for students, teachers and faculty members; a program of encouraging volunteerism and community service; and cooperative programs.

6.5 Communications and Public Affairs.

In coordination with and approval of the Contracting Officer, the Contractor shall conduct communications, information, public participation, and public affairs

programs including internal and external communications; community involvement and outreach; interactions with the media, businesses, and the scientific and technical community; and liaison and consultation with local, state, Native American, federal agencies and Congressional offices.

6.6 Other Administrative Services.

The Contractor shall provide other administrative services to include operating communications systems; operating transportation and traffic management services, managing and operating a records management system; and operating a systems of records for individuals including those related to personnel radiation exposure information, medical, safety and health; logistics support to the NNSA Los Alamos Site Office, when approved by the Contracting Officer; and, support other NNSA Nuclear Weapons Complex initiatives, when approved by the Contracting Officer.

6.7 Training.

The Contractor shall implement a training and qualification program including general training, orientation, and indoctrination; employee development; educational and professional advancement, and facilities-specific training and qualification. All Laboratory training and qualification programs shall emphasize the environment, safety and health (ES&H), and safeguards and security aspects of job and position responsibilities. The Contractor's training and qualification program shall be an element of the laboratory integrated safety management process. The Contractor shall provide other training programs and opportunities as approved by the Contracting Officer. The Contractor shall ensure the continuing involvement by senior laboratory line management in directing and evaluating the training and qualification program.

7.0 Reports and Other Deliverables.

The Contractor shall prepare, submit, disseminate, or otherwise publish financial, schedule, scientific, and technical performance plans and reports; and other information and deliverables consistent with the needs of the various programmatic sponsors and other customers or as required elsewhere in this Contract or as specifically required by the Contracting Officer.

PART III - SECTION J

APPENDIX C

SPECIAL FINANCIAL INSTITUTION AGREEMENT
FOR USE WITH THE
PAYMENTS-CLEARED FINANCING ARRANGEMENT

Modification Number 2
Contract Number DE-AC52-06NA25396
(87120-001-03)

The contract between Los Alamos National Security, LLC (Contractor) and Wells Fargo Bank, N.A. (Financial Institution) is modified as described herein. Except as modified, all other terms and conditions remain unchanged and in full force and effect. This modification is effective on the date of signature by the last party to sign.

MODIFICATION: This modification is to modify the end date contained in COVENANT 7 of the SPECIAL FINANCIAL INSTITUTION ACCOUNT AGREEMENT FOR USE WITH THE PAYMENT CLEARED FINANCING ARRANGEMENT. All other terms and conditions remain unchanged.

COVENANT (7) is hereby deleted in its entirety and replaced with the following:

(7) This Agreement, with all its provisions and covenants, shall be in effect on the 1st day of June, 2006, and ending on the 30th day of September, 2011 unless earlier terminated as provided in this Agreement.

End of Modification

The undersigned personally assert that they are authorized to execute this release on behalf of the parties.

For FINANCIAL INSTITUTION:
By: Barbara Hackney
Name: Barbara Hackney
Title: Vice President
Date: 9/11/08

For CONTRACTOR:
By: Ruben M Rafferty
Name: Ruben M Rafferty
Title: Prime Contract Chief, LANL
Date: 9/22/08

For THE UNITED STATES OF AMERICA
BY U.S. DEPARTMENT OF ENERGY
Contracting Officer
(U.S. Department of Energy)
9/23/2008
(Date Signed)

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SPECIAL FINANCIAL INSTITUTION ACCOUNT AGREEMENT FOR USE WITH THE PAYMENT CLEARED FINANCING ARRANGEMENT

Los Alamos National Security, LLC.
Contract Number DE-AC52-06NA25396
Department of Energy Account

This Special Financial Institution Account Agreement (hereinafter referred to as "Agreement") entered into this 31st day of March, 2006, between the UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as "DOE") and Los Alamos National Security, LLC, a legal entity existing under the laws of the State of Delaware (hereinafter referred to as the "Contractor") and Wells Fargo Bank, N.A., a national banking association, located at 550 California Street 10th Floor/A0112-102 San Francisco, CA 94104 (hereinafter referred to as the "Financial Institution") and being a member in good standing of the Federal Reserve Bank for general banking services to be performed for the Los Alamos National Laboratory (LANL).

RECITALS

a) On the effective date of December 21, 2005, DOE and the Contractor entered into Agreement(s) No. DE-AC52-06NA25396, or a Supplemental Agreement(s) thereto, providing for a payment cleared financing arrangement.

b) DOE requires that funds transferred to the Contractor thereunder be deposited in a Special Demand Deposit Account (hereinafter referred to as the "Account") at a financial institution covered by Department of the Treasury-approved Government deposit insurance organizations that are identified in Volume I TFM 6-9000.

c) The Account shall be designated "Los Alamos National Security, LLC, Los Alamos National Laboratory, Contract Number DE-AC52-06NA25396, DOE Special Bank Account."

COVENANTS

In consideration of the foregoing, and for other good and valuable considerations, it is agreed that –

(1) DOE shall have a title to the credit balance in the Account to secure the repayment of all funds transferred to the Contractor, and said title shall be superior to any lien, title, or claim of the Financial Institution or others with respect to the Account.

(2) The Financial Institution shall be bound by the provisions of said Agreement(s) between DOE and the Contractor relating to the transfer of funds into and the withdrawal of funds from the Account, which are hereby incorporated into this Agreement by reference, but the Financial Institution shall not be responsible for the application of funds withdrawn from the Account. After receipt by the Financial Institution of written directions from DOE, the Financial Institution shall act thereon and shall be under no liability to any party hereto for any action taken in accordance with the said written directions.

(3) DOE, or its authorized representatives, shall have access to financial records maintained by the Financial Institution with respect to such Account at all reasonable times and for all reasonable purposes, including, but without limitation to, the inspection or copying of such financial records and any or all memoranda, checks, payment requests, correspondence, or documents pertaining thereto. Such financial records shall be preserved by the Financial Institution for a period of six (6) years after the final payment under the Agreement.

(4) In the event of the service of any writ of attachment, levy of execution, or commencement of garnishment proceedings with respect to the Account, the Financial Institution shall promptly notify both the DOE and the Contractor as follows:

Notices to the DOE shall be provided to:

U.S. Department of Energy/NNSA
Financial Services Department
Albuquerque Division Services Branch
P.O. Box 5400
Albuquerque, NM 87185

U.S. Department of Energy/NNSA
Los Alamos Area Office
528 35th Street
Los Alamos, NM 87544

Notices to the Contractor shall be provided to:

Los Alamos National Security, LLC
Chief Financial Officer, Mail Stop P119
P.O. Box 1663
Los Alamos, NM 87545

Los Alamos National Security, LLC
Procurement, Mail Stop P222
Attn: Banking Agreement
P.O. Box 1663
Los Alamos, NM 87545

Notices to the Financial Institution shall be provided to:

Wells Fargo Bank, N.A.
Government, Education and Labor Division
550 California Street
10th Floor/A0112-102
San Francisco, CA 94104

(5) DOE shall authorize funds that shall remain available to the extent that obligations have been incurred in good faith thereunder by the Contractor to the Financial Institution for the benefit of the Account. The Financial Institution agrees to honor upon presentation for payment all payments issued by the Contractor and to restrict all withdrawals against the funds authorized to an amount sufficient to maintain the average daily account collected balance for each calendar month in a net positive position and as close to zero as administratively possible without being negative.

The Financial Institution agrees to service the Account in this manner based on the requirements and specifications contained in the Contractor's Request for Proposal No. 55408-RFP-02, dated May 27, 2003, as amended, which is attached to and incorporated into this Agreement as Attachment A. The Financial Institution agrees that per-item costs, detailed in the form "Schedule of Services and Charges" contained in the Financial Institution's aforesaid proposal will remain constant during the term of this Agreement.

(6) The Financial Institution shall post collateral, acceptable under United States Department of the Treasury Circular 176, with the Federal Reserve Bank in an amount sufficient to collateralize the highest balance in the Account included in this Agreement, less the Department of the Treasury-approved deposit insurance.

(7) This Agreement, with all its provisions and covenants, shall be in effect beginning on the 1st day of June, 2006, and ending on the 30th day of September , 2006 unless earlier terminated as provided in this Agreement.

The Contractor has the option to extend the term of the Agreement for up to two (2) years. This would have the agreement valid through September 30, 2008. Written notification of the option to extend will be provided by the Contractor not less than ninety (90) days prior to the expiration of the Agreement.

(8) DOE, the Contractor, or the Financial Institution may terminate this Agreement at any time within the Agreement period upon submitting written notification to the other parties one hundred eighty (180) days prior to the desired termination date. The specific provisions for operating the Account during this one hundred eighty (180) day period are contained in Covenant 11.

(9) DOE or the Contractor may terminate this Agreement at any time upon thirty (30) days' written notice to the Financial Institution if DOE or the Contractor, or both parties, find that the Financial Institution has failed to substantially perform its obligations under this Agreement or that the Financial Institution is performing its obligations in a manner that precludes administering the program in an effective and efficient manner or that precludes the effective utilization of the DOE's cash resources.

(10) Notwithstanding the provisions of Covenants 8 and 9, in the event that the Agreement between DOE and the Contractor is not renewed or is terminated, this Agreement between DOE, the Contractor, and the Financial Institution shall be terminated automatically upon the delivery of written notice to the Financial Institution by the Contractor.

(11) The Financial Institution agrees that it will at the Contractors unilateral discretion retain the Contractor's Account in full force and effect for an additional ninety (90) day period after the expiration or termination date of this Agreement to allow the Contractor to transition services in the event of a successor. During this ninety (90) day period, DOE shall continue funding the Account in accordance with this Agreement.

Upon expiration, termination or at the conclusion of the Agreement, it is further understood that the Financial Institution shall allow for clearance of outstanding payment items:

(a) The DOE shall place on deposit in the Account sufficient funds to cover all outstanding payment items presented for payment.

(b) The Financial Institution shall maintain collateral in accordance with U.S. Department of Treasury circular 176 the highest balance in the Account, less Federal Deposit Insurance Corporation coverage on the Account.

(c) All service charges shall be consistent with the amounts reflected in this Agreement.

(d) At the conclusion of six (6) months, a complete reconciliation will be performed by the DOE, after which time an account adjustment will be made.

The Financial Institution has submitted the forms entitled "Technical Representations and Certifications," and "Schedule of Services and Charges" which are hereby incorporated by this reference as Attachment B and C respectively. In addition the "Special Financial Institution Account Agreement Statement of Work" are hereby incorporated herein as an integral part of this Agreement as Attachment D.

Unofficial Conformed Copy as of 8/24/12 through Mod No. 196

IN WITNESS WHEREOF the parties hereto have caused this Agreement, which consists of seven (7) pages, to be executed as of the day and year first above written.

THE UNITED STATES OF AMERICA
BY U.S. DEPARTMENT OF ENERGY

Anthony L. Lovato, Contracting Officer
DOE/NNSA, Los Alamos Site Office

(U.S. Department of Energy)

4/28/06
(Date Signed)

Los Alamos National Security, LLC

(Signature of Contractor's Representative)

DIRECTOR
(Title)

5/3/06
(Date Signed)

Wells Fargo Bank, N.A.
(Name of Financial Institution)

Barbara Heebner
(Name of Financial Institution Representative)

Barbara Heebner
(Signature of Financial Institution Representative)

Vice President, Relationship Manager
(Title)

550 California St. (10), San Francisco, CA 94104
(Address)

5/23/06
(Date Signed)

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CERTIFICATE

I, William A. Eklund, certify that I am the Secretary of the corporation named as Contractor herein; that Michael Anastasio, who signed this Agreement on behalf of the Contractor, was then President of said corporation; and that said Agreement was duly signed for and on behalf of said corporation by authority of its governing body and is within the scope of its corporate powers.

William A Eklund, May 12, 2006
(Corporate Seal) (Signature)

CERTIFICATE

I, Lisa L. Mercer, certify that I am ~~the~~ an Assistant Secretary of the corporation named as the Financial Institution herein; that Barbara Heebner, who signed this Agreement on behalf of the Financial Institution, was then Vice President of said Bank; and that said Agreement was duly signed for and on behalf of said Bank by authority of its by laws and is within the scope of its corporate powers.

Lisa L. Mercer 05/24/06
(Corporate Seal) (Signature)

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CONTRACT FLOWDOWN CLAUSES

A.1 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

NUMBER	DATE	TITLE
52.212-4	DEC 2001	CONTRACT TERMS AND CONDITIONS – COMMERCIAL ITEMS

FAR 52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDER – COMMERCIAL ITEMS (Apr 2001) (DEVIATION)

(a) Comptroller General Examination of Record. The Contractor agrees to comply with the provisions of this paragraph (a) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records-Negotiation.
(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to the right to examine any of the contractor's directly pertinent records involving transactions related to this contract.
(2) The Contractor shall make available at its offices at all reasonable times, the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause of to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.
(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.
(b) The Contractor is not required to include any FAR clause, other than those listed below (and as maybe required by an addenda to this paragraph to establish the reasonableness of prices under Part 15), in a subcontract for commercial items or commercial components-

(1) 52.222-26, Equal Opportunity (E.O. 112546);
(2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212);
(3) 52.222-36, Affirmative Action for Workers with Disabilities (29 U.S.C. 793);
(4) 52.247-64, Preference for Privately-Owned U.S.-Flagged Commercial Vessels (46 U.S.C. 1241) (flow down not required for subcontracts awarded beginning May 1, 1996); and
(5) 52.222-41, the Service contract Act As Amended (41 U.S.C. 351, et seq.) Subcontracts for certain commercial services may be exempt from coverage if they meet the criteria in FAR 22.1103-4(c) or (d) (DoD class deviation number 2000-O0006.

(End of Clause)

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A.2 LOBBYING RESTRICTION (ENERGY & WATER DEVELOPMENT APPROPRIATIONS ACT, 2001(NOV 2000))

The contractor agrees that none of the funds obligated on this contract shall be expended directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

Part III – Section J

[Modified by Mod Nos. M051, M102, M156, M165, M174, M182, M187, and 196]

APPENDIX D

LISTING OF KEY PERSONNEL

August 24, 2012

TITLE	NAME
Laboratory Director	Charles McMillan
Deputy Laboratory Director	Elizabeth Sellers
Principal Associate Director, Weapons Programs	Bret Knapp
Principal Associate Director, Operations & Business	Carl Beard
Principle Associate Director, Global Security	Terry Wallace
Principal Associate Director, Science, Technology & Engineering	vacant
Principal Associate Director, Capital Projects	Paul Henry
Associate Director, Plutonium Science & Manufacturing	Jeffrey Yarbrough
Associate Director, Weapons	Vacant
Associate Director, Business Services	Mark Barth
Associate Director, Environment, Safety, & Health	Michael Brandt
Associate Director, Nuclear & High Hazard Operations	Charles Anderson
Associate Director, Project Management	vacant
Associate Director, Maintenance & Infrastructure Planning	James Johnson
Associate Director, Safeguards & Security	Michael Lansing
Associate Director, Environmental Programs	Michael Graham
Associate Director, Threat Identification & Response	W. Scott Gibbs
Associate Director, Chemistry, Life & Earth Sciences	Nancy Sauer
Associate Director, Engineering & Engineering Sciences	Steven Girrens
Associate Director, Experimental Physical Sciences	Susan Seestrom
Associate Director, Information Technology	Carolyn Zerkle
Associate Director, Theory, Simulation & Computation	vacant
Contractor Assurance Officer	vacant
Chief Financial Officer	Glenn Kizer
Chief Prime Contracts	Steve Shook

PART III – SECTION J

APPENDIX E

SMALL BUSINESS SUBCONTRACTING PLAN
[Modified by Modification No. M192]

Name of Contractor: Los Alamos National Security, LLC (LANS)

Address: 105 Central Park Square, Los Alamos, NM 87544

Item/Service: Management and operation of the Los Alamos National Laboratory and associated activities

Period of Contract Performance: June 1, 2006–September 30, 2017

This individual Small Business Subcontracting Plan describes the LANS' approach to involving small business (SB), veteran-owned small business (VOSB), service-disabled veteran-owned small business (SDVOSB), historically underutilized business zone (HUBZone) small business, small disadvantaged business (SDB), and women-owned small business (WOSB) concerns to the maximum extent practicable and to the extent consistent with the government's interest. Preference will be given to northern New Mexico small businesses pursuant to Appendix M, entitled "Regional Purchasing Program". The LANL Small Business Subcontracting Plan is submitted in accordance with FAR19.708 (b), FAR 52.219-8 and 52.219 9.

I. Goals

A. Percentage and dollar Goals

Small business subcontracting goals are usually negotiated annually or on a two-year basis with DOE's Office of Small Disadvantaged Business Utilization (OSDBU) and NNSA. The goals are proposed by LANS and reviewed and approved by NNSA-LASO, and incorporated into the prime contract via approval memorandum as provided to LANS' Prime Contract Office by DOE/NNSA-LASO. Goals are negotiated for the following: SB, VOSB, SDVOSB, HUBZone SB, SDB and WOSB concerns.

B. Method Used to Develop Subcontracting Goals

LANS uses the actual previous fiscal year's total procurement dollars that include all business categories to develop a baseline. Then, using the estimated budget for the succeeding fiscal year that is furnished from the LANS Budget Officer, LANS projects the estimated new fiscal year's procurement base. Next, LANS calculates the total anticipated awards to large business (those projects that small business cannot accomplish) and subtracts this amount from the total estimated procurement base. Next, after deleting the large business long-lead construction, facility and programmatic work, the amount available of estimated small business dollars is identified. Last, LANS looks at long term small business subcontracts and blanket ordering agreements (BOAs) and possible legislative changes to the various small business programs (i.e. WOSB, HUBZone SB, VOSB) and develops recommended percentages for each of the socioeconomic categories.

C. Identifying Small Business Sources of Supply and Services – Market Research

LANS continually identifies and reviews potential sources of supplies and services, including, but not limited to, the following:

- Government Central Contractor Registration (CCR) Dynamic Small Business Search database (formerly PRO-Net)
- State and regional Small Business Administration (SBA) resources
- National Minority Purchasing Council Vendor Information Service
- Research and Information Division of the Minority Business Development Agency in the Department of Commerce
- Trade associations for SB, VOSB, SDVOSB, HUBZone SB, SDB, and WOSB concerns
- Dun & Bradstreet procurement planning directory
- Sponsorship of and/or participation in various local, regional, and national SB trade fairs and conferences
- Membership in and coordination and cooperation with SB organizations, economic development organizations, and commercial and government organizations at the local, state, and national levels

D. Indirect Costs

Indirect costs at LANL are not included in the goals under this small business subcontracting plan.

II. Program Administrator

Title:	Doug McCrary
Address:	P. O. Box 1663, MSP201 Los Alamos, NM 87545
Telephone:	505.667.4419
Facsimile:	505.667.9819
E-Mail:	business@lanl.gov

LANS' small business program manager will ensure that the following activities are performed efficiently and effectively:

- Maintaining source lists of potential SB, VOSB, SDVOSB, HUBZone SB, SDB, and WOSB subcontractors
- Developing and maintaining bidders lists of SB, VOSB, SDVOSB, HUBZone SB, SDB, and WOSB concerns from as many sources as possible
- Seeking other SB concerns when the number of prospective sources is not adequate, using mass media tools such as Internet bulletin boards

- Reviewing solicitations to identify and remove any statements, clauses, etc., which may restrict or prohibit participation of SB, VOSB, SDVOSB, HUBZone SB, SDB, and WOSB subcontractors
- Ensuring that proper documentation is provided by the bid proposal board if an SB, VOSB, SDVOSB, HUBZone SB, SDB, or WOSB subcontractor who provided a low bid is not selected
- Ensuring establishment and maintenance of records on solicitations and subcontract award activity
- Attending or arranging for attendance of company counselors at business opportunity workshops, minority business enterprise seminars, trade fairs, etc.
- Preparing and submitting required semi-annual and annual subcontracting reports
- Coordinating contractor's activities prior to and during Federal agency compliance reviews
- Mentoring SBs currently under subcontract, enhancing their ability to provide timely, cost-effective, quality services
- Facilitating contact between SB suppliers and respective procurement and technical/program personnel
- Advising and training project management personnel on the purposes of the small business subcontracting plan and fostering their support for it
- Attending SB training and monitoring program changes to ensure compliance at LANL
- Reviewing, revising, and amending applicable procedures and instructions
- Keeping records and measuring performance against established goals
- Verifying that subcontracts contain the flowdown clauses pertaining to SB concerns, when required, and maintaining the policies and procedures required by the prime contract
- Reviewing and approving small business subcontracting plans submitted by large businesses, where applicable
- Verifying that lower-tier large business subcontractors submit small business subcontracting plans (when applicable), and the required semi-annual and annual subcontracting reports; and verifying compliance
- Establishing and maintaining contacts and communication with parent organizations and networking with other SB program advocates within these organizations to support, implement, or enhance the LANL SB program
- Maintaining good working relationships with SBA representatives to obtain assistance and coordination in finding capable SBs
- Maintaining a close working relationship with NNSA to ensure that our project objectives and activities are consistent with NNSA programs
- Reporting monthly progress in achieving goals under this program to the Laboratory's Director

III. Equitable Opportunities and Outreach Efforts

The following additional functions will be performed to effectively implement this plan.

A. Outreach efforts to obtain sources:

- A full-time onsite small business program manager serves as a liaison among the SB community, internal acquisition personnel, and the client.
- We plan solicitations (including time for preparation and for development of SOW, quantities, specifications, and delivery schedules) to facilitate SB participation in subcontracting opportunities and solicitation, offer, and proposal activities.
- We establish and maintain contacts with SB trade associations and business development organizations.
- We attend SB, VOSB, SDVOSB, HUBZone SB, SDB, and WOSB business procurement conferences and trade fairs.
- We conduct external workshops, seminars, and training programs to ensure SBs are familiar with the requirements for doing business at LANL.
- We maintain an effective outreach program by sponsoring and attending regional procurement conferences, trade fairs, and other functions to locate additional qualified sources.
- We implement an ongoing “in-reach” program that provides SBs access and exposure to key project planners and managers.
- We request sources from the SBA Commercial Market Representative (CMR) and access the CCR Dynamic Small Business search database when needed.
- We utilize newspapers and magazine ads to encourage new sources.
- We develop a comprehensive SB source list (which includes past performance) that is easily accessible and useful to acquisition personnel.
- We select and qualify SB concerns to perform specific scopes of work.
- We structure the program to help develop the capabilities and quality of services provided by SB suppliers and subcontractors currently working at LANL.
- We use book references, catalogs, source lists, or other reference material to identify SB, VOSB, SDVOSB, HUBZone SB, SDB, and WOSB sources before the acquisitions are placed.

B. Internal efforts to guide and encourage purchasing personnel:

- We conduct internal workshops, seminars, and training programs to ensure that internal customers and acquisition personnel are acquainted with the small business subcontracting plan, our policies, and prime contract requirements.
- We establish, maintain, and use SB, VOSB, SDVOSB, HUBZone SB, SDB, and WOSB source lists, guides, and other data for soliciting subcontracts.
- We monitor activities to evaluate compliance with the subcontracting plan.

IV. Subcontracting Plan Flowdown

LANS incorporates the flow down clause requirements of FAR 52.219-8, Utilization of Small Business Concerns and FAR 52.219-9, Small Business Subcontracting Plan as applicable into subcontracts that offer further subcontracting opportunities. This requires all subcontractors (except SB concerns) who receive subcontracts in excess of $650,000 ($1,500,000 for construction) to adopt a similar plan. The ASM division leader will be responsible for implementing and monitoring this aspect of the small business subcontracting plan.

V. Reports and Surveys

LANS will cooperate in any studies or surveys required by the contracting agency or the U.S. SBA and will submit periodic reports so that the government can determine the extent of compliance by the offeror with the small business subcontracting plan and submit the Individual Subcontracting Report (ISR), formally SF294, and the Summary Subcontracting Report (SSR), formally SF295 using the web-based eSRS at http://www.esrs.gov .

Reporting Period	Report Due	Due Date
Oct 1-Mar 31	ISR	April 30
Apr 1- Sep 30	ISR	Oct 30
Oct 1- Sep 30	SSR	Oct 30

VI. Records and Procedures

The types of records maintained and procedures adopted to demonstrate compliance with the requirements and goals of the small business subcontracting plan include the following:

A. Source lists (e.g., CCR Dynamic Small Business Search database); guides; and other data that identify SB, SDB, WOSB, HUBZone SB, VOSB, and SDVOSB concerns

B. Lists of organizations contacted in an attempt to locate sources that are SB, SDB, WOSB, HUBZone SB, VOSB, or SDVOSB concerns

C. Record on each subcontract solicitation resulting in an award of more than $150,000, are furnished in each subcontract file that indicates:

- Whether SB concerns were solicited and, if not, why not
- Whether SDB concerns were solicited and, if not, why not
- Whether WOSB concerns were solicited and, if not, why not
- Whether HUBZone SB concerns were solicited and, if not, why not
- Whether VOSB concerns were solicited and, if not, why not
- Whether SDVOSB concerns were solicited and, if not, why not
- If applicable, the reason an award was not made to an SB concern
-

D. Records of any outreach efforts to contact trade associations, business development organizations, and conferences, and trade fairs to locate SB, SDB, WOSB, HUBZone SB, VOSB, and SDVOSB sources

E. Records of internal guidance and encouragement provided to acquisition personnel through workshops, seminars, training programs, and incentive awards, and records of performance monitoring to evaluate compliance with the program's requirements

F. On a contract-by-contract basis, records to support award data submitted, including the name, address, and business size of each subcontractor

This small business subcontracting plan is submitted by:

Signed:	
Typed Name:	Doug McCrary
Title:	Acquisition Services Management, Division Leader
Date:	5/22/2012
Phone Number:	505.667.9182

PART III – SECTION J

APPENDIX F

PERFORMANCE GUARANTEE AGREEMENTS

In compliance with Section L-3(d) of the Request for Proposal, Performance Guarantee Agreements for the Los Alamos National Security, LLC parent companies are included herewith:

Bechtel National, Inc.
University of California (The Regents of the University of California)
BWX Technologies, Inc.
Washington Group International, Inc.

Annual Reports for each parent firm the past 3 years are included in an Appendix to Volume I.

PERFORMANCE GUARANTEE AGREEMENT

For value received, and in consideration of, and in order to induce the United States (the Government) to enter into Contract DE-AC52-05NA225396 for the management and operation of the Los Alamos National Laboratory (the "Contract") dated _____, by and between the Government and Los Alamos National Security, LLC (Contractor), the undersigned, **Bechtel National, Inc.** (Guarantor), a corporation incorporated in the State of Nevada with its principal place of business at 5275 West view Drive, Frederick, MD 21703, hereby unconditionally guarantees to the Government (a) the full and prompt payment and performance of all obligations, accrued and executory, which Contractor presently or hereafter may have to the Government under the Contract, and (b) the full and prompt payment and performance by Contractor of all other obligations and liabilities of Contractor to the Government, fixed or contingent, due or to become due, direct or indirect, now existing or hereafter and howsoever arising or incurred under the Contract, and guarantor further agrees to indemnify the Government against any losses the Government may sustain and expenses it may incur as a result of the enforcement or attempted enforcement by the Government of any of its rights and remedies under the Contract, in the event of a default by Contractor thereunder, and/or as a result of the enforcement or attempted enforcement by the Government of any of its rights 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 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 of 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 **July 8, 2005.**

BECHTEL NATIONAL, INC.
(Original signed by. . .)
Craig D. Weaver
Senior Vice President

I, J. Robert Humphries, Assistant Secretary, hereby attest that
Craig D. Weaver, who signed this certificate on behalf of the
Contractor, was then Senior Vice President of said Corporation.

(Original signed by . . .)
J. Robert Humphries

PERFORMANCE GUARANTEE AGREEMENT

For value received, and in consideration of, and in order to induce the United States (the Government) to enter into Contract DE-AC52-05NA225396 for the management and operation of the Los Alamos National Laboratory (the "Contract") dated _____, by and between the Government and Los Alamos National Security, LLC (Contractor), the undersigned, The Regents of the University of California (Guarantor), a corporation incorporated in the State of California with its principal place of business at 1111 Franklin Street, Oakland, CA 94607, hereby unconditionally guarantees to the Government (a) the full and prompt payment and performance of all obligations, accrued and executory, which Contractor presently or hereafter may have to the Government under the Contract, and (b) the full and prompt payment and performance by Contractor of all other obligations and liabilities of Contractor to the Government, fixed or contingent, due or to become due, direct or indirect, now existing or hereafter and howsoever arising or incurred under the Contract, and guarantor further agrees to indemnify the Government against any losses the Government may sustain and expenses it may incur as a result of the enforcement or attempted enforcement by the Government of any of its rights and remedies under the Contract, in the event of a default by Contractor thereunder, and/or as a result of the enforcement or attempted enforcement by the Government of any of its rights 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 is charging, 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 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 of 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 (date) (Original dated June 29, 2005)

THE REGENTS OF
THE UNIVERSITY OF CALIFORNIA

(Original signed by . . .)
ROBERT C. DYNES, PRESIDENT

ATTESTATION INCLUDING APPLICATION
OF SEAL BY AN OFFICIAL OF
GUARANTOR AUTHORIZED TO AFFIX
CORPORATE SEAL

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

I, Patricia L. Trivette, do hereby attest that I am the Secretary of The Regents of the University of California, a corporation, and that Robert C. Dynes is President and a duly authorized Officer of the University.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of this Corporation this 29th day of June, 2005.

(Original signed by Patricia L. Trivette)
Secretary of The Regents
Of the University of California

PERFORMANCE GUARANTEE AGREEMENT

For value received, and in consideration of, and in order to induce the United States (the Government) to enter into Contract DE-AC52-05NA225396 for the management and operation of the Los Alamos National Laboratory (the "Contract") dated _____, **2005**, by and between the Government and **Los Alamos National Security, LLC** (Contractor), the undersigned, **BWX Technologies, Inc.** (Guarantor), a corporation incorporated in the State of **Delaware** with its principal place of business at **2016 Mt. Athos Road, Lynchburg, Virginia 24504-5447**, hereby unconditionally guarantees to the Government (a) the full and prompt payment and performance of all obligations, accrued and executory, which Contractor presently or hereafter may have to the Government under the Contract, and (b) the full and prompt payment and performance by Contractor of all other obligations and liabilities of Contractor to the Government, fixed or contingent, due or to become due, direct or indirect, now existing or hereafter and howsoever arising or incurred under the Contract, and guarantor further agrees to indemnify the Government against any losses the Government may sustain and expenses it may incur as a result of the enforcement or attempted enforcement by the Government of any of its rights and remedies under the Contract, in the event of a default by Contractor thereunder, and/or as a result of the enforcement or attempted enforcement by the Government of any of its rights 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 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 of 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 **July 19, 2005.**

BWX Technologies, Inc.

(Original signed by . . .)
John A Fees, President and COO
BWX Technologies, Inc

CERTIFICATE

I, Charles F. Seabolt, certify that I am the Assistant Secretary of the corporation named as Guarantor herein; that who signed this certificate on behalf of the Guarantor, was then President and a Director of said corporation; that said certificate was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

	(Original signed by . . .)	9 July 2005
(Corporate Seal)	Charles F. Seabolt	Date
	Corporate Secretary	

PERFORMANCE GUARANTEE AGREEMENT

For value received, and in consideration of, and in order to induce the United States (the Government) to enter into Contract DE-AC52-05NA225396 for the management and operation of the Los Alamos National Laboratory (the "Contract") dated _____, by and between the Government and **Los Alamos National Security, LLC** (Contractor), the undersigned, **Washington Group International, Inc.** (Guarantor), a corporation incorporated in the State of **Ohio** with its principal place of business at **720 Park Boulevard, Boise, Idaho**, hereby unconditionally guarantees to the Government (a) the full and prompt payment and performance of all obligations, accrued and executory, which Contractor presently or hereafter may have to the Government under the Contract, and (b) the full and prompt payment and performance by Contractor of all other obligations and liabilities of Contractor to the Government, fixed or contingent, due or to become due, direct or indirect, now existing or hereafter and howsoever arising or incurred under the Contract, and guarantor further agrees to indemnify the Government against any losses the Government may sustain and expenses it may incur as a result of the enforcement or attempted enforcement by the Government of any of its rights and remedies under the Contract, in the event of a default by Contractor thereunder, and/or as a result of the enforcement or attempted enforcement by the Government of any of its rights 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 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

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 of 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 **July 19, 2005.**

Washington Group International, Inc.

(Original signed by . . . .)
Richard D. Parry
Sr. Vice President and General Counsel

ATTESTATION:

CORPORATE SEAL

(Original signed by . . .)
Craig G. Taylor
Corporate Secretary

PART III - SECTION J

APPENDIX G

August 24, 2012

[Modified by Modification No. A009, A015, A018, A019, A021, A027, M033, M041, M042, M046, M056, M062, M069, M078, M103, M133, 150, 157, 165, 177, 183, 192, 196]

LIST OF APPLICABLE DIRECTIVES

In addition to the list of applicable directives listed below, the Contractor shall also comply with supplementary directives, (e.g., manuals) which are invoked by a Contractor Requirements Document (CRD) attached to a directive. Electronic copies of these documents are available at the following Websites:

http://directives.doe.gov/cqi-bin/currentchecklist
http://www.directives,doe.gov/directives/globesearch-adv.html
http://www.nnsa.doe.gov/
http://www.eh.doe.gov/techstds/standard/standard.html
http://int.lanl.gov/orga/pcm/directives/html

DIRECTIVE NUMBER	DATE	DOE DIRECTIVE TITLE	Mod # Date
ANSI 8.22	1997	Nuclear Criticality Safety Based on Limiting and Controlling Moderators	
ANSI 8.23	1997	Nuclear Criticality Accident Emergency Planning and Response	
DOE O 130.1, Attachment 1 CRD	09/29/95	Budget Formulation	
DOE M 140.1-1B, Attachment 1 CRD	03/30/01	Interface with the Defense Nuclear Facilities Safety Board	
DOE O 142.1, Attachment 2 CRD	01/13/04	Classified Visits Involving Foreign Nationals	A019 04/26/07
DOE O 142.2A, Attachment 2 CRD	12/15/06	Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency	M033 01/09/08
DOE M 142.2-1, Attachment 1 CRD	09/04/08	Manual for Implementation of the Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency	M062 01/15/09
DOE O 142.3A, Attachment 1 CRD	10/14/10	Unclassified Foreign Visits and Assignments Program	192 05/21/12
DOE O 144.1 Admin Chg 1, Attachment 1 CRD	11/06/09	Department of Energy American Indian Tribal Government Interactions and Policy	M133 06/11/10
DOE O 150.1, Attachment 1 CRD	05/08/08	Continuity Programs	M103 10/06/09
DOE O 151.1C, Attachment 2 CRD	11/02/15	Comprehensive Emergency Management System	A015 01/25/07
DOE O 153.1, Attachment 2 CRD	06/27/07	Departmental Radiological Emergency Response Assets	M033 01/09/08

DIRECTIVE NUMBER	DATE	DOE DIRECTIVE TITLE	Mod # Date
DOE O 200.1A, Attachment 1 CRD	12/23/08	Information Technology Management **NOTE**: Implementation as cited by PCM-11-366 dated 12/21/11	183 02/06/12
DOE M 200.1-1, Chapter 9	02/15/00	Public Key Cryptography and Key Management	
DOE O 205.1A, Attachment 1 CRD	12/04/06	Department of Energy Cyber Security Management	A019 04/26/07
DOE M 205.1-3	04/17/06	Telecommunications Security Manual	A019 04/26/07
DOE M 205.1-4, Attachment 1 CRD	03/08/07	National Security System Manual	A021 06/11/07
DOE M 205.1-8, Attachment 1 CRD	01/08/09	Cyber Security Incident Management Manual	M069 04/21/09
DOE O 206.1, Attachment 1 CRD	01/16/09	Department of Energy Privacy Program	M103 10/06/09
DOE N 206.4, Attachment 1 CRD	06/29/07	Personal Identity Verification	M033 01/09/08
DOE O 210.2A, Attachment 2 CRD	04/08/11	DOE Corporate Operating Experience Program **NOTE**: Implementation as cited by PCM-11-312 dated 11/17/11 and LASO SO:26CK-397917 dated 11/21/11	183 02/06/12
DOE O 221.1A, Attachment 1 CRD	04/19/08	Reporting Fraud, Waste, and Abuse to the Office of Inspector General	M056 10/08/08
DOE O 221.2A, Attachment 1 CRD	02/25/08	Cooperation With The Office of Inspector General	M062 01/15/09
DOE O 225.1B, Attachment 1 CRD	03/04/11	Accident Investigations	165 05/27/11
DOE O 226.1B, Attachment 1 CRD	04/25/11	Implementation of Department of Energy Oversight Policy	177 10/03/11
DOE O 227.1, Attachment 1, CRD	08/30/11	Independent Oversight Program	183 02/06/12
DOE O 231.1B, Attachment 1 CRD	06/27/11	Environment, Safety, and Health Reporting	177 10/03/11
DOE O 232.2, Attachment 1, CRD	08/30/11	Occurrence Reporting and Processing of Operations Information	183 02/06/12
DOE O 241.1B, Attachment 1 CRD	12/13/10	Scientific and Technical Information Management	177 10/03/11
DOE O 243.1A, Attachment 1, CRD	11/07/11	Records Management Program **NOTE**: Implementation as cited by PCM-12-042 dated 2/29/12	192 05/21/12
DOE O 243.2, Attachment 2 CRD	02/02/06	Vital Records	A021 06/11/07
DOE O 251.1B, Attachment 1 CRD	08/16/06	Departmental Directives Program	A019 04/26/07
DOE M 251.1-1B, Attachment 1 CRD	08/16/06	Departmental Directives Program Manual	A019 04/26/07
DOE O 252.1A, Attachment 1 CRD	02/23/11	Technical Standards Program	165 05/27/11
DOE O 311.1B	02/12/03	Equal Employment Opportunity and Diversity Program	
DOE O 341.1A, Attachment 1 CRD	10/18/07	Federal Employee Health Services	M078 07/01/09

DIRECTIVE NUMBER	DATE	DOE DIRECTIVE TITLE	Mod # Date
DOE O 350.1 Chg 1, Attachment 1 CRD	05/08/98	Contractor Human Resource Management Programs	A018 03/29/07
DOE O 350.2B, Attachment 1 CRD	06/06/11	Use of Management and Operating or Other Facility Management Contractor Employees for Services to DOE in the Washington, D.C., Area	177 10/03/11
DOE O 410.2, Attachment 1 CRD	08/17/09	Management of Nuclear Materials	M133 06/11/10
DOE O 412.1A	04/21/05	Work Authorization System	A019 04/26/07
DOE O 413.1B, Attachment 1 CRD	10/28/08	Internal Control Program	M103 10/06/09
DOE O 413.2B, Attachment 2 CRD	04/19/06	Laboratory Directed Research and Development	A019 04/26/07
DOE O 413.3B, Attachment 1 CRD	11/29/10	Program and Project Management for the Acquisition of Capital Assets	157 01/21/11
DOE O 414.1D, Attachment 1 CRD	04/25/11	Quality Assurance **NOTE**: Implementation as cited by PCM-11-230 dated 9/30/11	177 10/03/11
DOE O 420.1B Chg 1, Attachment 2 CRD	04/19/10	Facility Safety	150 10/05/10
DOE O 420.2C, Attachment 1 CRD	07/21/11	Safety of Accelerator Facilities	177 10/03/11
DOE O 422.1, Attachment 1 CRD	06/29/10	Conduct of Operations	157 01/21/11
DOE G 424.1-1B	04/08/10	Implementation Guide For Use In Addressing Unreviewed Safety Question Requirements	150 10/05/10
DOE O 425.1D, Attachment 1 CRD	04/16/10	Verification of Readiness to Start Up or Restart Nuclear Facilities	150 10/05/10
DOE O 426.2, Attachment 1 CRD	04/21/10	Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities	150 10/05/10
DOE O 430.1B Chg.1, Attachment 2 CRD	02/08/08	Real Property Asset Management	M046 06/11/08
DOE O 433.1B, Attachment 1 CRD	04/21/10	Maintenance Management Program for DOE Nuclear Facilities	150 10/05/10
DOE O 435.1 Chg 1, Attachment 1 CRD	08/28/01	Radioactive Waste Management	
DOE M 435.1-1 Chg 1	06/19/01	Radioactive Waste Management Manual	
DOE O 436.1, Attachment 1 CRD	05/02/11	Departmental Sustainability	183 02/06/12
DOE M 440.1-1A, Attachment 2 CRD	01/09/06	DOE Explosives Safety Manual	M033 01/09/08
DOE O 440.2B Chg 1, Attachment 2 CRD	11/19/06	Aviation Management and Safety	A019 04/26/07
DOE M 441.1-1, Attachment 1 CRD	03/07/08	Nuclear Material Packaging Manual	M056 10/08/08
DOE O 442.1A, Attachment 1 CRD	06/06/01	Department Of Energy Employee Concerns Program	

DIRECTIVE NUMBER	DATE	DOE DIRECTIVE TITLE	Mod # Date
DOE O 442.2, Attachment 1 CRD	07/29/11	Differing Professional Opinions for Technical Issues Involving Environment, Safety, and Health	183 02/06/12
DOE O 443.1B, Attachment 1 CRD	03/17/11	Protection of Human Research Subjects	177 10/03/11
DOE O 452.1D, Attachment 1 CRD	04/14/09	Nuclear Explosive and Weapon Surety Program	M078 07/01/09
DOE O 452.2D, Attachment 1 CRD	04/14/09	Nuclear Explosive Safety	M078 07/01/09
DOE M 452.2-1A, Attachment 1 CRD	04/14/09	Nuclear Explosive Safety Manual	M078 07/01/09
DOE M 452.2-2, Attachment 1 CRD	04/14/09	Nuclear Explosive Safety Evaluation Processes	M078 07/01/09
DOE O 452.3, Attachment 2 CRD	06/08/05	Management of the Department of Energy Nuclear Weapons Complex	A021 06/11/07
DOE O 452.4A, Attachment 1 CRD	12/17/01	Security and Control of Nuclear Explosives and Nuclear Weapons	
DOE O 452.6A, Attachment 1 CRD	04/14/09	Nuclear Weapon Surety Interface with the Department of Defense	M078 07/01/09
DOE O 452.7, Attachment 1 CRD	05/14/10	Protection of Use Control Vulnerabilities and Designs	150 10/05/10
DOE O 452.8, Attachment 1 CRD	07/21/11	Control of Nuclear Weapon Data	183 02/06/12
DOE O 456.1, Attachment 1 CRD	05/31/11	The Safe Handling of Unbound Engineered Nanoparticles	177 10/03/11
DOE O 457.1, Attachment 2 CRD	02/07/06	Nuclear Counterterrorism	A019 04/26/07
DOE M 457.1-1, Attachment 2 CRD	08/10/06	Control of Improvised Nuclear Device Information	A019 04/26/07
DOE O 458.1 Chg 2, Attachment 1 CRD	06/06/11	Radiation Protection of the Public and the Environment **NOTE**: Implementation as cited by LASO BA:30RP-407384 dated 1/5/12 and PCM-12-028 dated 2/9/12	177 10/03/11
DOE O 460.1C, Attachment 1 CRD	05/14/10	Packaging and Transportation Safety	150 10/5/10
DOE O 460.2A, Attachment 2 CRD	12/22/04	Departmental Materials Transportation and Packaging Management	A019 04/26/07
DOE M 460.2-1A, Attachment 1 CRD	06/04/08	Radioactive Material Transportation Practices Manual For Use With DOE O 460.2A	M056 10/08/08
DOE O 461.1B, Attachment 1 CRD	12/20/10	Packaging and Transportation for Offsite Shipment of Materials of National Security Interest	165 05/27/11
DOE O 461.2, Attachment 1 CRD	10/31/10	Onsite Packaging and Transfer of Materials of National Security Interest	165 05/27/11
DOE O 462.1, Attachment 1 CRD	11/10/08	Import and Export of Category 1 and 2 Radioactive Sources and Aggregated Quantities	M069 04/21/09
DOE O 470.3B	08/12/08	Graded Security Protection (GSP) Policy	M062 01/15/09
DOE M 470.4-1 Chg 1, Attachment 2 CRD	03/07/06	Safeguards and Security Program Planning and Management	A015 01/25/07

DIRECTIVE NUMBER	DATE	DOE DIRECTIVE TITLE	Mod # Date
DOE M 470.4-3A, Attachment 1 CRD	11/05/08	Contractor Protective Force	M078 07/01/09
DOE M 470.4-6 Chg 1, Attachment 2 CRD	08/14/06	Nuclear Material Control and Accountability	A015 01/25/07
DOE O 471.1B, Attachment 1 CRD	03/01/10	Identification and Protection of Unclassified Controlled Nuclear Information	177 10/03/11
DOE O 471.3, Attachment 1 CRD	04/09/03	Identifying and Protecting Official Use Only Information	
DOE M 471.3-1, Attachment 1 CRD	04/09/03	Manual for Identifying and Protecting Official Use Only Information	
DOE O 471.5, Attachment 1 CRD	03/29/11	Special Access Programs	177 10/03/11
DOE O 472.2, Attachment 2 CRD	07/21/11	Personnel Security	177 10/03/11
DOE O 475.1, Attachment 2 CRD	12/10/04	Counterintelligence Program	A015 01/25/07
DOE O 475.2A, Attachment 1 CRD	02/01/11	Identifying Classified Information	177 10/03/11
DOE M 481.1-1A Chg 1	09/28/01	Reimbursable Work for Non-Federal Sponsors Process Manual	
DOE O 483.1, Attachment 1 CRD	01/12/01	DOE Cooperative Research and Development Agreements	
DOE M 483.1-1	01/12/01	DOE Cooperative Research and Development Agreements Manual	
DOE O 484.1, Attachment 2 CRD	08/17/06	Reimbursable Work for Department of Homeland Security	A018 03/29/07
DOE O 522.1, Attachment 2 CRD	11/03/04	Pricing of Departmental Materials and Services	
DOE O 534.1B, Attachment 1 CRD	01/06/03	Accounting	
DOE O 551.1D, Attachment 1 CRD	04/02/12	Official Foreign Travel	192 05/21/12
DOE G 573.1-1	10/03/05	Mail Services Users Guide	A019 04/26/07
DOE O 580.1 Chg 1, Attachment 2 CRD	05/08/08	Department of Energy Personal Property Management Program	M056 10/08/08
DOE O 5400.5 Chg 2	01/07/93	Radiation Protection of the Public and the Environment **NOTE:** Removal contingent upon full implementation of DOE O 458.1 Chg 2 as cited by LASO BA:30RP-407384 dated 1/5/12 and PCM-12-028 dated 2/9/12	
DOE O 5480.30 Chg 1	03/14/01	Nuclear Reactor Safety Design Criteria	
DOE O 5639.8A	07/23/93	Security of Foreign Intelligence Information and Sensitive Compartmented Information Facilities	
DOE O 5670.1A	01/15/92	Management and Control of Foreign Intelligence	
DOE HDBK 1169-2003	December 2003	DOE Handbook Nuclear Air Cleaning Handbook (Chapter 8, Appendix A, B, C)	M062 01/15/09
DOE-STD-1027-92 Chg 1	September 1997	Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23 Nuclear Safety Analysis Reports	

DIRECTIVE NUMBER	DATE	DOE DIRECTIVE TITLE	Mod # Date
DOE-STD-1183-2004	April 2004	Nuclear Safety Specialist Functional Area Qualification Standard	
DOE-STD-1186-2004	August 2004	Specific Administrative Controls	M042 04/14/08
DOE-STD-1189-2008	March 2008	Integration of Safety Into The Design Process	M046 06/11/08
DOE-STD-3009-94, Change Notice 3	April 2002	Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facility Documented Safety Analysis	M042 04/14/08
DOE-STD-3011-2002	December 2002	Guidance for Preparation of Basis for Interim Operation (BIO) Documents	
DOE-STD-3013-2004	April 2004	Stabilization, Packaging, and Storage of Plutonium-Bearing Materials	
DOE-STD-3014-96	October 1996	Accident Analysis for Aircraft Crash into Hazardous Facilities	
DOE-STD-3015-2004	May 2004	Nuclear Explosive Safety Evaluation Process	M062 01/15/09
DOE-STD-3016-2006	May 2006	Hazard Analysis Reports for Nuclear Explosive Operations	M069 04/21/09
DOE-STD-3020-2005	December 2005	Specification for HEPA Filters Used by DOE Contractors	183 02/06/12
DOE-STD-5506-2007	April 2007	Preparation of Safety Basis Documents for Transuranic (TRU) Waste Facilities	M078 07/01/09
QC-1, Revision 10	02/10/04	DOE/NNSA Weapon Quality Policy (QC-1) **NOTE**: Not applicable to Fissile and Type B Containers per LASO Letter QA-11-136-ABL dated 4/12/11	165 05/27/11
56XB, Revision 2	02/27/04	Development and Production (D&P) Manual	
NNSA DP G PPBE-001	10/21/11	Defense Programs (DP) Work Breakdown Structure (WBS)	192 05/21/12
NNSA NA-1 SD G 1027	11/28/11	Guidance of Using Release Fraction and Modern Dosimetric Information **NOTE**: Implementation as cited by PCM-12-083 dated 4/25/12	192 05/21/12
NA-1 SD 226.1A	10/17/08	NNSA Line Oversight and Contractor Assurance System Supplemental Directive	M069 04/21/09
NA SD O 350.2	11/16/11	Use of Management and Operating Contractor Employees for Services to NNSA in the Washington DC Area	183 02/06/12
NA SD M 452.3-1	12/10/09	Defense Programs Business Requirements and Processes Manual **NOTE**: Include RMI Chapters **R002, R007, R008, R010** per LASO approval 9/22/11 (Mod 177), RMI Chapter **R016** per LASO approval 6/12/12 and RMI Chapter **R018** per LASO approval 7/23/12 (Mod 196)	M133 06/11/10

DIRECTIVE NUMBER	DATE	DOE DIRECTIVE TITLE	Mod # Date
NA-10 WQAP Manual	03/30/09	NNSA Office of Defense Programs (NA-10) Weapon Quality Assurance Procedures Manual	M078 07/01/09
NAP 14.1-C	05/02/08	NNSA Baseline Cyber Security Program	M062 01/15/09
NAP 14.2-C	05/02/08	NNSA Certification and Accreditation (C&A) Process for Information Systems	M062 01/15/09
NAP 14.3-B	05/02/08	Transmission of Restricted Data Over Secret Internet Protocol Router Network (SIPRNet)	M062 01/15/09
NAP 70.2	07/02/10	Physical Security	157 01/21/11
NAP 70.4	07/02/10	Information Security	157 01/21/11
BOP-003.0404	07/28/04	Requests to Defense Contracting Audit Agency (DCAA) for Audit of M&O Contractor Subcontracts	
BOP-003.08, CRD	05/30/08	Management and Operating Contractor Business Meals and Light Refreshment	M046 06/11/08
NFPA 70E	2009 Edition	Standard for Electrical Safety in the Work Place	150 10/05/10

PART III-SECTION J

APPENDIX H

CONTRACTOR AND PARENT ORGANIZATION COMMITMENTS, AGREEMENTS, AND UNDERSTANDINGS

I.0 COMMUNITY PLAN EXECUTIVE SUMMARY

The LANS team is committed to benefiting the northern New Mexico community. Because we want to optimize the support we will provide to the local community, our plan for grant and services investments that complement those community activities that are allowable under the contract.

Beginning in June 2006, we will implement a 7-year community commitment plan that will invest up in northern New Mexico from fee and parent organization resources. The plan, as will be evident through FY07, will build upon the 63-year investment by the DOE/NNSA and University of California (UC) in the northern New Mexico community, and is structured to provide the greatest benefit to the region in three critical areas—education, economic development, and charitable giving.

Regional Community Philosophy. A consistent, responsive relationship with our neighbors is mutually beneficial. Given the regional dominance of the Laboratory, a strong, vibrant regional economy is vital to long-term Laboratory operations and to the morale of LANL's workforce. Based on this philosophy, our community commitments are aligned to support the Laboratory's mission and strategic objectives, providing mutual benefit and sustainability to both the Laboratory and to the surrounding communities. We believe that local leaders and organizations know best the needs of the community and out community commitment plan reflects this approach.

Regional Community Approach. The LANS Community Commitment Plan invests from fee and parent organization resources into northern New Mexico, the eight northern pueblos, and the State of New Mexico. LANS key personnel will be relationship owners, building a partnership with each constituency that will be a dynamic balance of listening and action. Working with the community and NNSA, we will establish formal metrics for performance, including annual surveys and formal feedback loops to verify alignment with community needs and priorities.

I.1 COMMUNITY COMMITMENT PLAN

To lay the groundwork for our 7-year Community Commitment Plan, the FY07 efforts will be coordinated with allowable regional initiatives, the regional purchasing plan, and the technology commercialization plan to create an overall community investment strategy.

I.1.1 DIRECT COMMUNITY INVESTMENTS

Direct community investments are targeted to the critical areas of education, economic development, and community giving. We use existing local organizations as the conduit for our

direct investments.

I.1.1.1 Education
Beginning in June 2006, we will implement investments in education for the people of northern New Mexico. The commitment will include student scholarships, community grants, student learning and master teachers' support, and professional development in quality processes.

LANS will contribute significant funds to the community. Initial programs will include:

- Matching Funds for the Los Alamos Employees' Scholarship Fund
- Education Outreach Grants
- Math and Science Academy (MAS) Expansion
- Regional Quality Center

In addition, LANS will contribute to programs and causes directly related to workforce development in order to address LANL's future pipeline needs. These include:

- NMHU Endowed Chair
- NNM University and College Collaboration
- NNMC Nursing and Teaching Program

I.1.1.2 Economic Development
Through FY07, we will begin implementation of a program for economic development in northern New Mexico. The commitment will include resources for economic development support, enterprise development, and other infrastructure enhancement that will stimulate entrepreneurialism, business creation, and economic growth in the community. Based on past experience in job creation in the region, investments have been structured to address the unique challenges of economic development in northern New Mexico.

This includes the following discretionary and program investments:

- Economic Development. This investment will build upon LANL's current relationship with the Regional Development Corporation, e.g., providing grant writing assistance and major subcontractor consortium support.
- Enterprise Development. LANS commits to creating an enterprise development system in northern New Mexico. This system will assist communities seeking to grow their economies from within. LANS will help establish this place-based program that works in concert with existing economic development efforts to assist entrepreneurs. Efforts will also be made to align these efforts with LANL's technology transfer initiatives and scientific expertise.

- Northern New Mexico Connect (NNM Connect). LANS commits to foster NNM Connect. NNM Connect is based on the successful UC San Diego Connect (UCSD) program for economic diversification and is widely recognized as the most successful program of its kind to link entrepreneurs to investment funds and to provide startup support. This program will help address the lack of seasoned entrepreneurial business talent in northern New Mexico.

- Technology Maturation. This investment will provide incremental funding for prototype and simple feasibility testing for new applications that will lead to licensing opportunities for new technologies.

I.1.1.3 Community Giving
Beginning in FY07, LANS will continue investing in northern New Mexico's United Way campaign. Last year, the LANL campaign raised over $700,000, resulting in contributions that accounted for over 60% of the total contributions made to United Way in northern New Mexico.

I.1.2 IN-KIND AND OTHER COMMUNITY INVESTMENTS
We will leverage LANS's parent organization resources to provide additional support in education and economic development to northern New Mexico communities.

Out-of-State Tuition and Fee Waiver. This program will apply for any LANS full-time active employee and/or dependent who is accepted to any University of California undergraduate or graduate program. Based on the past 3 years of data, approximately 100 students will take advantage of this program annually. Out-of-state tuition and fee waiver represents a savings of $17,000 per student each year—$1.7 million annually x 7 years = $11.9 million.

Other Out-of-State Tuition and Fee Waiver Scholarships. Scholarships administered by the Los Alamos Foundation will be provided to any northern New Mexico student graduating from high school who is accepted to any University of California undergraduate program. Out-of-state tuition and fee waiver represents a savings of $17,000 per student annually.

Project Management Services. Building on the existing volunteer spirit of LANL employees, we anticipate that LANS employees will volunteer time after work hours and on weekends to support community projects, such as school construction, community centers, and research parks. Services would include project management, construction management, project controls, scheduling, and inspection services. Data has shown that these professional services save the community 40% of overall project costs that can be reinvested into more project space or as a savings to a community.

Small Business Assistance Program with State Gross Receipt Tax (GRT) Credit. New Mexico Law provides for a $1.8M tax credit (per year) to laboratories for providing technical services assistance to small business, LANS commits to participate in this program.

It is the purpose of the Laboratory partnership with Small Business Tax Credit Act to bring the technology and expertise of the national laboratories to New Mexico small businesses to promote economic development in the state, particularly in rural areas.

Assistance will be rendered in compliance with state regulations and may include the transfer of technology, including software and manufacturing, mining, oil and gas, environmental, agricultural, information and solar, and other alternative energy source technologies. Assistance also includes non-technical assistance related to expanding the New Mexico base of suppliers, including training and mentoring individual small businesses; developing business systems to meet audit, reporting, and quality assistance requirements; and other supplier development initiatives for individual small businesses.

I.2 BENEFITING THE COMMUNITY – INTEGRATION OF COMMUNITY INITIATIVES
The Community Commitment Plan activities through FY07 are structured to work in conjunction with allowable regional initiatives to support an overall community investment strategy, including a regional purchasing program and technology commercialization.

- Partnering With and Understanding our Tribal Communities
- Education Outreach
- Strengthening and Providing Leadership in Support of Small Business and Subcontractor Councils

LANS has crafted this integrated Community Commitment Plan based on our parent organizations' solid track record of partnering and contributing to the communities in which we work.

LANS's partners—Bechtel, University of California, BWXT, and WGI—have found that investing in local communities is good business. Partnering with the community smoothes the way for program and project implementation; provides a skilled, local, and knowledgeable resource base; and promotes economic stability in the area. By committing funds and technical and management resources, these firms benefit educational and economic development in communities worldwide.

PART III - SECTION J

APPENDIX I

DIVERSITY PLAN GUIDANCE

With regard to the Contract Section I Clause entitled "Diversity Plan", this Appendix provides guidance to assist the Contractor in understanding the information being sought by the Department for each of the clause's Diversity elements. If the Contractor's current policy or procedure already addresses the following elements, the Contractor need only provide a copy of the policy or procedure to the Contracting Officer and identify the applicable policy or procedure and applicable page number(s).

Work Force

This Contract includes clauses on Equal Employment Opportunity (EEO) and Affirmative Action (AA). The Contractor's Diversity Plan should describe the means by which the Contractor's policies, or plans for implementation of these clauses in its operations, establish, meet, and maintain result-oriented EEO and AA programs in accordance with the requirements contained in the clauses. The Contractor's Diversity Plan should also describe how the Contractor's organization includes or plans to include elements/dimensions of diversity that might enhance such programs.

Educational Outreach

The Contractor's Diversity Plan should describe the means by which the Contractor's policies or plans provide Contractor employees an opportunity to improve their employment skills and opportunities. Examples of these programs could include: educational assistance allowance, provision for outside training programs either during or outside regular work hours, and executive training programs for non-executive employees; and, how the Contractor plans to participate in any program supporting Historically Black Colleges and Universities, Hispanic Serving Institutions, and Native American Institutions. The Contractor's Diversity Plan should describe the Contractor's strategies to foster relationships with regional educational institutions and with other institutions of higher learning to increase their participation in federally sponsored programs through subcontracting opportunities, research and development partnerships, and mentor-protégé relationships. The Contractor's Diversity Plan should also identify actual or planned cooperative programs, which encourage under represented students to pursue science, engineering, and technology careers.

Community Involvement and Outreach

This Contract includes a clause entitled "Community Commitment" that deals with (1) recognizing the diverse interests of the region and its stakeholders, (2) engaging regional stakeholders in issues and concerns of mutual interest, and (3) recognizing that giving back to the community is a worthwhile business practice. The Contractor's Diversity Plan should describe

the means by which the Contractor's policies or plans meet or are consistent with the above interests. Examples of activities in support of these interests could include: support, through direct sponsorship or individual employees available to work with the specific local community activity; support for science, mathematics and engineering education; support for community service organizations; assistance to Governmental and community service organizations and for equal opportunity activities; community assistance in connection with work force reduction plans; and strategic partnerships with professional and scientific organizations to enhance recruitment into all levels of the organization.

Subcontracting

The Contract contains the Clause entitled "Small Business Subcontracting Plan" and other small business related clauses. The Contractor's Diversity Plan may discuss outreach activities for enhancing subcontracting opportunities for small business concerns, and the means by which the Contractor's policies or plans meet the requirements contained in these clauses. The Contractor's Diversity Plan may also identify actual or planned participation in the Department's Mentor-Protégé Program.

Economic Development (Including Technology Transfer)

Many of the Department's Contracts include clauses dealing with Technology Transfer. Planning or activities developed under such clauses may apply to this element of the Contractor's Diversity Plan. Additionally, some of the subcontracting activities undertaken or planned by the Contractor with small business concerns for the purpose of assisting the economic development of or transferring technology to such a business should be identified in the Contractor's Diversity Plan. The Contractor's Diversity Plan should identify the means by which the Contractor's planned activities relate to promoting economic diversification of the local community.

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 Contractor should address how the Contractor's policies or plans meet the following interests: (1) avoiding profiling based on race or national origin; (2) providing informational or educational programs that ensure managers and employees understand these issues; (3) providing employees with avenues for raising issues or concerns about profiling; (4) using education, training, and community outreach to partner with its work force and with established advocacy groups to recruit, retain, and promote a diverse work force and to review administrative processes that may impact achievement of a truly diverse work force and work place; and (5) holding management and leadership responsible and accountable for performance under the diversity plan, for example: performance appraisals, compensation, promotions, etc. The Contractor's Diversity Plan should identify 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 Contractor's Diversity Plan should also identify procedures intended to expedite timely

resolution of adverse actions. Methodologies should also be included for benchmarking, sharing best practices, or lessons learned in the prevention of prohibited profiling, as well as, the use of forums available to employees for expressing concerns or issues about prohibited profiling practices in the workplace.

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APPENDIX J

ALL IN FORCE BILATERAL AGREEMENTS

The **All In Force Bilateral Agreements** are electronically accessible in portable document format (pdf) from the DOE Office of Scientific and Technical Information database located at the following internet site: www.osti.gov

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APPENDIX K

SENSITIVE FOREIGN NATIONS CONTROL

1. Pursuant to the Contract Section I Clause entitled "Sensitive Foreign Nations Controls," "sensitive foreign nations" is one of the countries listed below:

Algeria	Armenia
Azerbaijan	Belarus
China (People's Republic of)	Cuba
Georgia	Hong Kong
India	Iran
Iraq	Israel
Kazakhstan	Kygyrstan
Libya	Moldova
North Korea (Democratic People's Republic of)	Pakistan
Russia	Sudan
Syria	Taiwan
Tajikistan	Turkmenistan
Ukraine	Uzbekistan

Note: The above list is current through 31Mar05.

2. Due to the dynamic nature of world events, other countries may, at any time, become sensitive. Therefore, caution should be exercised with citizens of countries not listed above to assure that sensitive information, although unclassified in nature, is not inadvertently disclosed. This would include nuclear and other U.S. technology and economic information. The Contracting Officer may (i) update the above list by providing the Contractor a periodic written notice, (ii) update the above list via a unilaterally Contract modification, or (iii) if the Contractor is granted access to the NNSA Service Center Intranet, direct the Contractor's attention to the list as updated and included in the following website http://www.al.gov/ci/sensitiv_country.htm.

3. The Contract's Appendix G "List of Applicable Directives", DOE Order 142.3 "**UNCLASSIFIED FOREIGN VISITS AND ASSIGNMENTS PROGRAM"**, Attachment 3 contains definitions associated with DOE's Unclassified Foreign Visits and Assignments Program**.**

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APPENDIX L

REGIONAL INITIATIVES

(a) General.

(1) This Appendix L describes the commitments of the National Nuclear Security Administration (NNSA) and the Contractor to ensure that the Los Alamos National Laboratory (the Laboratory) is a sound corporate citizen in northern New Mexico. The costs incurred in performing these commitments will be allowable under this Contract, unless a contrary intent is expressed herein or elsewhere in the Contract. NNSA's commitments are subject to the availability of funds that can be expended for this purpose.

(2) NNSA and the Contractor are charged with carrying out unique and critical national missions at the Laboratory. The Laboratory has benefited from its location in northern New Mexico and from the workforce and other resources provided by the region. The Laboratory has in turn had a significant and continuing impact on the region. The regional economy has developed in a climate characterized by the dominance of the Laboratory and other government-funded activities. In recognition of this impact, NNSA supports a number of outreach activities in northern New Mexico as allowable costs under the Contract. It is recognized that additional efforts are necessary to ensure that the overall impact of the Laboratory, as a major employer and business institution, is positive.

(3) To achieve this end, the Parties have committed to pursue initiatives designed to make a contribution to the economic diversification of the region in order to reduce the region's economic dependence on federal expenditures. Success of these initiatives will depend on an effective partnership among NNSA, the Contractor, and governments, educational institutions, and businesses in the region.

(4) With the exception of those activities required by statute or existing agreements, NNSA will not prescribe which outreach (e.g., educational, economic development, charitable) and assistance activities in which the Contractor shall engage in.

(b) Regional Educational Outreach Programs.

The Contractor shall conduct a wide variety of science education and outreach programs at the Laboratory with programmatic funding from NNSA. The objectives of these programs include teacher enhancement, student support, curriculum enhancement, educational technology, and public understanding of science. In addition, the Contractor may seek Contracting Officer approval to incur other reimbursable costs for other

educational outreach activities such as providing the services of Laboratory employees to schools, colleges, and universities in the State of New Mexico. Pursuant to the provisions of the National Defense Authorization Act, the primary management and operations contractor shall provide $8.0 million in each fiscal year to the Los Alamos Public School District to support public elementary and secondary education.

(c) Community Technical Assistance.

The Contractor is authorized to conduct a Community Technical Assistance program to provide access by regional businesses, regional municipalities, institutions, and communities to Laboratory resources provided that such assistance (1) does not duplicate services provided by other entities, or (2) compete with the private sector. The costs of such program are allowable.

The Contractor is also authorized to provide Community technical assistance when it contributes to the enhancement of infrastructure for Northern New Mexico municipalities, regional businesses and communities; when it has a broad regional impact; when it is anticipated that the activity assisted will become self-sustaining; when it demonstrably leverages other resources from regional partners; or, when it is a model or test bed for applications outside the region.

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APPENDIX M

[Modified by Modification Nos. A022, M056]

REGIONAL PURCHASING PROGRAM

Los Alamos National Security, LLC (LANS) is committed to building a strong supplier base in northern New Mexico businesses and the local Native American pueblos and tribes in the purchases of goods and services. Since 1995, through its procurement policies and a regional purchasing program, the Laboratory has strengthened regional business enterprise, stimulated greater regional employment and infrastructure, increased the business tax base in northern New Mexico, and has worked hard to reduce regional dependence on federal investment. This Program is hereby enhanced and provides more substantive preferences to northern New Mexico businesses and local Native American pueblos and tribes, such as a pricing preference, supplier assistance, regional procurement advisory efforts, and a sustainable procurement strategy.

In fiscal year 2006, LANL procured $495 million or 54% of its total procurement volume of $922 million from New Mexico suppliers and contractors. Of those two figures, $380 million was purchased from northern New Mexico suppliers and contractors, both small and large businesses. This $380 million is up from the $202 million that was purchased in FY1996 from Northern New Mexico businesses.

The LANS team appreciates the Laboratory's impact on the local and regional economy, and is committed to benefiting the northern New Mexico Community (which includes Taos, Santa Fe, Rio Arriba, Sandoval, Mora, San Miguel, and Los Alamos Counties, and the eight regional Pueblos of Nambe, Picuris, Pojoaque, San Ildefonso, San Juan, Santa Clara, Taos, and Tesuque) in the future.

The LANS Regional Purchasing Program in conjunction with the LANS Community Commitment Plan will contribute to the continued economic development of northern New Mexico while continuing to meet NNSA program expectations.

LANL has made and will continue to make efforts to evaluate the necessity to have certain services performed on site or whether it is feasible and/or cost-effective to outsource these activities. As institutional contracts come up for renewal, LANL will review the scopes of work to determine how best to meet mission requirements, while taking the local economy and the local business community into consideration. LANL has already accomplished this regarding some fabrication and machining via the use of Rapid Response Blanket Contracts, small construction and design projects (via Blanket Ordering Agreement's), facility repair and maintenance, vehicle maintenance, etc.

The following principles and practices are designed to enhance the Laboratory's Regional Purchasing Program. These principles and practices are geared toward supplier development by helping build the capability, competency, and capacity of the local business community to enable

them to provide competitive goods and services to the Laboratory and improve their ability to serve other customers locally, regionally and nationally.

These principles and practices will be implemented by incorporation into the Acquisition Services Management Division policies and procedures (i.e. Acquisition Procedures), as appropriate.

(1) Northern New Mexico (NNM) purchasing preference. LANS will maximize procurement opportunities for NNM businesses whenever possible.

A NNM business concern is a business that is actively engaged in doing business in NNM, has an operative business location in NNM, and uses labor from NNM. To meet these requirements, a business must be able to demonstrate, if and when requested, through the submission of New Mexico gross receipts tax and unemployment compensation tax forms or otherwise, that for the calendar year preceding the submission of its bid/offer:

(a) it has been properly authorized to do business and has been operating in NNM with a staff of three or more full time equivalent employees (of which 51% must reside in NNM), and that it currently has a facility in NNM that can support the business activity contemplated by the Statement of Work / Scope of Work; or

(b) it has historically operated in NNM with two or less full time equivalent employees who reside in NNM, it is independently owned (i.e., its owner(s) exercise(s) close control over operations and decisions which are not subject to control or the power to control by others), its majority ownership interest is held by residents of NNM, it has been properly authorized to do business in NNM and it currently has a facility in NNM that can support the business activity contemplated by the Statement of Work / Scope of Work.

In accordance with its Small Business Subcontracting Plan, LANS will give preference to NNM small businesses for acquisitions exceeding the LANL competitive threshold by adding a 5% adjustment factor to be applied to the proposed total evaluated bid/cost of those qualified suppliers whose businesses do not meet the definition of a NNM small business concern. This pricing preference will be flowed down via LANS subcontract clauses in subcontracts and purchase orders with a value of $5 million or greater. Subcontractors and suppliers with such subcontracts and purchase orders will be required to report achievements on a semi-annual basis to their LANS Procurement Specialist.

(2) New services. Newly required services will be pursued via subcontracts, unless such services are required to be performed by Laboratory employees. LANS will determine whether LANS possesses the necessary skills at LANL or whether it is an economic or programmatic advantage to develop said skills internally prior to pursuing any subcontract solicitation or award.

(3) Business alliances. LANS will actively participate with local and regional business alliances and associations, including but not limited to the Northern New Mexico Supplier Alliance, Small Business Development Centers, Minority Business Development Centers, the New Mexico 8(a) and Minority Business Association, Regional Chambers of Commerce and others that will enable development of regional small business suppliers of goods and services that are normally procured by LANL to help prepare them to compete effectively for Laboratory subcontracts and purchase orders. These business alliances may include training and mentoring programs and/or encouraging the participation in regional trade associations which will better enable regional businesses to build viability, capacity and sustainability, to allow them to better satisfy Laboratory and other customer needs and/or requirements. This will include encouraging businesses to form their own mentor-protégé programs, participate in any LANL mentor-protégé programs, participate in the Sandia National Laboratories Mentor Protégé Program, or the SBA 8(a) mentor-protégé program.

(4) Assistance. LANS will make prospective regional suppliers aware of LANL sponsored supplier forums, similar to the recent February 8, 2007 forum, aimed at focused training on proposed LANL requirements, forecasted opportunities, and how best to prepare themselves to compete on LANL procurements. Said forums will be held on a semi-annual basis and will also focus on forecasted business opportunities, how to do business with LANL, and matchmaking/ teaming events between large and small businesses on large and complex LANL requirements. LANS will also endeavor to make prospective regional suppliers aware of any assistance that may be available from associations such as the Northern New Mexico Supplier Alliance (NNMSA), Regional Development Corporation (RDC), Small Business Development Centers (SBDC's), the Los Alamos Commerce and Development Corporation (LACDC), NM 8(a) and Minority Business Association, or other entities that will allow regional suppliers to better operate a successful business, build capacity and sustainability, and network among each other and learn to compete in markets other than LANL. Some examples include, but not limited to, utilizing an independent third party auditor by small businesses that do not have the capability or the capacity to maintain and internal audit activity; getting assistance on obtaining appropriate SBA certifications or obtaining GSA contracts, co-sponsoring more matchmaking events with small and large businesses on major procurement packages that are conducive to small business set-asides, such as the recent VMS/Staff Augmentation matchmaking event; sponsoring specific forums for substantive acquisition changes such as subcontract templates, security requirements, new ES&H plans, etc.

In addition, LANS (through the Community Program Office) will implement, in coordination with Sandia National Laboratories, the New Mexico Small Business Assistance Program. The Program, jointly managed by the two laboratories, will be a mechanism in which technical assistance will be provided by the laboratories to the small business community. This New Mexico tax credit program will enable the laboratories to assist small business in strengthening their business capability by addressing their technical challenges.

(5) Regional procurement advisory efforts. LANS is actively participating with regional associations such as the Northern New Mexico Supplier Alliance (NNMSA) and the NM 8(a) and Minority Business Association regarding the status of this Program. For example, LANS partnered with both organizations in November 2006 to discuss how best to create a predictable business climate, that included such topics as 1) enhanced STR training; 2) consultation with association leaders to identify qualified suppliers; 3) communicating changes to policies and procedures clearly to suppliers, 4) promoting economic development in the region; etc.

LANS will also convene short term Business Advisory Committees (i.e. focus groups) to discuss key LANL business and operational issues and to listen to community perceptions regarding the affects of specific LANL business practices on the regional economy and business community. LANL will invite a cross section of known experts and key stakeholders to participate in the periodic Business Advisory Committees. The focus groups will be convened as deemed beneficial.

In addition, LANL will convene quarterly meetings of community stakeholders, such as the recent Regional Community Leaders Breakfast meeting, to brief the business community on the status of the LANS Community Commitment Plan, which includes LANS investments in education, community giving, and economic development. This Program is one component of the Laboratory's economic development strategy. These quarterly meetings will also include opportunities for LANL leadership to bring the community up to date on various laboratory challenges and issues as well as serve as an opportunity to hear from regional constituents.

(6) Long-term subcontracts. When appropriate, LANS will award purchase orders and subcontracts for multiple-year terms to meet long term programmatic requirements for products and services and create more stable business relationships with regional strategic suppliers, such as the Blanket Ordering Agreements that will replace the legacy JIT subcontracts.

The LANS procurement strategy on commodity purchases is to maximize Blanket Ordering Agreements to the maximum extent possible. Competition will be used to ensure best value for LANL and the Government. LANS is committed to providing small and regional local businesses the opportunities to compete for LANL's business, which will include the pricing preference to regional suppliers and subcontractors.

In addition, all subcontracts and purchase orders are being reviewed to ensure that the laboratory and government are receiving value for their money. One of the initiatives is to consolidate scopes of work wherever possible, both to decrease the cost of administration and to leverage the dollars more effectively. This may result in fewer subcontractors, but with larger scopes and values which in itself creates more stable business relationships for regional strategic suppliers. A focus will remain to maximize small business participation on all procurement opportunities via teaming arrangements and matchmaking events as discussed previously.

LANS will direct prospective suppliers to the U.S. Small Business Administration and other financial entities referenced in the LANL Small Business Resource Guide (2006) that are in the business of making capital available to commercial sources.

(7) Subcontractor transitions. In any re-competition of its two major on-site support subcontractors (currently KSL and PTLA), LANS will require any and all offerors to submit technical and cost proposals that will maximize the stability of the workforce and to assure continuity in operations. The pricing preference cited herein will flow down to any new subcontracts that exceed $5M that may result from any re-competition. Transition plans shall be submitted for LANS approval prior to subcontract awards.

(8) Financial incentives. LANS will continue to encourage its two major support subcontractors (KSL and PTLA), through performance goals tied to financial incentives, to further subcontract in a manner that to the maximum extent practicable promotes regional economic diversification.

In addition, with the consent of NNSA, LANS will plan for, and include the submittal and evaluation of "Subcontractor Regional and Community Development Plans" as part of applicable solicitations and resulting awards for subcontracts valued at $5 million and above. A Consortium of Major LANL Subcontractors and the Regional Development Corporation will be available to assist successful subcontractors develop "Subcontractor Regional and Community Development Plans" and also be available for membership to assist and leverage economic resources that will promote regional economic diversification in the seven counties and pueblos listed herein. The Consortium of Major Subcontractors is an independent organization consisting of LANL major subcontractors interested in leveraging their resources to create greater economic and community impact in the northern New Mexico Community. LANS is not a member of the Consortium, however, representatives from LANL's Community Relations Office and the Small Business Program Office are invited by the Consortium to attend quarterly meetings for informational and interactive purposes only.

(9) Importing new businesses. LANS will actively participate with the Regional Development Corporation and local chambers of commerce on practices (e.g. forecasting, training, technology transfer, etc.) intended to attract businesses to northern New Mexico where regional capabilities do not exist. LANS will also be an active participant of the quarterly Regional Chamber meetings, similar to the February 1, 2007 meeting, to communicate LANL's procurement strategies, forecasted opportunities, and other information as may be requested by Chamber representatives.

(10) Subcontracting for research at New Mexico colleges and universities. LANS stands by the commitment made in its proposal to engage New Mexico colleges and universities for acquiring research efforts in support of Laboratory programs. LANS will pursue a streamlined process for acquiring research efforts in support of Laboratory programs from New Mexico colleges and universities. This effort will be consistent with the LANL's recently created Institute for Advanced Studies (and the university partnerships contained within the Institute).

Measuring Program success. Program success will ultimately be measured by regional economic indicators, including the number of companies positively impacted via the pricing preference, new services acquired via subcontract as opposed to performed in-house, impact of LANS sponsored supplier forums, impacts or deliverables brought about by the Business Advisory Committees, customer/stakeholder surveys and other program impacts that bring about economic diversification.

LANS will measure the following:

- number of times a northern New Mexico small business is solicited,
- number of times a northern New Mexico small business responds to a solicitation,
- the number of times a northern New Mexico small business is solicited, responds and is successful based on the pricing preference, and
- the number of times a northern New Mexico small business is solicited, is responsive and awarded a purchase order/subcontract without the pricing preference playing a factor.

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APPENDIX N

TECHNOLOGY COMMERCIALIZATION

(a) Purpose. The Technology Commercialization (TC) Program described in this Appendix supports, in part, other contract conditions as they relate to:

(1) The transfer of new and emerging technologies between the Laboratory and private industry to enhance the Laboratory's ability to meet mission requirements and improve the economic environment in which the Laboratory operates and further the industrial competitiveness of the United States; and

(2) The development of improved mechanisms for the utilization of Laboratory technologies to stimulate new business startups, attract entrepreneurs, create alternative job opportunities, and attract businesses and capital to the region while also continuing to serve the nation as a whole.

(b) TC Program Description.

(1) Commercialization of Laboratory technology is to be promoted nationally and within northern New Mexico through the following mechanisms:

(i) Research, technology development, and technical assistance efforts by the Laboratory for entities other than the federal government;

(ii) Efforts that support the deployment of technology consistent with the objectives of this Appendix and complementary to the missions of the Laboratory;

(iii) Access to Laboratory facilities, equipment, and intellectual property through Designated User Facilities, Technology Deployment Centers, and licenses or other NNSA-authorized agreements;

(iv) Support new and small business enterprises within northern New Mexico utilizing Laboratory technology, including those enterprises formed by current Laboratory employees, in accordance with, and consistent with conflict of interest requirements as described in this Appendix; and

(v) Provide special assistance to those persons interested in commercializing Laboratory technologies with the greatest market-place potential. This special assistance will include such activities as market analyses of the technologies and services of Laboratory-supported business consultants.

(2) The activities listed above will be performed on a non-interference basis with any NNSA, DOE or other Federal Government directed and funded work of the Laboratory, within the general scope of work of the Contract's Statement of Work, and in accordance with the terms of the Contract.

(c) TC Program administration. The Contractor will maintain a Technology Commercialization Office (TCO) at the Laboratory to support and promote industrial partnering activities.

(1) TC Program Manager. The Laboratory Director is responsible for appointing a Technology Commercialization Program Manager who will be responsible for day to day operations and the conduct of the TC Program in accordance with this Appendix and assuring that the TCO has access to resources that include qualified, experienced professionals in the fields of contract administration, marketing, R&D program management, and technology and intellectual property licensing.

(2) Technology Commercialization Advisory Board. The Laboratory Director is responsible for appointing a Technology Commercialization Advisory Board, and its chair, representing both national and regional interests, and which will draw upon experts from the fields of finance, manufacturing, business, academia and government. The Technology Commercialization Advisory Board will advise the Program Manager in setting objectives, goals, and priorities for the TCO. The Technology Commercialization Advisory Board will be invited to participate in program reviews of the TCO.

(3) Technology Development Investment.

(i) NNSA has agreed to allocate as an item of Laboratory overhead $1,000,000 annually, which in addition to any funds from external sponsors, will fund TC Program activities. In the event that such activities generate revenues, such revenues will be added to the annual NNSA allocation or be otherwise used consistent with the terms and purposes of this Contract.

(ii) The Contractor may also use its own funds for non-federal work, either as advance funding or for continuation of work should a non-federal work for others sponsor fail to fully fund its project. However, such a circumstance is limited to the term and scope of the original work for others agreement. Such Contractor funds are in addition to, and not limited by, the annual NNSA allocation stated above.

(d) Coordination with NNM RDC. The Northern New Mexico Regional Development Corporation (RDC) was established to help minimize social and economic impacts on north central New Mexico resulting from Laboratory downsizing. The Contractor will cooperate with the RDC on strategies to reduce the dependence of the region on the Laboratory, support regional economic diversification, and build valued partnerships

with surrounding communities. The RDC will be invited to designate a representative to be a member of the Technology Commercialization Advisory Board.

(e) Third Party Agreements. The TCO may utilize external firms and consultants with recognized experience in new business formation, marketing, finance, and licensing to assist in executing the responsibilities of the TCO. To the extent permitted by law and the terms of this Contract, such firms may be retained on a profit-sharing or commission basis to provide commercial market incentives to successful commercialization of Laboratory technologies.

(f) Pricing.

(1) The Laboratory's methodology for determining cost charged for research and technical consulting efforts funded from non-federal sources located in northern New Mexico (which includes Taos, Santa Fe, Rio Arriba, Sandoval, Mora, San Miguel, and Los Alamos Counties, and eight Pueblos of Nambe, Picuris, Pojoaque, San Ildefonso, San Juan, Santa Clara, Taos, and Tesuque) will ensure that this work is not unduly burdened with overhead costs incurred for the primary benefit of Government programs. "Non-federal sources" excludes non-federal entities using federal procurement contract funds (as the term "procurement contract" is described in 31 U.S.C. § 6303), except as approved by the Contracting Officer.

(2) For private businesses located in northern New Mexico, the Laboratory will ensure that each business has: (i) a New Mexico tax number, (ii) a *bona fide* northern New Mexico place of business, and (iii) certifies that the results of the work are expected to aid in retaining or creating employment in northern New Mexico.

(3) Pricing of work with public sector entities under this section will be limited to state agencies; local government agencies and tribal governments located in northern New Mexico; and school districts located in northern New Mexico.

(4) The amount of overhead cost not related to the scope of work for these efforts will be taken into consideration in determining the appropriate overhead rates applied to such work. Such overhead rates are subject to review by NNSA.

(g) Litigation, Claims and Indemnification. The operations of the TCO will be subject to the same terms and conditions as other operations of the Contractor under this Contract.

(h) Intellectual Property. In addition to the provisions of the Contract's Section I Clauses entitled "Technology Transfer Mission" and "Patent Rights – Management and Operating Contracts", the following are supplemental provisions for the purpose of this Appendix:

(1) Retention of Title. The Contractor will assign or retain title to intellectual property generated by Laboratory employees in the course of non-federal work, in accordance with Class Waiver provisions and guidance provided by the NNSA

Patent Counsel, and based on the best interests of the technology transfer program of NNSA and the Laboratory.

(2) Equity Participation. Equity may be accepted in lieu of license royalties or fees in accordance with published Contractor policies governing such acceptance. Such policies shall be provided to the NNSA Patent Counsel before they are to be issued or modified for concurrence.

(i) Entrepreneurial Leave of Absence.

General. In furtherance of the activities described in the Program Description, the Contractor may authorize entrepreneurial leave for full time or part time regular employees who are involved in the transfer of Laboratory technology to the private sector to allow such employees to maintain their ties with the Laboratory and to provide them access to Laboratory benefits and positions. The authorization of entrepreneurial leave is subject to the Contractor's "Leave Without Pay" policies. If the employee so desires, and the Contractor agrees, the employee may terminate employment rather than take an entrepreneurial leave of absence and receive the same reemployment rights and benefits as if the employee were on entrepreneurial leave.

(j) Conflicts of Interest.

(1) The participation of Laboratory employees in the process of technology transfer and commercialization is essential to meeting the mission objectives of both the Contractor and NNSA. It is acknowledged that it is reasonable for Laboratory employees to participate in such activities in both their official capacity as Laboratory employees and in their private capacity, subject to appropriate policy limitations. These policy limitations naturally prohibit an employee from participating, actively or through substantial financial interest, in a business which utilizes a Laboratory technology or receives a Laboratory intellectual property license related to the employee's Laboratory duties.

(2) Credibility and public trust require that any conflict of interest issues that arise be managed so as to enable successful technology commercialization while also protecting legitimate interests of NNSA and the Contractor. To this end, the Contractor will implement a Laboratory-wide Conflicts of Interest Compliance Plan in accordance with Contract's Section H clause entitled "Conflicts of Interest Compliance Plan" that will require disclosure of conflicts of interest and potential conflicts of interest in all technology commercialization activities, and will implement institutional mechanisms to independently identify and mitigate or eliminate apparent, actual or potential conflicts. NNSA and the Contractor explicitly recognize that potential conflicts can arise.

(3) The Contracting Officer will work with the Contractor in such instances to assure that beneficial collaborations between the Laboratory and the private sector are accomplished so long as potential conflicts are fully disclosed and are

appropriately managed to avoid apparent conflicts, where possible, and to avoid actual conflicts of interest.

(4) It will be a policy of the Contractor to grant Entrepreneurial Leave (see paragraph (i) above) or other leave without pay to an employee who wishes to participate, either through substantial financial ownership in or in an active role, in a business where the employee's participation is otherwise prohibited because such business utilizes a Laboratory technology related to the employee's Laboratory duties. The Contracting Officer may approve exceptions to the prohibition against participation in such business while remaining in pay status.

(5) Potential conflicts can usually be adequately managed through the Contractor applying a Laboratory-wide Conflicts of Interest Compliance Plan, in addition to other requirements of this Contract, in connection with:

(i) Laboratory employee ownership of equity interests in companies with which the Laboratory has a partnership agreement;

(ii) Laboratory employee ownership of interests in companies based on Laboratory technologies, where the Laboratory technologies are unrelated to the employee's job assignments or responsibilities;

(iii) Laboratory employees consulting or working for others in their private capacities, outside of their employment with the Laboratory;

(iv) Laboratory employees receiving royalties from the Contractor's licenses of Laboratory intellectual properties; and

(v) Laboratory employees retaining title to Laboratory intellectual property through waiver or election.

(k) Annual Program Review. A program review involving the Laboratory, the Technology Commercialization Advisory Board and recognized experts on economic development and technology commercialization programs will be conducted annually and will seek, among other things, to set performance targets for the technology commercialization. The following indicators will be included in the annual review to assess the strategic direction of the program:

(1) Number of companies established as a result of TC Program activities.

(2) Number of licenses executed with companies as a result of TC program activities.

(3) Number of start-ups by Laboratory employees on entrepreneurial leave.

(4) An impact assessment of TC Program activities, addressing the following:
(i) jobs created as a result of TC Program activities;

(ii) startup business status after one, two, and three years of business activity; and
(iii) overall economic impact of CT Program on the region.

(5) Survey of customers and stakeholders, e.g., regional community leaders, NNSA program managers, and national leaders, to determine satisfaction with the TC Program.

(6) Data on the numbers of employees taking entrepreneurial leave and the costs of such leave, including the cost of benefits provided, and an analysis of the effectiveness of such leave on promoting technology commercialization.

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APPENDIX O

PARENT ORGANIZATION'S OVERSIGHT PLAN

(Modified by Contract Mod 156 January 2011)

EXECTIVE SUMMARY
LANS PARENT ORGANIZATION OVERSIGHT PLAN

PURPOSE

The purpose of this plan is to describe the organizational approach and detail the parent organizations' planned activities. This plan monitors and continuously improves the contractor's performance of statement of work activities, including ISM and ISSM performance, and assists the contractor in meeting Laboratory mission and operations requirements. The plan includes the activity descriptions, cost estimates, schedule for planned activities, reporting, and describes the change management process for parent organization oversight. Parent organization oversight will be provided by the four parent entities which make up LANS. In accordance with Clause H-6 of the Prime Contract, the specific plan for each year will be provided to NNSA for review and approval.

SCOPE

The corporate oversight of LANS's operation of the Laboratory is designed to meet or exceed the needs and the expectations of the NNSA and LANL stakeholders, and the Laboratory itself. The immediate goal is to ensure excellence in every aspect of the Laboratory's operations such that the current and future missions can be achieved successfully in accord with applicable laws, regulations, and policies. The ultimate goal is for the Laboratory to be recognized as a world-class institution that not only provides solutions to known issues, but that anticipates and influences the future to help keep our nation safe and secure.

While the oversight of the Laboratory depends, to a large extent, on dedicated individuals and groups, responsibility must begin with the partners and owners of the entity that will be responsible for managing the Laboratory on a day-to-day basis.

ORGANIZATION

A separate business entity (LLC) has been set up by the parent organizations for the sole purpose of managing and operating the Laboratory. LANS LLC has set up a parent organization oversight body—the Board of Governors—which has authority to guide, control, direct, measure, and incentivize the Laboratory and its personnel. The Board also administers the Parent Organization Oversight Plan, with support from the LLC corporate office staff, as described below.

BOARD OF GOVERNORS AND COMMITTEES

The Board is composed of governors as follows:

- Executive Committee Governors – Individuals are appointed by the parent organizations as governors in the Executive Committee, of which there are an equal number of UC appointees and Bechtel appointees. Nomination for one seat is delegated to B&W and URS jointly. These individuals will make up the Executive Committee, which is the decision-making body of the LLC and is responsible for the oversight of Laboratory operations. The cost of these senior parent organization executives will not be charged to the Contract.
- Outside Governors – Outside governors will come from other organizations and will be appointed by the Executive Committee of the Board to achieve excellence and transparency through peer consideration. These world-class members will be selected to mirror the most significant needs of the Laboratory.

Board Committees

- The Board will be supported by committees appointed by the Executive Committee of the Board, with each committee chaired by one of the Board members. These committees will assist the Board in its oversight process by conducting evaluations, measuring performance, and making recommendations to the Board.

PARENT ORGANIZATION FUNCTIONAL MANAGEMENT ASSESSMENTS

Assessments will be conducted by teams comprised of LANS parent company experts and external consultants. These experts may come from corporate resources, other DOE and NNSA sites managed by LANS partners, or external leaders in the area of interest.

In addition, although not strictly oversight, there are a number of areas in which the parent organizations will provide support or training in best management practices such as Six Sigma, lean manufacturing, and performance-based leadership.

LANS LLC CORPORATE OFFICE (NORTHERN NEW MEXICO)

Given the magnitude of the Laboratory initiative, the parent organizations have determined that it is in the best interest of the Laboratory and NNSA for LANS to establish its corporate headquarters in northern New Mexico. The office will serve as base of operations for a small permanent staff supporting the LANS Board of Governors and will be led by the LANS Executive Staff Director, who is designated as the parent organizations' responsible official for the administration of the Oversight Plan.

SCHEDULE FOR PLANNED ACTIVITIES

A detailed schedule of planned activities is used to manage Parent Organization Oversight (see Clause H-6). The schedule development will be integrated and maintained by LANS Corporate Office staff on behalf of the Board and the parent organizations.

COST ESTIMATE FOR PLANNED ACTIVITIES

A cost estimate summary based on the planned activities scheduled is provided to NNSA annually. The cost estimates and budget development will be integrated and maintained by corporate office staff on behalf of the Board and the parent organizations.

PERIODIC REPORTS

Reports providing status against the planned activities will be provided to the Federal Contracting Officer as required. The report preparation will be integrated by the LANS corporate office staff on behalf of the Board and the parent organizations.

CHANGE MANAGEMENT AND CONTROL

A disciplined change management and control process will be implemented. This will ensure changes to the plan scope, cost and schedule baseline are reviewed and approved by the Contracting Officer.

PART III - SECTION J

APPENDIX P

LISTING OF PREDECESSOR CONTRACTOR SENIOR MANAGEMENT POSITIONS

TITLE
(LANL Organizational Chart, October 18, 2004)

Laboratory Director

Laboratory Deputy Director

Executive Chief of Staff

Deputy, National Security

Associate Director, Administration

Associate Director, Security & Facility Operations

Associate Director, Technical Services

Associate Director, Strategic Research

Associate Director, Threat Reduction

Principal Associate Director, Nuclear Weapons Prg.

Associate Director, Weapons Eng. & Manufacturing

Associate Director, Weapons Physics

Chief Counsel

Chief Auditor

Chief Financial Officer

Chief Information Officer

Chief Science Officer

Chief Security Officer

EEO Officer

Ombuds

Institutional Planning & Eval. Office

Policy Office

Communications & External Relations

Center for Homeland Security

PART III - SECTION J

APPENDIX Q

CONTRACTOR'S TRANSITION PLAN

If you require this information, please contact the Prime Contract Management Office.

PART III - SECTION J

APPENDIX R

[Modified by Modification No. A017, No. M034]

AGREEMENT BETWEEN THE DEPARTMENT OF ENERGY/NATIONAL NUCLEAR SECURITY ADMINISTRATION AND LOS ALAMOS NATIONAL SECURITY LLC CONCERNING THE TRANSFER OF ASSETS AND LIABILITIES FROM THE UNIVERSITY OF CALIFORNIA RETIREMENT PLAN TO THE LANS DEFINED BENEFIT PENSION PLAN

(a) **General.**

(1) The "Parties" means the Department of Energy, through the National Nuclear Security Administration (DOE/NNSA), and Los Alamos National Security, LLC (LANS).

(2) The "Agreement" means this Agreement between the Department of Energy/National Nuclear Security Administration and LANS concerning the Transfer of Assets and Liabilities from the University of California Retirement Plan (UCRP) to the LANS Defined Benefit Pension Plan ("LANS Plan"). This Agreement includes the following Exhibits:

(i) June 1, 2006, Los Alamos National Laboratory Special Interim Addendum Report (Exhibit 1)(Actuarial Valuation).

(ii) Proposed Approach for Asset Allocation for Transfer to the LANS Plan (Exhibit 2)(Asset Allocation).

(iii) Pricing Procedures for Asset Classes Held in the UCRP (Exhibit 3)(Pricing Procedures).

(iv) Estimated Asset Transfer Amount (Exhibit 4)(Estimation)., to be modified upon determination of the actual value at the Asset Transfer Date.

(3) Pursuant to H.008 of Contract No: W-7405-ENG-36 (Modification No: M620) between DOE and the Regents of the UC of California (UC), the assets and liabilities associated with the Los Alamos National Laboratory Segment (LANL Segment) of the UCRP have been accounted for separately each year by the Regents' actuary since the early 1990s at the request of DOE/NNSA.

(4) During the transition to management of Los Alamos National Laboratory (LANL) by LANS, employees of UC at LANL on May 31, 2006, who were either active, or rehired and reinstated as members of the UCRP, consistent with Section 2.17 of the LANS Plan, could elect to participate in the LANS Plan so that benefit liabilities under the UCRP attributable to their service prior to June 1, 2006 under UCRP, would be transferred from the UCRP to the LANS Plan effective June 1, 2006. Such individuals are collectively referred to as "Transferring Employees." The benefit liabilities transferred exclude any liabilities for Capital Accumulation Provision (CAP) accounts. The benefit liabilities transferred also exclude liabilities for benefits assigned by a qualified domestic relations order (QDRO) to a former spouse of an employee who elected to participate in the LANS Plan if the former spouse elected pursuant to procedures established by LANS and UC to retain his or her interest in UCRP. Collectively the excluded liabilities for CAP accounts and for alternate payees under QDROs who themselves elect to retain their interest in the UCRP shall be referred to as "Excluded Liabilities."

(5) Under the terms of the LANS Plan, as adopted by LANS on September 13, 2006, Transferring Employees began accruing benefits under the terms of the LANS Plan starting June 1, 2006. As provided in the LANS Plan, these individuals are also eligible to receive benefits under the LANS Plan attributable to service credited under the UCRP for employment prior to June 1, 2006, based upon the benefit provisions, payment options, and other terms of the LANS Plan. Transferring Employees waived any rights they might have had to benefits under the UCRP, except the Excluded Liabilities, which remain payable from the UCRP.

(b) **For and in consideration of the mutual understandings expressed herein, DOE/NNSA agrees and represents as follows**:

(1) DOE/NNSA will work with the Internal Revenue Service (IRS) to facilitate regulatory approval for the transfer of assets and liabilities described below from the UCRP to the LANS Plan.

(2) The costs, expenses, losses and penalties that LANS, the LANS Plan, or one or more fiduciaries of the LANS Plan reasonably incurs, as a direct result of the transfer of assets and liabilities from the UCRP to the LANS Plan (or the LANS Plan to the UCRP) as provided for in this Agreement, including transaction costs associated with rebalancing investments, will be assessed as costs of the LANS Plan to the extent permissible or, if not, separately invoiced. "Costs" for these purposes do not include losses on the value of assets sold in the rebalancing of investments. "Penalties" for these purposes are limited to those assessed to LANS, to one or more fiduciaries of the LANS Plan, or to the LANS Plan as a DIRECT result of performing those acts in conformance with the terms of this Agreement.

(3) DOE/NNSA will provide LANS with the following –

(i) A copy of the application submitted by UC to the IRS on June 17, 1999, for a Favorable Determination Letter that the UCRP, as amended, continues to satisfy the requirements of Code section 401(a).

(ii) UC's representation that the request has been held at the National Office of the IRS pending resolution of certain issues concerning cash balance plans.

(iii) UC's representation that UC recently received notification that its request is now being considered and that UC is committed to maintaining the tax-qualified status of the UCRP.

(iv) The Favorable Determination Letter from the IRS that was previously issued on the UCRP in 1997.

(v) UC's commitment to make any amendments to the UCRP necessary to obtain a Favorable Determination Letter from the IRS. Prior to the execution of this Agreement, UC will also provide an opinion from counsel for UC that the UCRP as amended for General Agreements on Tariffs and Trade, Uniformed Services Employment and Reemployment Rights of 1994, Small Business Job Protection Act, The Taxpayer Relief Act of 1997 (GUST) changes and as may be requested by the IRS is qualified under Section 401(a) of the Code as to form, its trust is exempt from taxation under Section 501(a) of the Code, and UC will make any amendments requested by the IRS as required to obtain a determination that the form of the UCRP continues to satisfy the requirements of Code section 401(a).

(vi) UC's certification that UC has determined that, priced as of May 31, 2006, as provided in the Pricing Procedures, the total market value of the assets allocated to the LANL Segment was $4,448,574,090 on May 31, 2006.

(vii) UC's certification that, as of midnight Pacific Time on May 31, 2006, the liabilities associated with the LANL Segment for benefits under the UCRP attributable to service at LANL prior to June 1, 2006, that are retained in the LANL Segment, including the Excluded Liabilities, were $3,169,811,239. Collectively, these liabilities, together with the associated assets, are referred to as the "Retained Segment."

(viii) UC's certification that, priced as of May 31, 2006, as provided in the Pricing Procedures, the market value of the assets to be transferred from the UCRP to the LANS Plan is $1,278,762,851 (Formula Amount) on May 31, 2006.

(ix) Certification from UC's enrolled actuaries that, if Code section 414(l) did apply to the spin off of assets and liabilities from the UCRP to the LANS Plan, the transfer of the Asset Transfer Amount as defined in subparagraph (d)(2) would comply with Code section 414(l) regarding the minimum level of assets to be transferred to the LANS Plan to cover the liabilities transferred and that UC will submit an IRS Form 5310-A to that effect for the spin off of assets and liabilities from the UCRP.

(x) UC's agreement to transfer the Asset Transfer Amount from the UCRP to the LANS Plan as of a date on or about April 2, 2007 (Asset Transfer Date); provided, however, that the transfer will be accomplished with an allocation of cash and an allocation of assets mutually agreed upon by the DOE/NNSA, LANS, and UC as set forth in Exhibit 2 attached to and made a part of this Agreement.

(xi) UC's agreement to cooperate with DOE/NNSA and LANS to determine and reconcile the Final Transfer Amount and the final liability transfer amount from the UCRP to the LANS Plan in accordance with the terms of this Agreement and applicable law. UC further agrees to cooperate with DOE/NNSA and LANS in finalizing the data and reconciliation to support any adjustments in the amount of assets and liabilities transferred from the UCRP to the LANS Plan that may be necessary after the Asset Transfer Date.

(xii) UC's agreement to provide data, documentation, and records reasonably requested for and on behalf of the LANS Plan for the proper establishment, maintenance and administration of the LANS Plan.

(xiii) UC's agreement that, if – in accordance with paragraph (c)(3) of this Agreement – LANS returns the Asset Transfer Amount (as adjusted pursuant to paragraphs (c)(3) and (d)(3) of this Agreement) and the remaining liabilities for service under the UCRP prior to June 1, 2006, to the UCRP, the UCRP will accept those assets and liabilities to the extent legally permissible.

(c) **For and in consideration of the mutual understandings expressed herein, LANS agrees and represents as follows**:

(1) LANS agrees to provide a copy of the application submitted by LANS on January 31, 2007, to the IRS for a Favorable Determination Letter that the LANS Plan satisfies the requirements of Section 401(a) of the Internal Revenue Code of 1986 (Code), including the requirements of the Economic Growth and Tax Relief Reconciliation Act (EGTRRA) and all other applicable requirements, including those documented in the Cumulative List in Notice 2005-101. In that application, LANS also requested a determination that the LANS Plan's associated trust is tax-qualified within the meaning of Code section 501(a).

(2) LANS agrees to provide a copy of an opinion provided by LANS to DOE/NNSA from counsel for LANS that the LANS Plan is qualified under Section 401(a) of the Internal Revenue Code (Code) as to form, that its trust is exempt from taxation under Section 501(a) of the Code, and that LANS will make any modifications requested by the IRS as required to obtain a Favorable Determination as to the qualified status of the LANS Plan.

(3) LANS agrees to return the Asset Transfer Amount (as defined in clause (d)(2) below) and the remaining liabilities for service under the UCRP prior to June 1, 2006, to the UCRP to the extent legally permissible (a) if LANS is unable to obtain a Favorable Determination from the IRS on the form of the LANS Plan; (b) if LANS, with the facilitation of DOE/NNSA, as described above, is unable to obtain IRS approval for the asset and liability transfer to the LANS Plan; or (c) if so ordered by a court of competent jurisdiction. To the extent legally permissible:

(i) The assets so returned to the UCRP shall be the Asset Transfer Amount adjusted by benefit distributions from the LANS Plan attributable to service credit earned prior to June 1, 2006, to the extent transferred to the LANS Plan, and an allocable share of the investment return and expenses incurred during the period from the Asset Transfer Date to the date the assets are returned to UCRP.

(ii) The allocable share of expenses to be offset against the assets returned to UCRP shall be an amount equal to the administrative expenses, excluding investment expenses, incurred during the period from the Asset Transfer Date to the date the assets are returned to UCRP, multiplied by the ratio of the liability of the Transferring Employees to the total liability of the LANS Plan on the Asset Transfer Date.

(iii) Solely for the purpose of calculating the ratio in (ii) above, the liability shall be based on the current liability under Code section 412(l) using the LANS Plan assumptions for current liability for the LANS plan year containing the Asset Transfer Date.

(iv) The allocable share of the investment return added to (or subtracted from) the assets returned to UCRP shall be determined in accordance with applicable fiduciary duties by applying the total rate of investment return, net of investment expenses, of the LANS Plan (during the period from the Asset Transfer Date to the date the assets are so returned to the UCRP) to the Asset Transfer Amount adjusted by benefit distributions attributable to service credit earned prior to June 1, 2006 and the allocable share of expenses determined above.

(v) The liabilities so returned to the UCRP shall be adjusted by benefit distributions attributable to service credit earned prior to June 1, 2006, to the extent of the liabilities transferred to the LANS Plan, and the obligations incurred by LANS on behalf of members of the LANS Plan under the LANS Defined Benefit Eligible Survivor Income Program and the LANS Defined Benefit Eligible Disability Program.

(4) LANS agrees to cooperate in finalizing the data and reconciliations to support any adjustments in the amount of assets transferred from the UCRP to the LANS Plan that may be necessary after the Asset Transfer Date. LANS agrees to assume full responsibility for payment of premiums to the Pension Benefit Guaranty Corporation for the LANS Plan. LANS also agrees to assume responsibility for the LANS Plan's compliance with the requirements of the Code; provided, however, that any costs, expenses, losses and penalties of compliance that directly result from compliance with this Agreement and/or with any other requirement imposed on LANS or the LANS Plan by UC and/or DOE will be handled in the manner provided in paragraph (b)(2) of this Agreement.

(5) LANS agrees that it has been given an adequate opportunity to review the proposed allocation of assets to be transferred from the UCRP to the LANS Plan, that it agrees that the valuation approach to be used with respect to the assets transferred is reasonable, and that it agrees to direct the trustee of the LANS Plan to accept the Asset Transfer Amount into the LANS Plan as of the Asset Transfer Date.

(6) LANS agrees that it will maintain the special schedule (or the data necessary to create the special schedule) as required by Code section 414(l), and that it will file IRS Form 5310-A to this effect for the merger of the assets and liabilities into the LANS Plan.

(7) LANS agrees that, upon transfer of the Asset Transfer Amount from the UCRP to the LANS Plan pursuant to this Agreement and in accordance with the Agreement between DOE/NNSA and UC concerning the Transfer of Assets and Liabilities from the UCRP to the LANS Plan, all liabilities of the UCRP, UC and the Regents for the benefits under the UCRP attributable to service prior to June 1, 2006, associated with the Transferring Employees – with the exception of Excluded Liabilities retained in the UCRP – will be extinguished.

(d) **For and in consideration of the mutual understandings and the certifications expressed herein, LANS and DOE/NNSA agree as follows**:

(1) Formula Amount

(i) The Parties are mutually relying upon obtaining approval from the IRS for the Formula Amount.

(ii) The Formula Amount ($1,278,762,851) was determined based upon the Actuarial Valuation as of May 31, 2006, the effective date of disaffiliation.

(2) Asset Transfer Amount

The Asset Transfer Amount is the Formula Amount adjusted to the Asset Transfer Date to reflect the following factors occurring during the period beginning June 1, 2006, and ending on or near the Asset Transfer Date: the portion of the total return earned by the UCRP portfolio allocable to the Formula Amount of the LANL Segment; administrative expenses allocable to the Formula Amount of the LANL Segment; buybacks for the UCRP service credit attributable to the UCRP benefits of Transferring Employees (apart from the CAP accounts); and any interim distributions agreed to by DOE/NNSA from the UCRP made to the LANS Plan and/or to LANS Plan members or their beneficiaries or alternate payees pursuant to a QDRO. See Determination of Asset Transfer Amount (Exhibit 4) estimating the Asset Transfer Amount, based upon preliminary accounting through February 28, 2007, to be modified on or before April 15, 2007, upon determination of the actual value at the Asset Transfer Date. The administrative expenses allocated to the LANL Segment shall not include any losses or penalties which cannot be charged to the LANL Segment.

(3) Final Transfer Amount

UC, DOE, and LANS acknowledge and agree that the Asset Transfer Amount transferred on the Asset Transfer Date may need to be subsequently adjusted to reflect – with respect to certain assets – final earnings figures and other final performance numbers that may be

received by UC after the Asset Transfer Date, other investment-related adjustments and any data corrections related to the calculations supporting the Asset Transfer Amount, but not available on the Asset Transfer Date, as well as to make any adjustments necessary to obtain appropriate regulatory approval. Any additional transfers of assets between the UCRP and the LANS Plan as may be needed to make such adjustments will be made as soon as practicable following the Asset Transfer Date.

(4) Corrections

The Parties agree that LANS will provide prompt notice of any errors or omissions in data used to calculate the Asset Transfer Amount discovered after the Asset Transfer Date that would have had an effect on the Asset Transfer Amount had such error or omission been recognized prior to April 2, 2007. The Parties shall determine how to correct the error or omission with as minimum an administrative burden on the Parties as possible.

(5) Third Party Beneficiaries

This Attachment, including its Exhibits, is for the exclusive benefit and convenience of the Parties hereto. Nothing contained herein shall be construed as granting, vesting, creating or conferring any right of action or any other right or benefit upon past, present or future employees of the Contractor, upon any participants or beneficiaries of the UCRP, as amended from time to time, or upon any other third party. Notwithstanding the foregoing, UC may rely on the representations made by LANS in subparagraph (c) of this Agreement provided that UC has entered into an enforceable agreement with the DOE/NNSA providing that LANS may rely on the representations provided by UC described in subparagraph (b)(3) of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date(s) indicated below.

DEPARTMENT OF ENERGY/NATIONAL NUCLEAR SECURITY ADMINISTRATION

By: _____
David O. Boyd

Title: Director
Office of Acquisition and Supply Management

Date: MAR 19 2007

LOS ALAMOS NATIONAL SECURITY, LLC

By: _____

Title: CFO

Date: MAR 19 2007

EXHIBIT

1

SEGAL

Benefits, Compensation and HR Consulting

University of California Retirement Plan
Special Interim Addendum Report

Actuarial Valuation Results for
Los Alamos National Laboratory
as of June 1, 2006

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SEGAL

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February 15, 2007

Ms. Judith W. Boyette
Associate Vice President, Human Resources and Benefits
University of California
1111 Franklin Street, 7th Floor
Oakland, California 94607-5200

Dear Associate Vice President Boyette:

We are pleased to submit this Actuarial Valuation Report as of June 1, 2006 for the University of California Retirement Plan ("UCRP" or "Plan"). It summarizes the actuarial data used in the valuation, includes results both before and after reflecting the transfer elections and analyzes the preceding year's experience for Los Alamos National Laboratory.

The census and unaudited financial information on which our calculations were based was provided by the UC HR/Benefits Staff. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of John Monroe, ASA, MAAA, Enrolled Actuary.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion the assumptions as approved by the Regents are reasonably related to the experience of and future expectations for the Plan.

We look forward to reviewing this report and to answering any questions.

Sincerely,

THE SEGAL COMPANY

By:

Paul Angelo, FSA, EA, MAAA
Senior Vice President and Actuary

John Monroe, ASA, EA, MAAA
Associate Actuary

JZM/hy

SECTION 1

EXECUTIVE SUMMARY

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SECTION 1: Executive Summary for the University of California Retirement Plan – Los Alamos National Laboratory

SECTION 1: Executive Summary for the University of California Retirement Plan – Los Alamos National Laboratory

Purpose

This special addendum report presents the results for Los Alamos National Laboratory (LANL) of the June 1, 2006 actuarial valuation of the University of California Retirement Plan (UCRP). Results from the prior valuation are shown for comparison. The report is published for the purpose of complying with the requirements of Contract No. W-7405-ENG-36 (Contract 36), Modification No. M602. The report is based on the procedures specified in Modification No. M602.

Contributions

The Department of Energy (DOE) has agreed to fund the employer cost of UCRP at the contribution rates established from time to time by the Regents, as long as the contributions do not exceed the full funding limit defined in the Internal Revenue Code, Section 412. This interim valuation report does not calculate recommended contributions.

Significant Issues in Valuation Year

LOS ALAMOS NATIONAL LABORATORY TRANSFER OF ASSETS AND LIABILITIES

- The University of California contract to manage the Los Alamos National Laboratory (LANL) expired on May 31, 2006. The Department of Energy (DOE) executed a new management and operations contract effective June 1, 2006 with Los Alamos National Security, LLC (LANS). Under the terms of the LANS contract, LANS will sponsor a defined benefit pension plan that is substantially equivalent to the provisions of the UCRP. Assets and liabilities will be transferred from UCRP to the LANS defined benefit plan for the LANL employees who elected to transfer to the new plan, provided the necessary and advisable rulings on the plans and proposed transactions are obtained from the appropriate regulatory agencies.
- There are 6,532 active members who elected to transfer to the LANS defined benefit plan. Their actuarial accrued liability as of June 1, 2006 is approximately $1.4 billion, excluding the liability for their CAP benefits that will be retained by UCRP. This liability is reflected in our valuation results and included with the UCRP active member liabilities. This liability is based on the current UCRP actuarial assumptions, methods and plan provisions. The liability for these members as determined for the LANS defined benefit plan will almost certainly be different, as it will be based on the LANS benefit provisions and the actuarial assumptions and methods used by the LANS actuary.

Significant Issues in Valuation Year (continued)

- The LANL transfer elections reflected in this valuation are based on the transfer election data provided by the University as of August 24, 2006. There were minor changes to this information made later, but we do not believe these changes have a material impact on the valuation results.
- The amount of assets to be retained in UCRP for LANL members who have retired or are inactive, and the amount of the assets that will be transferred to the LANS defined benefit plan for the transitioning employees who elected to participate in the LANS defined benefit plan will follow the "A – B" formula listed in Contract 36, Clause H. "A" represents the market value of UCRP assets associated with UCRP members' LANL service during the performance of Contract 36 and is $4.449 billion. "B" represents the liability associated with those LANL members who are retired or inactive and retained by UCRP and is $3.170 billion. The amount of assets as of June 1, 2006 to be transferred from UCRP to the LANS defined benefit plan is "A – B", or $1.279 billion. The amount to be transferred will be adjusted for investment return, allocable expenses and any other appropriate adjustments through the anticipated transfer date of early April 2007.
- While this valuation includes results reflecting the LANL transfer elections, it does not reflect the actual transfer of assets and liabilities to the LANS defined benefit plan. This means that the results of this valuation include liabilities even for members who have elected to transfer to the LANS defined benefit plan. As noted above, we have continued to value these members as active UCRP members and their liabilities are shown as active in the results. LANL employees **who elected not** to transfer to the LANS defined benefit plan are included in the valuation results either as terminated vested or nonvested members. Consistent with current practice, for those terminated members who were eligible for retirement, we have assumed a July 1, 2006 commencement date for their retirement benefits.

ASSETS

- During the July 1, 2005 through May 31, 2006 period, the rate of return on the unaudited market value of assets was 7.2%. Due to the recognition of prior investment losses, the rate of return on the actuarial value of assets was 5.5%, which is below the expected annual return of 7.5% (6.9% for an 11-month period).

FUNDED RATIO

- The funded ratio for LANL's portion of the Plan on an actuarial basis decreased from 99% as of July 1, 2005 to 92% as of May 31, 2006 before reflecting elections and 94% as of May 31, 2006 after reflecting elections. The LANL portion of the Plan remains in an underfunded position as the actuarial accrued liability exceeds the actuarial value of assets by $357 million as of June 1, 2006 before reflecting elections and $261 million as of June 1, 2006 after reflecting the transfer elections.

Significant Issues in Valuation Year (continued)

FUTURE EXPECTATIONS

- No contributions were recommended for the 2005-2006 Plan Year. This was due to the application of the full funding policy that the Regents adopted in 1990. Member contributions are all currently being redirected to the UC Defined Contribution Plan. It is expected that UCRP's surplus will run out in the next few years and may run out as soon as July 1, 2008.

DEMOGRAPHIC EXPERIENCE

- Prior to reflecting the LANL transfer elections, the number of UCRP active members considered LANL employees for valuation purposes decreased by 1.6% from 9,730 as of July 1, 2005 to 9,570 as of June 1, 2006. Total covered payroll increased by 3.0%, to a level of $869.9 million. As of June 1, 2006, LANL has 4,552 members currently receiving benefits, an increase of 12.1% from 2005. Total annual benefits in pay status increased by 21.8%, to a level of $161.1 million. There are also 1,780 terminated members who are entitled to future benefits. Within this group of terminated members, there are 992 terminated vested members who are entitled to a deferred or immediate vested monthly benefit and 788 terminated nonvested members who are entitled to a refund of member contributions or payment of their Capital Accumulation Provision (CAP) balance.
- The LANL transfer elections showed the following:
  - There were 6,532 active members who elected to transfer to LANS. As described earlier, we have continued to value these members as active UCRP members.
  - There were 1,239 active members who elected inactive status and were eligible to retire in UCRP. Consistent with current practice, we have assumed a July 1, 2006 commencement date for their retirement benefits.
  - There were 580 active members who elected inactive status and were vested in UCRP, but not yet eligible to retire. These members were valued as terminated vested members in this valuation.
  - There were 1,219 active members who were not vested in UCRP and did not elect to transfer to the LANS defined benefit plan. They are only eligible for a refund of member contributions and CAP balance payment. These members were valued as terminated nonvested members in this valuation due a refund of member contributions and CAP balance payment, if applicable.

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- There were also 20 members who terminated prior to the valuation date and elected to transfer to the LANS defined benefit plan. These members were valued as either terminated vested or nonvested members in this valuation, depending on each member's circumstance.

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT A

Table of Plan Coverage
i. Active Members

Category	Year Beginning: After Elections June 1, 2006	Year Beginning: Before Elections June 1, 2006	Year Beginning: July 1, 2005	Change From Prior Year*
Active members with Social Security:				
Number	6,426	9,164	9,141	0.3%
Average age	43.4	43.9	44.0	N/A
Average service credit	8.9	9.6	9.8	-2.0%
Total compensation	$574,438,250	$830,882,802	$790,428,327	5.1%
Average compensation	$89,393	$90,668	$86,471	4.9%
Active members without Social Security:				
Number	106	406	589	-31.1%
Average age	52.9	53.0	53.6	N/A
Average service credit	27.1	25.7	26.4	-2.7%
Total compensation	$9,847,514	$38,978,920	$54,398,045	-28.3%
Average compensation	$92,901	$96,007	$92,357	4.0%
All active members:				
Number**	6,532	9,570	9,730	-1.6%
Average age	43.6	44.3	44.6	N/A
Average service credit	9.2	10.3	10.8	-5.3%
Total compensation	$584,285,764	$869,861,722	$844,826,372	3.0%
Average compensation	$89,450	$90,895	$86,827	4.7%

** Represents change between "Before Elections" and prior year columns.*
*** After elections, this represents the active members transferring to the LANS defined benefit plan.*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT A

Table of Plan Coverage
ii. Nonactive Members

Category	Year Beginning After Elections June 1, 2006*	Year Beginning Before Elections June 1, 2006*	Year Beginning July 1, 2005	Change From Prior Year*
Terminated vested members:**				
Number	2,811	992	969	2.4%
Average age	51.0	48.1	48.0	N/A
Total monthly benefit	$6,751,523	$830,764	$785,871	5.7%
Average monthly benefit	$2,402	$837	$811	3.2%
Terminated nonvested members:**				
Number	2,007	788	700	12.6%
Average member refund and CAP balance	$1,294	$2,484	$2,389	4.0%
Retired members:				
Number in pay status	3,801	3,801	3,367	12.9%
Average age	68.0	68.0	68.5	N/A
Total monthly benefit	$12,268,769	$12,268,769	$9,981,268	22.9%
Average monthly benefit	$3,228	$3,228	$2,964	8.9%
Disabled members:				
Number in pay status	217	217	208	4.3%
Average age	54.2	54.2	54.2	N/A
Total monthly benefit	$402,801	$402,801	$370,509	8.7%
Average monthly benefit	$1,856	$1,856	$1,781	4.2%
Beneficiaries (includes Eligible Survivors, Contingent Annuitants, and Spouses/Domestic Partners):				
Number in pay status	534	534	486	9.9%
Average age	70.2	70.2	69.9	N/A
Total monthly benefit	$752,628	$752,628	$669,145	12.5%
Average monthly benefit	$1,409	$1,409	$1,377	2.3%

** Benefit amounts have been adjusted for the July 1, 2006 COLA. Represents change between "Before Elections" and prior year columns.*
*** There are 7 vested members and 13 nonvested members who terminated prior to the valuation date and elected to transfer to the LANS defined benefit plan.*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT B

Members in Active Service and Average Compensation as of June 1, 2006*
By Age and Service Credit

i. All Active Members

		Service Credit								
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	352	345	7	--	--	--	--	--	--	--
	$37,360	$37,026	$53,824	--	--	--	--	--	--	--
25 - 29	720	628	92	--	--	--	--	--	--	--
	59,858	60,135	57,968	--	--	--	--	--	--	--
30 - 34	1,003	720	246	36	1	--	--	--	--	--
	75,106	72,170	83,035	$79,957	$64,217	--	--	--	--	--
35 - 39	1,194	614	387	149	39	5	--	--	--	--
	86,928	76,566	98,789	99,316	87,317	$69,199	--	--	--	--
40 - 44	1,484	517	388	274	171	122	12	--	--	--
	95,834	83,061	102,197	111,979	102,722	86,072	$72,931	--	--	--
45 - 49	1,704	470	282	223	260	299	165	5	--	--
	96,339	82,673	101,551	111,785	109,627	99,972	78,357	$83,217	--	--
50 - 54	1,518	383	194	146	178	275	237	103	2	--
	101,332	90,053	104,338	109,325	109,755	113,390	99,300	83,916	$116,520	--
55 - 59	1,142	274	115	109	113	209	180	121	21	--
	106,480	90,065	106,155	101,431	107,889	117,642	119,530	110,274	96,259	--
60 - 64	357	97	49	37	51	56	37	25	5	--
	114,138	95,210	117,809	117,931	119,033	118,989	123,640	137,158	127,605	--
65 - 69	79	25	16	5	4	8	8	7	6	--
	124,791	101,740	119,929	128,501	158,128	122,021	129,104	167,104	157,060	--
70 & over	17	4	2	2	3	4	2	--	--	--
	122,436	84,062	127,282	188,130	133,670	105,183	146,298	--	--	--
Total	9,570	4,077	1,778	981	820	978	641	261	34	--
	$90,895	$74,220	$97,330	$107,733	$107,768	$106,920	$101,020	$103,453	$112,790	$0

Average Age: 44.3

Average Service Credit: 10.3

* *Reflects data before LANL transfer elections are recognized.*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT B

Members in Active Service and Average Compensation as of June 1, 2006*
By Age and Service Credit

ii. Members with Social Security

		Service Credit								
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	347	340	7	--	--	--	--	--	--	--
	$37,191	$36,849	$53,824	--	--	--	--	--	--	--
25 - 29	699	607	92	--	--	--	--	--	--	--
	59,772	60,046	57,968	--	--	--	--	--	--	--
30 - 34	984	701	246	36	1	--	--	--	--	--
	75,100	72,081	83,035	$79,957	$64,217	--	--	--	--	--
35 - 39	1,188	608	387	149	39	5	--	--	--	--
	87,001	76,606	98,789	99,316	87,317	$69,199	--	--	--	--
40 - 44	1,478	511	388	274	171	122	12	--	--	--
	95,872	83,020	102,197	111,979	102,722	86,072	$72,931	--	--	--
45 - 49	1,695	470	282	223	260	297	159	4	--	--
	96,495	82,673	101,551	111,785	109,627	100,060	79,146	$83,171	--	--
50 - 54	1,394	381	194	146	176	265	217	15	--	--
	102,951	90,043	104,338	109,325	109,849	114,406	101,183	93,082	--	--
55 - 59	978	274	113	107	106	190	168	20	--	--
	106,576	90,065	106,308	102,246	109,268	116,781	120,222	131,606	--	--
60 - 64	323	96	48	37	47	55	34	6	--	--
	113,467	94,974	118,699	117,931	120,765	118,520	124,808	172,203	--	--
65 - 69	62	22	15	5	4	7	8	--	1	--
	118,865	102,244	119,247	128,501	158,128	121,530	129,104	--	$172,973	--
70 & over	16	4	2	2	3	3	2	--	--	--
	119,893	84,062	127,282	188,130	133,670	85,869	146,298	--	--	--
Total	9,164	4,014	1,774	979	807	944	600	45	1	--
	$90,668	$74,252	$97,324	$107,835	$108,009	$106,671	$101,970	$119,872	$172,973	$0

Average Age: 43.9

Average Service Credit: 9.6

** Reflects data before LANL transfer elections are recognized.*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT B

Members in Active Service and Average Compensation as of June 1, 2006*
By Age and Service Credit

iii. Members without Social Security

		Service Credit								
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	5	5	--	--	--	--	--	--	--	--
	$49,062	$49,062	--	--	--	--	--	--	--	--
25 - 29	21	21	--	--	--	--	--	--	--	--
	62,708	62,708	--	--	--	--	--	--	--	--
30 - 34	19	19	--	--	--	--	--	--	--	--
	75,434	75,434	--	--	--	--	--	--	--	--
35 - 39	6	6	--	--	--	--	--	--	--	--
	72,534	72,534	--	--	--	--	--	--	--	--
40 - 44	6	6	--	--	--	--	--	--	--	--
	86,511	86,511	--	--	--	--	--	--	--	--
45 - 49	9	--	--	--	--	2	6	1	--	--
	66,868	--	--	--	--	$86,883	$57,442	$83,401	--	--
50 - 54	124	2	--	--	2	10	20	88	2	--
	83,135	91,853	--	--	$101,453	86,451	78,872	82,354	$116,520	--
55 - 59	164	--	2	2	7	19	12	101	21	--
	105,909	--	$97,530	$57,830	87,009	126,253	109,846	106,049	96,259	--
60 - 64	34	1	1	--	4	1	3	19	5	--
	120,515	117,861	75,062	--	98,693	144,826	110,402	126,092	127,605	--
65 - 69	17	3	1	--	--	1	--	7	5	--
	146,405	98,048	130,168	--	--	125,459	--	167,104	153,878	--
70 & over	1	--	--	--	--	1	--	--	--	--
	163,124	--	--	--	--	163,124	--	--	--	--
Total	406	63	4	2	13	34	41	216	33	--
	$96,007	$72,149	$100,072	$57,830	$92,826	$113,838	$87,108	$100,032	$110,966	$0

Average Age: 53.0

Average Service Credit: 25.7

** Reflects data before LANL transfer elections are recognized.*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT C

Members and Beneficiaries in Pay Status and Average Monthly Benefit as of June 1, 2006*

	Years Since Retirement						
Age	Total	0-4	5-9	10-14	15-19	20-24	25 & Over
0 – 49	76	29	34	10	2	-	1
	$1,440	$1,706	$1,328	$1,342	$714	-	$17
50 – 59	719	540	128	44	5	1	1
	2,635	3,002	1,637	1,317	881	557	852
60 – 61	345	232	69	42	1	1	-
	3,930	4,984	2,253	951	4,068	160	-
62 – 63	494	303	94	91	6	-	-
	3,948	5,168	2,695	1,335	1,556	-	-
64 – 65	421	159	148	100	13	1	-
	3,494	4,822	3,505	1,758	706	593	-
66 – 67	425	75	188	135	26	1	-
	3,319	4,652	3,863	2,267	1,059	1,568	-
68 – 69	413	55	117	190	48	3	-
	3,229	5,446	3,359	2,963	1,602	487	-
70 – 71	323	13	43	188	79	-	-
	3,004	4,267	2,782	3,507	1,718	-	-
72 – 73	294	5	19	151	115	4	-
	2,699	4,698	2,222	3,286	1,975	1,110	-
74 & over	1,042	6	39	181	510	226	80
	1,768	3,310	1,556	2,897	1,933	897	617
Total	4,552	1,417	879	1,132	805	237	82
	$2,885	$4,169	$2,871	$2,613	$1,840	$893	$612

Average Age: 67.6

Average Years Since Retirement: 9.9

* *Excludes temporary Social Security Supplement and adjustment for July 1, 2006 COLA.*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT D

Members with Deferred Benefits and Average Monthly Benefits as of June 1, 2006*

	Years Since Termination						
Age	Total	0-4	5-9	10-14	15-19	20-24	25 & Over
25 – 29	6	4	2	--	--	--	--
	$380	$344	$452	--	--	--	--
30 – 34	32	21	11	--	--	--	--
	519	536	488	--	--	--	--
35 – 39	103	37	57	9	--	--	--
	657	656	658	652	--	--	--
40 - 44	189	57	94	37	1	--	--
	616	733	622	394	$1,725	--	--
44 – 49	274	59	101	93	20	1	--
	737	928	898	448	724	$219	--
50 - 54	213	29	70	76	34	4	--
	923	1,448	1,049	776	613	364	--
55 – 59	134	5	25	59	36	9	--
	1,162	1,660	1,752	1,120	852	758	--
60 – 64	29	4	3	6	8	6	2
	1,199	903	2,052	705	1,422	1,189	$1,127
65 – 69	10	1	1	--	1	4	3
	1,761	572	8,323	--	1,431	994	1,104
70 – 74	2	--	1	1	--	--	--
	2,600	--	4,002	1,198	--	--	--
75 & over	--	--	--	--	--	--	--
	--	--	--	--	--	--	--
Total	992	217	365	281	100	24	5
	$821	$866	$901	$685	$805	$817	$1,113

Average Age: 48.1

Average Years Since Termination: 8.4

** Reflects data before LANL transfer elections are recognized. Excludes temporary Social Security Supplement.*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT E

Reconciliation of Member Data*

	Active Members	Terminated Vested Members**	Retired Members	Disabled Members	Beneficiaries	Total
Number as of July 1, 2005	9,730	1,669	3,367	208	486	15,460
New members	836	N/A	N/A	N/A	N/A	836
Terminations – with vested rights	-216	216	0	0	0	0
Termination – without vested rights***	-272	-23	0	0	0	-295
Retirements	-492	-24	495	21	N/A	0
Lump Sum Cashouts	-52	-31	0	0	N/A	-83
Return to work	37	-37	0	0	N/A	0
Died with or without beneficiary	-7	-1	-59	-10	47	-30
Net transfers from or to another location	4	0	0	0	0	4
Data adjustments	2	11	-2	-2	1	10
Number as of June 1, 2006	9,570	1,780	3,801	217	534	15,902

* *Reflects data before LANL transfer elections are recognized.*

** *Includes terminated nonvested members due a refund of member contributions or CAP balance payment (700 for July 1, 2005 and 788 at June 1, 2006).*

*** *"Termination – without vested rights" includes those members who terminated and received a refund of member contributions or a distribution of their CAP balance.*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT F

Allocation of Administrative Expenses and Investment Return

	Year Ended May 31, 2006	Year Ended June 30, 2005
Administrative cost*:		
Total UCRP administrative expenses for the defined benefit plan	$23,565,000	$21,257,941
Total UCRP market value of assets at beginning of year	41,857,499,914	39,216,093,957
Administrative expenses as a percent of assets	0.0563%	0.0542%
Market value allocated to LANL as of beginning of year	4,327,036,857	4,066,190,566
Multiplied by administrative expenses ratio	0.0563%	0.000542
Administrative expenses allocated to LANL	$2,436,122	$2,203,875
Investment return:**		
Annualized compound total return for UCRP	7.2%	10.3%
Investment return allocated to LANL	304,944,010	$411,080,563

**Administrative expenses are allocated in proportion to the market value of assets at the beginning of the year as specified by Modification No. M602.*

***The annualized compound total return for UCRP is applied to the market value of assets at the beginning of the year and to employer contributions, member contributions, benefit payments and administrative expenses assuming all payments are made in the middle of the plan year.*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT G

Asset Values

	Year Ended May 31, 2006	Year Ended June 30, 2005
Market value of assets:		
Market value at beginning of year	$4,327,036,857	$4,066,190,566
Employer contributions	0	0
Member contributions	340,037	194,247
Benefit payments	(181,310,692)	(148,224,644)
Administrative expenses	(2,436,122)	(2,203,875)
Investment return	304,944,010	411,080,563
Market value at end of year	$4,448,574,090	$4,327,036,857
Actuarial value of assets allocation:		
Total UCRP market value at end of year	$43,576,734,000	$41,857,499,914
Market value allocated to LANL at end of year	4,448,574,090	4,327,036,857
Ratio of LANL allocation to total	0.102086	0.103375
Total UCRP actuarial value at end of year	42,063,338,046	41,084,861,813
Multiplied by market value ratio	0.102086	0.103375
Actuarial value allocated to LANL at end of year	$4,294,077,928	$4,247,147,590

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT H

Development of the Fund Through May 31, 2006

Year Ended June 30	Employer Contributions	Member Contributions	Investment Income	Benefit Payments	Administrative Expenses	Market Value of Assets at End of Year
1991	N/A	N/A	N/A	N/A	N/A	$1,410,141,418
1992	$27,582	$1,788,557	$213,646,831	$(21,929,891)	$(1,909,331)	1,601,765,166
1993	10,065	1,826,704	271,170,552	(25,578,519)	(2,317,754)	1,846,876,214
1994	182	556,776	(47,158,152)	(63,971,042)	(2,430,489)	1,733,873,489
1995	0	280,867	445,797,520	(53,296,928)	(1,834,438)	2,124,820,510
1996	0	240,584	446,057,713	(63,161,700)	(1,491,624)	2,506,465,483
1997	5,390	293,581	638,736,896	(64,163,429)	(1,355,998)	3,079,981,923
1998	2,908	220,121	657,204,831	(77,280,086)	(1,515,351)	3,658,614,346
1999	0	271,558	444,977,344	(82,413,789)	(2,125,655)	4,019,323,804
2000	24,015	334,957	504,664,174	(92,603,352)	(1,744,387)	4,429,999,211
2001	0	284,295	(240,404,969)	(114,193,054)	(2,445,360)	4,073,240,123
2002	0	215,347	(361,180,502)	(114,943,442)	(2,749,437)	3,594,582,089
2003	0	220,961	197,960,245	(118,074,273)	(2,947,557)	3,671,741,465
2004	0	207,720	523,076,990	(126,335,153)	(2,500,456)	4,066,190,566
2005	0	194,247	411,080,563	(148,224,644)	(2,203,875)	4,327,036,857
2006*	0	340,037	304,944,010	(181,310,692)	(2,436,122)	4,448,574,090

** As of May 31, 2006*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT I

Actuarial Liabilities

Actuarial Accrued Liability	After Elections June 1, 2006	Before Elections June 1, 2006	July 1, 2005
Members in pay status:			
Retirees*	$1,844,343,144	$1,844,343,144	$1,477,930,304
Beneficiaries	96,052,312	96,052,312	86,512,775
Disableds	61,697,344	61,697,344	57,403,236
Total in pay status	$2,002,092,800	$2,002,092,800	$1,621,846,315
Active members**			
Non safety	$1,384,215,868	$2,515,775,748	$2,550,023,801
Safety	0	0	0
Total Actives	$1,384,215,868	$2,515,775,748	$2,550,023,801
Terminated members***			
Vested	$1,165,938,269	$131,131,232	$127,934,208
Nonvested	2,596,125	1,957,751	1,672,596
Total terminated	$1,168,534,394	$133,088,983	$129,606,804
Total actuarial accrued liability	$4,554,843,062	$4,650,957,531	$4,301,476,920
Current Liability			
Members in pay status*	$2,002,092,800	$2,002,092,800	$1,621,846,315
Active members**	806,800,462	1,654,057,090	1,740,355,195
Terminated members***	1,168,534,394	133,088,983	129,606,804
Total current liability	$3,977,427,656	$3,789,238,873	$3,491,808,314
Actuarial Present Value of Projected Benefits			
Members in pay status*	$2,002,092,800	$2,002,092,800	$1,621,846,315
Active members**	2,191,004,145	3,628,171,463	3,568,625,632
Terminated Members***	1,168,534,394	133,088,983	129,606,804
Total	$5,361,631,339	$5,763,353,246	$5,320,078,751

**For June 1, 2006, includes a liability of $9,036,934 for Lump Sum Cashouts, CAP balance payments and refunds of member contributions that were paid on or after June 1, 2006.*

***In the "After Elections" column, the active members liability represents the non-CAP liability for those active members transferring to the LANS defined benefit plan.*

****In the "After Elections" column, the terminated members liability includes a CAP liability of $55,056,067 for members transferring to the LANS defined benefit plan. The non-CAP liability for members who terminated prior to the valuation date and are transferring to the LANS defined benefit plan is $815,955.*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT J
Funded Status

Funded Status (Contribution Basis)	After Elections June 1, 2006	Before Elections June 1, 2006	July 1, 2005
Actuarial accrued liability (AAL)	$4,554,843,062	$4,650,957,531	$4,301,476,920
Actuarial value of assets (AVA)	4,294,077,928	4,294,077,928	4,247,147,590
Unfunded/(Overfunded) actuarial accrued liability	$260,765,134	$356,879,603	$54,329,330
Funded ratio (AVA/AAL)	94.3%	92.3%	98.7%
Funded Status (Full Funding Basis)*			
Actuarial accrued liability (including normal cost)	$4,648,651,197	$4,785,290,539	$4,429,710,763
150% of current liability (including normal cost)	6,124,761,839	5,949,391,358	5,478,147,563
Full funding liabilities (lesser of above liabilities)	4,648,651,197	4,785,290,539	4,429,710,763
Assets (lesser of actuarial value, market value)	4,294,077,928	4,294,077,928	4,247,147,590
Surplus/(deficit)	$(354,573,269)	$(491,212,611)	$(182,563,173)

**Shown for illustration only.*

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT K

Development of Unfunded/(Overfunded) Actuarial Accrued Liability

		Year Ended May 31, 2006
1. Unfunded/(Overfunded) actuarial accrued liability at beginning of year		$ 54,329,330
2. Normal cost at beginning of year		117,547,689
3. Total contributions (employer and member)		(340,037)
4. Interest		
(a) For whole year on (1) + (2)	$11,816,545	
(b) For half year on (3)	(11,689)	
(c) Total interest		11,804,856
5. Expected unfunded/(overfunded) actuarial accrued liability		$183,341,838
6. Changes due to:		
(a) Actuarial loss	$173,537,765	
(b) Total changes		173,537,765
7. Unfunded/(Overfunded) actuarial accrued liability at end of year, before reflecting LANL transfer elections		$356,879,603
8. Effect of reflecting LANL transfer elections		(96,114,469)
9. Unfunded/(Overfunded) actuarial accrued liability at end of year, after reflecting LANL transfer elections		$260,765,134

** Results have been adjusted for the eleven month period as necessary.*

EXHIBIT L

Section 415 Limitations

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit indexed for inflation. That limit is $170,000 for 2005 and $175,000 for 2006. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, form of benefits chosen and after tax contributions.

The University pays benefits in excess of the limits through a 415(m) Restoration Plan.

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

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EXHIBIT M

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions: The estimates on which the cost of the Plan is calculated including:

(a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost: The amount required to fund the level cost allocated to the current year of service.

Actuarial Accrued Liability for Actives: The accumulated value of normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability for Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and of the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded (Overfunded) Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds (or is exceeded by) the assets of the Plan. There are many approaches to recognizing the unfunded or overfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

SECTION 2: Supplemental Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Amortization of the Unfunded (Overfunded) Actuarial Accrued Liability:	Payments made over a period of years equal in value to the Plan's unfunded or overfunded actuarial accrued liability.
Investment Return:	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return reflects a smoothing of market gains and losses to avoid significant swings in the value of assets from one year to the next.
Current Liability:	The actuarial present value of accumulated plan benefits.
Beneficiary:	Used for statistical purposes only; includes Eligible Survivors, Contingent Annuitants and Spouses/Domestic Partners

SEGAL

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

EXHIBIT I

Actuarial Assumptions and Methods

Demographic Assumptions

Post – Retirement Mortality Rates:

Healthy: 1994 Group Annuity Reserving Mortality Table unloaded, projected with scale AA to 2002. Ages are set back two years for males (from the male table) and set back one year for females (from the female table).

Disabled: Based upon 1987 Group Long Term Disability Table (composite select and ultimate rates).

Sample Termination Rates Before Retirement:

	Rate (%)					
	Healthy Mortality		Disabled Mortality*		Disability Incidence	
Age	Male	Female	Male	Female	Male	Female
20	0.04	0.03	19.60	15.10	0.14	0.06
25	0.06	0.03	18.18	13.81	0.15	0.08
30	0.08	0.03	11.49	7.88	0.16	0.10
35	0.09	0.04	7.86	5.48	0.18	0.16
40	0.10	0.06	5.26	4.13	0.22	0.26
45	0.13	0.09	3.89	3.15	0.28	0.38
50	0.20	0.12	3.30	2.66	0.37	0.57
55	0.33	0.21	3.02	2.84	0.51	0.80
60	0.60	0.40	3.14	3.75	0.78	1.12
65	1.10	0.79	4.28	5.07	1.24	1.45

** Assumed to apply only while receiving a disability benefit.*

Sample Termination Rates Before Retirement (continued):

	Rate (%)			
	Withdrawal – Faculty*			
	Less than one Year of Service	At least one, but less than two Years of Service	At least two, but less than three Years of Service	Three or more Years of Service
Age	Unisex	Unisex	Unisex	Unisex
20	24.00	22.00	21.00	21.00
25	24.00	20.00	18.00	16.00
30	21.00	10.00	9.00	9.00
35	12.00	8.00	5.00	4.00
40	12.00	6.00	5.00	4.00
45	12.00	5.00	5.00	2.00
50	12.00	3.00	3.00	2.00
55	12.00	3.00	3.00	2.00
60	12.00	3.00	3.00	2.00

* *Withdrawal rates are assumed to be zero for those participants eligible for retirement.*

Sample Termination Rates Before Retirement (continued):

	Rate (%)			
	Withdrawal – Staff*			
	Less than one Year of Service	At least one, but less than two Years of Service	At least two, but less than three Years of Service	Three or more Years of Service
Age	Unisex	Unisex	Unisex	Unisex
20	27.00	20.00	16.00	16.00
25	25.00	20.00	16.00	15.00
30	23.00	18.00	12.00	10.00
35	18.00	15.00	10.00	7.00
40	15.00	10.00	8.00	5.00
45	15.00	7.00	6.00	3.00
50	12.00	7.00	6.00	3.00
55	12.00	7.00	4.00	2.00
60	12.00	7.00	4.00	2.00

** Withdrawal rates are assumed to be zero for those participants eligible for retirement.*

Sample Termination Rates Before Retirement (continued):

	Rate (%) Withdrawal – Safety*							
	Less than one Year of Service		At least one, but less than two Years of Service		At least two, but less than three Years of Service		Three or more Years of Service	
Age	Male	Female	Male	Female	Male	Female	Male	Female
20	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
25	20.00	20.00	20.00	20.00	20.00	19.00	18.00	18.00
30	15.00	20.00	15.00	20.00	15.00	16.00	10.00	11.00
35	10.00	19.00	10.00	19.00	10.00	15.00	6.00	7.00
40	10.00	16.00	10.00	16.00	10.00	10.00	4.00	6.00
45	10.00	14.00	10.00	14.00	10.00	10.00	3.00	6.00
50	10.00	10.00	10.00	10.00	10.00	10.00	2.00	5.00
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

** Withdrawal rates are assumed to be zero for those participants eligible for retirement.*

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Retirement Rates:

	Retirement Probability – Unisex		
Age	Faculty	Staff	Safety
50	3.00%	8.00%	20.00%
51	2.00%	5.00%	5.00%
52	2.00%	5.00%	5.00%
53	2.00%	5.00%	5.00%
54	2.00%	6.00%	5.00%
55	2.00%	6.00%	25.00%
56	2.00%	6.00%	25.00%
57	2.00%	6.00%	25.00%
58	2.00%	8.00%	25.00%
59	4.00%	20.00%	25.00%
60	5.00%	20.00%	25.00%
61	5.00%	20.00%	25.00%
62	5.00%	20.00%	50.00%
63	5.00%	20.00%	50.00%
64	5.00%	30.00%	75.00%
65	6.00%	30.00%	100.00%
66	6.00%	25.00%	100.00%
67	10.00%	25.00%	100.00%
68	10.00%	25.00%	100.00%
69	15.00%	30.00%	100.00%
70	100.00%	100.00%	100.00%

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Retirement Age and Benefit for Deferred Vested Members:	Deferred vested members are assumed to retire at age 50.
Form of Payment:	Life annuity for single members; 25% contingent annuity for members with Social Security in a relationship for at least one year; 50% contingent annuity for members without Social Security in a relationship for at least one year; 50% contingent annuity for Safety members in a relationship for at least one year.
Future Benefit Accruals:	1.0 year of service per year for the full-time employees. Part-time employees are assumed to earn full-time service for all future years.
Definition of Active Members:	All members of UCRP who are not separated from active employment as of the valuation date or have not started receiving a monthly pension on or before the valuation date. The results of this valuation include liabilities even for members who have elected to transfer to the LANS defined benefit plan. These members are still valued as active UCRP members and their liabilities are shown as active in the results.

Percent with Eligible Dependents (Samples):

Age	Male	Female
20	58.00%	66.50%
25	85.00	89.50
30	91.50	92.50
35	93.00	94.00
40	93.50	93.50
45	94.00	92.50
50	95.00	91.00
55	94.50	89.00
60	94.00	85.00
65	93.00	80.00

Spouse/Domestic Partner Ages: Members assumed to have an opposite sex spouse or domestic partner, with females three years younger than males.

Number of Dependents (Samples):

	Number of Eligible Dependents per Active Member with Dependents	
Age	Male	Female
20	1.0	1.0
25	1.8	2.3
30	2.3	3.2
35	3.0	3.1
40	3.5	2.5
45	3.0	2.0
50	2.5	1.5
55	2.0	1.3
60	1.5	1.1
65	1.3	1.1

Economic Assumptions

Net Investment Return: 7.50% (including 4.00% for inflation)

Consumer Price Index: Increase of 4.00% per year.

Salary Increases (Samples):

Annual Rate of Compensation Increase

The sum of 4.00% inflation (at all ages) plus the following Merit and Longevity increases:

Age	
20	2.50%
25	2.50%
30	2.10%
35	1.70%
40	1.50%
45	1.30%
50	1.20%
55	1.10%
60	0.90%

The assumed salary increases will be 2.0% lower overall for the period June 1, 2006 through June 30, 2007.

Administrative Expenses: 0.5% of payroll added to normal cost.

Actuarial Methods

Actuarial Value of Assets: The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and the expected returns on a market value basis and is recognized over a five-year period.

For assets allocated to LANL, this is approximated as the total UCRP actuarial value multiplied by the ratio of market value of LANL allocated assets to the total UCRP market value.

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is calculated as the valuation date minus years of service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salaries, as if the current benefit accrual rate has always been in effect.
Other Actuarial Assumptions	
Lump Sum Assumptions:	
Discount Rate:	7.50%
COLA:	2.00%
Take-rate:	None assumed.
Mortality:	1994 Group Annuity Reserving Mortality Table unloaded for males set back three years, projected with scale AA to 2002.
Approximations:	
Guaranteed Survivor and Disability Benefits	Liability and normal cost for guaranteed survivor and disability benefits for members who elected Social Security was estimated as 10% of their basic liability and normal cost.
Sick Leave	Service has been increased by 0.2% for faculty, 1.4% for staff, and 2.5% for safety members to account for unused sick leave.
Changes in Assumptions:	There have been no changes in actuarial assumptions since the previous valuation.

EXHIBIT II

Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Effective Date:	April 24, 1954. Includes amendments through June 1, 2006.
Covered Employees:	Generally all employees who are not members of another retirement system to which the Regents contribute, and who: a. Are appointed to work 50% time or more for one year or longer or b. Have generally accumulated at least 1,000 hours in a 12-month period.
Highest Average Plan Compensation (HAPC):	Highest average monthly full-time-equivalent base compensation rate received during any period of 36 consecutive months.

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Age Factor: Percentage of HAPC per year of service credit (interpolated for fractional ages).

Nonsafety Members

Age	Factor	Age	Factor
50	1.10%	56	1.94%
51	1.24	57	2.08
52	1.38	58	2.22
53	1.52	59	2.36
54	1.66	60+	2.50
55	1.80		

Safety Members 3.0% at all ages 50 and above.

Tier II Members Equal to one-half of the Age Factor for Nonsafety Members.

Benefit Percentage: Age Factor multiplied by years of service credit; not to exceed 100%.

Basic Retirement Income (BRI):

Members without Social Security Benefit Percentage x HAPC.

Members with Social Security Benefit Percentage x HAPC in excess of $133 per month.

Safety Members Benefit Percentage x HAPC.

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Service Retirement:	
Eligibility	Age 50 with 5 years of service credit, or Age 62 regardless of service credit if membership began on or before July 1, 1989, or Retirement on Normal Retirement Date.
Benefit	BRI.
Form of Payment	Single Life Annuity.
Payment Options	Full continuance to contingent annuitant; two-thirds continuance to contingent annuitant; one-half continuance to contingent annuitant; one-half continuance (including post-retirement survivor continuance) to surviving spouse or domestic partner (for members with Social Security only).
Lump Sum Cashout	May be elected in lieu of monthly retirement income.
Temporary Social Security Supplement:	
Eligibility	For members with Social Security only and retirement must occur before age 65.
Benefit	Temporary annuity payable to age 65 in the amount of $133 per month multiplied by Benefit Percentage.
Form of Payment	Single Life Annuity.
Payment Options	None.

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Disability:	
Eligibility	Disablement after five years of service credit; safety members are eligible for duty disability without regard to years of service credit. Service credit continues to accrue during disabled period.
Benefit	
Member without Social Security	25% of final salary, plus 5% of final salary per year of service credit greater than two, total not to exceed 40% of final salary, plus 5% of final salary for each eligible child, total not to exceed 20% of final salary.
Member with Social Security	15% of final salary, plus 2.5% of final salary per year of service credit greater than two, total not to exceed 40% of final salary, less $106.40 per month.
Safety Members(Non-duty)	Same as for members without Social Security; includes eligible child's benefit.
Safety Members(Duty)	50% of HAPC, or non-duty disability benefit if greater.
Form of Payment	Single life annuity payable until end of disability income period or retirement date if earlier.
Disability Income Period	
Members disabled before November 5, 1990	To earliest of:
	Date member is eligible to retire and retirement income equals or exceeds disability income;
	Age 62 (age 67 for members without Social Security); or
	Date member retires.
Members disabled on or after November 5, 1990	If under age 65 at disablement:
	Members with Social Security: to age 65 or five years if longer.
	Members without Social Security: to age 67 or five years if longer.
	If age 65 or older at disablement: to age 70 or 12 months if longer.
	Disability income ends if member is no longer disabled.

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Vested Termination:	
Eligibility	Five years of service credit, or age 62 regardless of service credit if membership began on or before July 1, 1989.
Benefit	BRI beginning at age 50 or later, calculated using HAPC at termination date, adjusting for CPI changes (see Cost-of-Living Adjustment), and benefit formula in effect when benefits commence.
Form of Payment	As for retirement.
Payment Options	As for retirement.
Refund Option	Member may elect a refund of contributions with interest, thereby forfeiting all other benefits.
Lump Sum Cashout	May be elected in lieu of retirement income, available only if at least age 50 with five years service credit at date of termination.

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Pre-retirement Survivor Income:

Eligibility

Eligible survivor of deceased active or disabled member with two or more years of service credit; no service requirement for duty-related death of Safety member.

Benefit

Member without Social Security

Percent of final salary as follows:

Eligible Survivors	Percent	Minimum Benefit
1	25%	$200
2	35	$300
3	40	$300 plus 5% of final salary
4	45	$300 plus 10% of final salary
5+	50	$300 plus 15% of final salary

Member with Social Security

25% of final salary less $106.40 per month.

Safety Members, non-duty death

As for members without Social Security.

Safety Members, duty death

Percentage of HAPC as follows, but not less than benefit for non-duty death.

Eligible Survivors	Percent of HAPC
1	50.0%
2	62.5
3	70.0
4+	75.0

Death while eligible to retire

Eligibility

Eligible surviving spouse or domestic partner of active, disabled or inactive member who dies while eligible to retire.

Benefit

Greater of benefit described above or monthly benefit to surviving spouse or domestic partner assuming member had retired on date of death and elected full continuance option with spouse or domestic partner as contingent annuitant.

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Post-retirement Survivor Continuance:	
Eligibility	Eligible survivor of deceased retired member.
Benefit	
Member without Social Security	50% of BRI including COLA.
Member with Social Security	25% of BRI including COLA, plus 25% of Temporary Social Security Supplement (ends when member would have reached age 65).
Safety Members	50% of BRI including COLA.
Lump Sum Death Benefit:	
Eligibility	Active, inactive, disabled, or retired member.
Basic Benefit	
Active member who became a member before October 1, 1990	Greater of :
	$1,500 plus one month's final salary, or $7,500.
All others	$7,500
Residual Benefit	Refund of member contributions plus interest, reduced by a portion of benefits received (100% of retirement income, 50% of pre-retirement survivor income or disability income) payable to beneficiary if no survivor, surviving spouse, domestic partner, or contingent annuitant.
Normal Retirement Date:	Attainment of age 60 with five years of service credit.

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Eligible Survivor:	
Eligible Spouse or Domestic Partner	Spouse or domestic partner of deceased active or disabled member in relationship for at least one year before date of death and who is:
	Responsible for care of eligible child, disabled, or age 60 (age 50 if spouse of member without Social Security and in Plan prior to October 19, 1973).
Eligible Child	Child that is either under age 18, under age 22 and full-time student, or disabled, if disability occurred prior to age 18 or age 22 if a full-time student.
Eligible Dependent Parent	Parent of deceased active, disabled or retired member, supported by 50% or more by member for one year prior to earliest of death, disablement or retirement.
Inactive Member:	Former UCRP member who retains right to vested benefits.
Cost-of-Living Adjustment:	
Basic	100% of annual Consumer Price Index (CPI) increase up to 2% per year.
Supplemental	Greater of: 75% of annual CPI increase above 4%, or accumulated increment.
	Accumulated increment: 2% compounded annually from the member's COLA eligibility date through the current date, less 2%.
	The sum of the Basic and Supplemental COLA's cannot exceed 6% in a year.
COLA applies to:	
Retired members, survivors, disabled members, and contingent annuitants receiving retirement income	Benefits in pay status one or more years on July 1.
Inactive members	HAPC (used to calculate retirement income) adjusted for COLA up to 2% per year from separation date to retirement date; retirement income adjusted using COLA formula.
Disabled members receiving disability income since before November 5, 1990	HAPC (used to calculate retirement income) adjusted for COLA up to COLA formula above for years from disablement to retirement date.

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Capital Accumulation Provision(CAP):	
Eligibility	Active member on specified date; benefits immediately vested.
Allocation Dates	
April 1, 1992	Active member from December 31, 1991 through April 1, 1992: 5.0% of 1991 calendar year covered compensation.
July 1, 1992	Active member on July 1, 1992: 2.5% of 1991-1992 fiscal year covered compensation.
July 1, 1993	Active member on July 1, 1993: 2.5% of 1992-1993 fiscal year covered compensation.
November 1, 1993	Active member on October 1, 1993 and subject to 1993-1994 salary plan: 5.26% of July through October 1993 covered compensation. Not applicable for laboratory members.
July 1, 1994	Active member on June 1, 1994 and subject to 1993-1994 salary plan: 2.67% of November 1993 through June 1994 covered compensation. Not applicable for laboratory members.
May 1, 2002	Active member on April 1, 2002: 3.0% of April 2001 through March 2002 covered compensation.
May 1, 2003	Active member on April 1, 2003: 5.0% of April 2002 through March 2003 covered compensation.
Interest Credit	Regent's approved interest rate; currently 8.5% per year for pre-2002 CAPs and 7.5% for 2002 and later CAPs (CAP II).
Payment	Lump sum payment upon termination, retirement or death.
University Contributions:	Determined by the Entry-Age Normal Cost method. Beginning with the 1990 plan year, the Regents adopted a full funding policy. Under that policy, the University will suspend contributions when the smaller of the market value or the actuarial value of plan assets exceeds the lesser of: The actuarial accrued liability (including normal cost), or 150% of the estimated current liability (including normal cost).

SECTION 3: Reporting Information from the Valuation of the University of California Retirement Plan – Los Alamos National Laboratory

Member Contributions:	Member contributions are currently being redirected to the UC Defined Contribution Plan.
Members without Social Security	3.0% of covered compensation, less $19 per month.
Members with Social Security	2.0% of covered compensation up to the Social Security wage base, plus 4.0% of excess covered compensation, minus $19 per month.
Safety Members	3.0% of covered compensation, less $19 per month.
Interest Credit	Regent's approved interest rate; currently 6.0% per year.
Changes in Plan Provisions:	There have been no changes in plan provisions since the last valuation that have a material impact on Plan liabilities and normal cost.
	Active members at the Los Alamos National Laboratory made an election to either become inactive in UCRP or to transfer to a defined benefit plan that begins effective June 1, 2006 for the Los Alamos National Security LLC (LANS). This valuation includes results reflecting the LANL transfer elections. However, it does not reflect the actual transfer of assets and liabilities to the LANS defined benefit plan. This means that the results of this valuation include liabilities even for members who have elected to transfer to the LANS defined benefit plan. These members are still valued as active UCRP members and their UCRP liabilities are shown as active in the results. LANL members **who elected not** to transfer to the LANS defined benefit plan are included in the valuation results either as terminated vested or nonvested members. Consistent with current practice, for those terminated members who were eligible for retirement, we have assumed a July 1, 2006 commencement date for their retirement benefits.

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EXHIBIT

2

Exhibit 2--Proposed Approach for Asset Allocation for Transfer to the LANS Plan

The following is an illustration of the approach to determine the amount of each investment to be transferred from the University of California Retirement Plan (UCRP) to the Los Alamos National Security, LLC, Defined Benefit Plan (LANS Plan) based on a hypothetical transfer amount of $1.279 billion on a hypothetical transfer date of December 31, 2006.

Amount of hypothetical transfer from UCRP to the LANS Plan: $ 1,279,000,000.00 (Note 1)

Column 1	Column 2	Column 3
Summary of Actual UCRP Investments as of December 31, 2006 (Note 2)		Pro-rata portion of UCRP Investments Equaling Transfer Amount
Investments	Market Value	= 2.713% x Column 2
Small Cap	$ 1,172,314,252.00	$ 31,805,951.29
Large Cap	8,952,254,408.00	242,882,799.71
Non US	3,179,254,936.00	86,256,076.36
Emrg Markt (NAV)	1,500,896,026.00	40,720,673.50
Equitization Port	60,187,302.50	1,632,936.23
Russell 3000 TF Index	12,610,202,905.00	342,126,267.52
MSCI EAFE + Canada TF	5,746,415,322.00	155,905,471.19
fixed inc	5,708,988,069.00	154,890,035.80
Tips	2,679,842,685.00	72,706,568.03
FI transition	801,116,154.00	21,735,009.47
fi high yield int	462,323,381.00	12,543,253.58
fi high yield ext	556,152,958.00	15,088,935.29
fi emrg mrkt int	935,590,860.00	25,383,430.49
WGBI index	1,394,196,895.34	37,825,829.10
Liquidity	49,753,506.54	1,349,857.86
Real estate	361,981,978.00	9,820,900.11
Priv equity	966,093,362.00	26,210,991.09
eq dist	4,239,201.00	115,013.38
Total	$ 47,141,804,201.38	$ 1,279,000,000.00

Column 4	Column 5	Column 6
Determination of Investments to be Transferred from UCRP to the LANS DB Plan (Note 3)		
All UCRP Investments	Corresponding Amount from Column 3	Investments to be Transferred from UCRP to the LANS DB Plan
Small Cap	$ 31,805,951.29	
Large Cap	242,882,799.71	
Russell 3000 TF	342,126,267.52	
Equitization Port	1,632,936.23	
1/2 Real Estate	4,910,450.05	
Priv Equity & Eq Dist	26,326,004.47	
Subtotal	**649,684,409.27**	**Russell 3000 Tobacco Free Index**
MSCI Eafe+ Canada TF Index	155,905,471.19	
Non US Eq	86,256,076.36	
Emrg Market	40,720,673.50	
Subtotal	**282,882,221.06**	**MSCI EAFE + Canada Tobacco Free Index**
Tips	**72,706,568.03**	**Lehman Brothers U.S. Treasury TIPS Index**
Fixed Income	154,890,035.80	
FI High Yield Int	12,543,253.58	
FI High Yield Ext	15,088,935.29	
FI Transition	21,735,009.47	
1/2 Real Estate	4,910,450.05	
Subtotal	**209,167,684.20**	**FI Transition - CG LPF Bond Index**
FI Emrg Mrkt	25,383,430.49	
WGBI Index	37,825,829.10	
Subtotal	**63,209,259.59**	**WGBI Index**
Liquidity	**1,349,857.86**	**Liquidity Portfolio**
Total	$ 1,279,000,000.00	

Note 1: This amount will be changed to the Asset Transfer Amount as of the Asset Transfer Date when the actual transfer is determined.
Note 2: The actual assets in UCRP as of the Asset Transfer Date will be used when the actual transfer is determined.
Note 3: Instead of transferring a portion of each investment of UCRP (investment as shown in Column 1 and amount in Column 3), the transfer amount will be apportioned to a subset of the investments (investment as shown in Column 6 and amount as shown in bold in Column 5) grouped by similar types (as shown in Column 4) so that the total transfer amount equals the total amount from Column 3.

EXHIBIT

3

EXHIBIT 3

PRICING PROCEDURES FOR ASSET CLASSED HELD IN UNIVERSITY OF CALIFORNIA RETIREMENT PLAN

The asset classes held in the University of California Retirement Plan (UCRP) will be priced according to the Pricing Procedures described in the chart attached hereto as Attachment 1. The Pricing Procedures are used by State Street Investor Services ("State Street"), the custodian of the UCRP trust, to price the assets of the UCRP generally. The procedures are subject to State Street's internal controls that are regularly tested and evaluated by an independent auditor.

Attached hereto as Attachment 2 is the Report of Independent Service Auditors (Report) on State Street's internal controls related to its recordkeeping and custody services. The Report was prepared by PriceWaterhouseCoopers for the period April 1, 2006 through September 30, 2006 in accordance with standards established by the American Institute of Certified Public Accountants (Statement on Auditing Standards No. 70, as amended).

Attached hereto as Attachment 3 are the relevant pages from Section V of the Report that address controls providing reasonable assurance that securities are valued completely and in accordance with client instructions.

ATTACHMENT 1 TO EXHIBIT 3

CHART--Pricing Procedures
For Asset Classes
Held in UCRP

Exhibit 3 - Pricing Procedures for Asset Classes Held in UCRP

Security Type	Primary Automated Source	Second Automated Source	Third Automated Source	Other Available Automated Sources	Non-Automated Source	Secondary Non-Automated Source
US Equities	1-Reuters, Last Trade for Primary Market	2-Reuters, Last Bid for Primary Market			Bloomberg / Thompson One	Investment Manager
International Equities	1-Reuters, Last Trade for Primary Market	2-Reuters, Last Bid for Primary Market			Bloomberg / Thompson One	Investment Manager
Listed US and International Options	1-Reuters, Settle				Bloomberg / Thompson One	Investment Manager
Listed US and International Futures	1-Reuters, Settle				Bloomberg / Thompson One	Investment Manager
Listed US Warrants and Rights	1-Reuters, Settle				Bloomberg / Thompson One	Investment Manager
FOREIGN EXCHANGE RATES	Reuters/WM Company - Rate as of London Close 11:am Eastern	Reuters - Rates as of 12 pm Eastern time				
Preferred Stock	3-FT Interactive (IDC) Bid				Bloomberg	Investment Manager
US Mutual Funds	1-Reuters, NASDAQ Close				Bloomberg / Thompson One	Mutual Fund House
US Government Bonds	1-Lehman Brothers	2-Bear Sterns	3-FT Interactive (IDC) Bid	Reuters/Bridge Fixed Income, Standard & Poors/J.J. Kenny Securities Data and Evaluation Services	Bloomberg	Investment Manager
US Mortgage Backed (GNMA, FNMA, FHLMC)	1-Lehman Brothers	2-Bear Sterns	3-FT Interactive (IDC) Bid	Reuters/Bridge Fixed Income, Standard & Poors/J.J. Kenny Securities Data and Evaluation Services	Bloomberg	Investment Manager
US Corporate Bonds (including High Yield)	1-Lehman Brothers	2-Bear Sterns	3-FT Interactive (IDC) Bid	Reuters/Bridge Fixed Income, Standard & Poors/J.J. Kenny Securities Data and Evaluation Services	Bloomberg	Investment Manager
US Convertible Bonds	1-Bear Sterns	3-FT Interactive (IDC) Bid	3-Reuters/Bridge Fixed Income	Standard & Poors/J.J. Kenny Securities Data and Evaluation Services	Bloomberg	Investment Manager
US Municipal Bonds	1-FT Interactive (IDC)	2- Standard & Poors/J.J. Kenny Securities Data and Evaluation Services			Bloomberg	Investment Manager
US CMO & Asset Backed Securities	1-Lehman Brothers	2-Bear Sterns	3-FT Interactive (IDC) Bid	Reuters/Bridge Fixed Income, Standard & Poors/J.J. Kenny Securities Data and Evaluation Services	Bloomberg	Investment Manager
International Corporate Bonds	3-FT Interactive (IDC) Bid	2- FRI Corporation			Bloomberg	Investment Manager
International Govt Issues	3-FT Interactive (IDC) Bid	2- FRI Corporation	3- CIBC World Markets		Bloomberg	Investment Manager

Equities
Mutual Funds
Derivatives
Fixed Income

ATTACHMENT 2 TO EXHIBIT 3

Report of Independent Service Auditors
On State Street Investor Services Global Controls
Related to Recordkeeping and Custody Services
April 1, 2006 through September 30, 2006

Attachment 2 to Exhibit 3 has been redacted because it contains business sensitive information. If you require this information, Please contact the Prime Contract Management Office.

ATTACHMENT 3 TO EXHIBIT 3

Relevant Pages from Section V—State Street Investor Services

Global Controls Examination

Control Objective 8

Attachment 3 to Exhibit 3 has been redacted because it contains business sensitive information. If you require this information, please contact the Prime Contract Management Office.

EXHIBIT

4

Unofficial Conformed Copy as of 8/24/12 through Mod No. 196

Exhibit 4 - Determination of Asset Transfer Amount

		UCRP Mkt Val	Total LANL Segment of UCRP	Portion Retained by UCRP	Portion Transferred to LANS
Assets as of	**5/31/2006**	**$ 43,510,515,291**	**$ 4,448,574,090**	**$ 3,169,811,239**	**$ 1,278,762,851**
+/- Correction to 5/31/06 Addendum Report				**(652,775)**	**652,775**
+ Total Investment Return		24,551,924	2,510,222	1,784,078	726,144
+ Contributions/Service Credit Buybacks		363,974	95,575	95,575	-
- Interim Transfers		-	-	-	-
- Retiree payments		(228,025,401)	(37,421,706)	(37,421,706)	-
- Fees and expenses		(10,433,454)	(1,066,730)	(760,094)	(306,637)
Assets as of	**6/30/2006**	**43,296,972,334**	**4,412,595,875**	**3,132,760,742**	**1,279,835,134**
+ Total Investment Return		178,733,347	18,215,547	12,914,445	5,301,102
+ Contributions/Service Credit Buybacks		165,755	11,664	11,664	-
- Interim Transfers		-	-	-	-
- Retiree payments		(59,903,650)	(33,487,697)	(33,487,697)	-
- Fees and expenses		-	-	-	-
Assets as of	**7/31/2006**	**43,415,967,786**	**4,397,335,389**	**3,112,199,154**	**1,285,136,236**
+ Total Investment Return		1,017,876,405	103,094,418	72,681,846	30,412,572
+ Contributions/Service Credit Buybacks		310,704	44,056	44,056	-
- Interim Transfers		-	-	-	-
- Retiree payments		(230,041,015)	(77,842,074)	(77,842,074)	-
- Fees and expenses		-	-	-	-
Assets as of	**8/31/2006**	**44,204,113,880**	**4,422,631,790**	**3,107,082,981**	**1,315,548,808**
+ Total Investment Return		667,825,412	66,816,086	46,782,332	20,033,755
+ Contributions/Service Credit Buybacks		178,788	-	-	-
- Interim Transfers		-	-	-	-
- Retiree payments		(252,346,412)	(45,883,353)	(45,883,353)	-
- Fees and expenses		(21,963)	(2,197)	(1,544)	(654)
Assets as of	**9/30/2006**	**44,619,749,705**	**4,443,562,325**	**3,107,980,416**	**1,335,581,909**
+ Total Investment Return		1,225,661,705	122,060,393	85,364,580	36,695,813
+ Contributions/Service Credit Buybacks		32,971	-	-	-
- Interim Transfers		-	-	-	-
- Retiree payments		(9,637,177)	(1,395,416)	(1,395,416)	-
- Fees and expenses		-	-	-	-
Assets as of	**10/31/2006**	**45,835,807,204**	**4,564,227,302**	**3,191,949,580**	**1,372,277,722**
+ Total Investment Return		1,054,602,266	105,014,938	73,295,299	31,719,639
+ Contributions/Service Credit Buybacks		100,935	-	-	-
- Interim Transfers		-	-	-	-
- Retiree payments		(135,967,316)	(25,596,675)	(25,596,675)	-
- Fees and expenses		(9,549,004)	(950,869)	(664,981)	(285,888)
Assets as of	**11/30/2006**	**46,744,994,085**	**4,642,694,697**	**3,238,983,224**	**1,403,711,473**
+ Total Investment Return		425,142,800	42,225,018	29,411,759	12,813,259
+ Contributions/Service Credit Buybacks		159,478	3,918	3,918	-
- Interim Transfers		-	-	-	-
- Retiree payments		(127,443,492)	(19,044,535)	(19,042,292)	(2,243)
- Fees and expenses		(1,909,801)	(189,681)	(132,331)	(57,350)
Assets as of	**12/31/2006**	**47,040,943,070**	**4,665,689,418**	**3,249,224,279**	**1,416,465,140**
+ Total Investment Return		503,464,335	49,935,398	34,715,127	15,220,271
+ Contributions/Service Credit Buybacks		100,281	-	-	-
- Interim Transfers		-	-	-	-
- Retiree payments		(126,465,923)	(20,572,918)	(20,570,209)	(2,709)
- Fees and expenses		(8,380,886)	(831,246)	(578,887)	(252,360)
Assets as of	**1/31/2007**	**47,409,660,878**	**4,694,220,652**	**3,262,790,310**	**1,431,430,342**
+ Total Investment Return		(35,894,967)	(3,554,105)	(2,466,145)	(1,087,960)
+ Contributions/Service Credit Buybacks		136,411	-	-	-
- Interim Transfers		-	-	-	-
- Retiree payments		(137,347,558)	(18,104,726)	(18,096,976)	(7,750)
- Fees and expenses		(2,831,233)	(280,332)	(194,849)	(85,483)
Assets as of	**2/28/2007**	**$ 47,233,723,530**	**$ 4,672,281,490**	**$ 3,242,032,340**	**$ 1,430,249,150**
+ Total Investment Return					
+ Contributions/Service Credit Buybacks					
- Interim Transfers					
- Retiree payments					
- Fees and expenses					
Assets as of	**3/31/2007**	**47,233,723,530**	**4,672,281,490**	**3,242,032,340**	**1,430,249,150**