This document consists of 13 pages excluding this cover page.

MODIFICATION NO. M034 SUPPLEMENTAL AGREEMENT TO CONTRACT NO. DE-AC02-98CH10886

MODIFICATION NO. M034

CONTRACTOR AND ADDRESS:

Brookhaven Science Associates, LLC

Brookhaven National Laboratory

Upton, NY 11973

MODIFICATION FOR:

Recognition of previous obligation increases; Modification of Article 4, Statement of Work; Modification of Article 17, Key Personnel; Addition of Article 50, Reduction or Suspension of Advanced, Partial, or Progress Payments; Deviation Modification of Article 94 - Access to And Ownership of Records; replacement of Articles 108 and 109; Modification of Appendix B, Performance Measures and Criteria to included the SNS Project; replacement of Appendix I - DOE Directives; and, addition of Appendix M - Spallation Neutron Source (SNS).

PRIOR OBLIGATION:

\$749,222,535.12

INCREASE IN MODS. A029 THROUGH A033

\$ 31,491,540.14

INCREASE IN THIS MODIFICATION

-0-

CURRENT TOTAL OBLIGATION:

\$780,714,075.26

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THIS MODIFICATION, effective the 22 day of October 1999, by and between the UNITED STATES OF AMERICA (hereinafter referred to as the "Government"), as represented by the UNITED STATES DEPARTMENT OF ENERGY (hereinafter referred to as "DOE"), and BROOKHAVEN SCIENCE ASSOCIATES, LLC (hereinafter referred to as the "Contractor"),

WITNESSETH THAT:

WHEREAS, the Government and the Contractor entered into Contract No. DE-AC02-98CH10886) on the 5th day of January 1998, for the operation of the Brookhaven National Laboratory; and

WHEREAS, said contract has been modified previously, and the parties desire to modify said contract further, as hereinafter provided; and

WHEREAS, this modification is authorized by law, including 41 U.S.C. 252(c)(15), P.L. 95-91 and other applicable law;

NOW, THEREFORE, said contract, as modified previously, is hereby further modified as follows:

- 1. The first sentence of paragraph (a) of Article 31, <u>OBLIGATION OF FUNDS</u>, is revised to read as follows: "The amount presently obligated by the Government with respect to this contract is \$780,714,075.26."
- 2. Article 17, KEY PERSONNEL, is revised in the second paragraph under (a) by deleting Dr. Adrian Roberts and substituting Dr. Teresa Fryberger.
- 3. ARTICLE 4, STATEMENT OF WORK (SPECIAL) is modified as follows in the second paragraph of subparagraph (b) add the following phrase in the 10th line "and the Spallation Neutron Source (as described in Appendix M)" between "...HFBR, BMRR" and "...and, when complete, the relativistic..."

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- 4. The following article is added:
 - "ARTICLE 50 REDUCTION OR SUSPENSION OF ADVANCE, PARTIAL, OR PROGRESS PAYMENTS (DEC 1997)
 - (a) The contracting officer may reduce or suspend further advance, partial, or progress payments to the contractor upon a written determination by the Secretary that substantial evidence exists that a contractor's request for advance, partial, or progress payment is based on fraud.
 - (b) The contractor shall be afforded a reasonable opportunity to respond in writing."
- 5. Article 94 ACCESS TO AND OWNERSHIP OF RECORDS (JUN 1997) is modified as follows: add the parenthetical "(DEVIATION)" at the end of the Article's title, and in the 9th line of subparagraph (b)(1) insert the following phrase "and non-employee patient medical/health related records "after" ... similar files)",
- 6. Article 108 UTILIZATION OF SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS CONCERNS (JUN1997) is deleted in its entirety and replaced with the following:
 - "ARTICLE 108 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 1999)
 - (a) It is the policy of the United States that small business concerns, HUBZone small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, and small business concerns owned and controlled by women shall have maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, and components, and related services for major

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systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, HUBZone small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, and small business concerns owned and controlled by women.

- (b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.
- (c) Definitions. As used in this contract-
 - (1) "Small business concern" means a small business as defined pursuant to section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.
 - (2) "HUBZone small business concern" means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.
 - (3) "Small business concern owned and controlled by socially and economically disadvantaged individuals" and "small disadvantaged business concern" mean a small business concern that represents, as part of its offer that-
 - (i) It has received certification as a small disadvantaged business concern consistent with 13 CFR 124, Subpart B;
 - (ii) No material change in disadvantaged ownership and control has occurred since its certification;

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- (iii) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and
- (iv) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).
- (4) "Small business concern owned and controlled by women" means a small business concern-
 - (i) Which is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
 - (ii) Whose management and daily business operations are controlled by one or more women.
- (d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, HUBZone small business concern, a small business concern owned and controlled by socially and economically disadvantaged individuals, or a small business concern owned and controlled by women."
- 7. Article 109 <u>FAR 52.219-9 SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS PLAN (AUG1996)</u> is deleted in its entirety and replaced with the following:

"ARTICLE 109 - SMALL BUSINESS SUBCONTRACTING PLAN (OCT 1999)

- (a) This clause does not apply to small business concerns.
- (b) Definitions. As used in this clause-

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"Commercial item", means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulations.

"Commercial Plan" means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

"Individual contract plan" means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract. "Master plan" means a subcontracting plan that contains all the required elements of an individual contract plan except goals, and may be incorporated into individual contract plans,

provided the master plan has been approved.

- "Subcontract", means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.
- (c) The offeror, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan, where applicable, which separately addresses subcontracting with small business, HUBZone small business concerns, small disadvantaged business, and with women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, HUBZone small business concerns, small disadvantaged business, and with women-owned small business concerns with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting

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Officer. Failure to submit and negotiate the subcontracting plan shall make the offeror ineligible for award of a contract.

- (d) The offeror's subcontracting plan shall include the following:
 - (1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, HUBZone small business concerns, small disadvantaged business, and women-owned small business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.
 - (2) A statement of:
 - (i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for the commercial plan;
 - (ii) Total dollars planned to be subcontracted to small business concerns;
 - (iii) Total dollars planned to be subcontracted to HUBZone small business concerns, and
 - (iv) Total dollars planned to be subcontracted to small disadvantaged business concerns, and
 - (v) Total dollars planned to be subcontracted to women-owned small business concerns.
 - (3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to-
 - (i) small business concerns:
 - (ii) HUBZone small business concerns;

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- (iii) Small disadvantaged business concerns; and
- (iv) Women-owned small business concerns.
- (4) A description of the method used to develop the subcontracting goals in subparagraph (d)(1) of this clause..
- (5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned business trade associations). A firm may rely on the information contained in PRO-Net as an accurate representation of a concern's size and ownership characteristics for purposes of maintaining a small, HUBZone, small disadvantaged and women-owned business source list. Use of the PRO-Net as its source list does not relieve a firm of its responsibilities (i.e., outreach, assistance, counseling, publicizing subcontracting opportunities) in this clause.
- (6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—
 - (i) small business concerns;
 - (ii) HUBZone small business concerns;
 - (iii) Small disadvantaged business concerns; and
 - (iv) Women-owned small business concerns.
- (7) The name of the individual employed by the offeror who will administer the

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offeror's subcontracting program, and a description of the duties of the individual.

- (8) A description of the efforts the offeror will make to assure that small business, HUBZone small business, small disadvantaged business, and women-owned business concerns have an equitable opportunity to compete for subcontracts.
- (9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns", in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of \$500,000 (\$1,000,000 for construction of any public facility), to adopt a subcontracting plan that complies with the requirements of this clause.
- (10) Assurances that the offeror will-
 - (i) cooperate in any studies or surveys as may be required,
 - (ii) submit periodic reports in order to allow the Government to determine the extent of compliance by the offeror with the subcontracting plan;
 - (iii) submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with the instructions on the forms or as provided in agency regulations and in paragraph (j) of this clause; and
 - (iv) ensure that its subcontractors agree to submit Standard Forms 294 and 295.
- (11) A description of the types of records that will maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, HUBZone small business, small

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disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated):

- (i) Source lists, (e.g., PRO-Net), guides, and other data that identify small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.
- (ii) Organizations contacted in an attempt to locate sources that are small business, HUBZone small business, small disadvantaged business concern, or women-owned small business concerns.
- (iii) Records on each subcontract solicitation resulting in an award of more than \$100,000, indicating—
 - (A) whether small business concerns were solicited and if not, why not;
 - (B) whether HUBZone small business concerns were solicited and if not, why not;
 - (C) whether small disadvantaged business concerns were solicited and, if not, why not;
 - (D) whether women-owned small business concerns were solicited and, if not, why not; and
 - (E) if applicable, the reason award was not made to a small business concern.
- (iv) Records of any outreach efforts to contact-
 - (A) trade associations;
 - (B) business development organizations; and
 - (C) conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources.

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- (v) Records of internal guidance and encouragement provided to buyers through-
 - (A) workshops, seminars, training, etc., and
 - (B) monitoring performance to evaluate compliance with the program's requirements.
- (vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.
- (e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:
 - (1) Assist small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.
 - (2) Provide adequate and timely consideration of the potentialities of small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.
 - (3) Counsel and discuss subcontracting opportunities with representatives of

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- small HUBZone small business, small disadvantaged business, and womenowned small business firms.
- (4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small business, HUBZone small business, small disadvantaged, and women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.
- (f) A master subcontracting plan on a plant or division-wide basis which contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required by the offeror by this clause; provided—
 - (1) the master plan has been approved;
 - (2) the offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer, and
 - (3) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.
- (g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.

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- (h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.
- (i) The failure of the Contractor or subcontractor to comply in good faith with-
 - (1) The clause of this contract entitled, "Utilization of Small Business Concerns;" or
 - (2) An approved plan required by this clause, shall be a material breach of the contract.
- (j) The Contractor shall submit the following reports:
 - (1) Standard Form 294, Subcontracting Report for Individual Contracts. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.
 - (2) Standard Form 295, Summary Subcontract Report. This report encompasses all the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by Standard Industrial Classification (SIC) Major Group. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant SIC Major Group and report all awards to that subcontractor under its predominant SIC Major Group.

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8. APPENDIX B, PERFORMANCE MEASURES AND CRITERIA is modified as follows:

In Attachment 1, under section 1.3, Success in Constructing and Operating Research

Facilities, add the following paragraph:

"Reviewers will assess the Laboratory's progress in providing effective and efficient

leadership against the scheduled deliverables in the development of the Spallation Neutron

Source (SNS) Project."

9. APPENDIX I - DOE Directives identified as Modification M028 is deleted in its entirety and

replaced by Appendix I - DOE Directives identified as Modification M034.

10. APPENDIX M - Spallation Neutron Source (SNS) is added.

IN WITNESS WHEREOF, the parties have executed this document.

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY

BY: 🖊

Contracting Officer

DATE: 10-22-99

BROOKHAVEN SCIENCE ASSOCIATES, LLC

BY: ()

Assistant Laboratory Director

for Finance & Administration (Title)

DATE: 10-22-99

CONTRACT MODIFICATION M034 BROOKHAVEN SCIENCE ASSOCIATES, LLC CONTRACT NO. DE-AC02-98CH10886

MOD NO.	INCREASED AMOUNT	REMARKS	
A029	\$9,140,682.15		
A030	\$15,952,683.65		
M031	\$0.00	CANCELED	
A032	\$6,147,181.43		
A033	\$250,992.91	**	

TOTAL	\$31,491,540.14	
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CONTRACT MODIFICATION M034

BROOKHAVEN SCIENCE ASSOCIATES, LLC CONTRACT NO. DE-AC02-98CH10886

CONTRACT NO. DE-ACUZ-98CH10886	•
Current BSA Contract Amount (Thru Mod. M028, incl.)	\$749,222,535.12
Increased amount (Modification A029 thru A033)	\$31,491,540.14
New Contract Total	\$780,714,075.26

APPENDIX I

DOE DIRECTIVES

There is no List A to this Appendix.

List B to this Appendix contains two parts as follows:

Part I: " Directives List"

This section contains a list of Directives that are considered by DOE as applicable to the BNL contract.

Part II: "Partial Deletions of Directives"

This section contains a list of Directives that were accepted and implemented by the previous contractor but have subsequently been revised by DOE to remove certain sections.

Appendix I - Part I

CRD=Contract Requirements Document

DIRECTIVES LIST				
DATE	DOE DIRECTIVE NUMBER	SUBJECT TITLE		
7/14/99	N 142.1	UNCLASSIFIED FOREIGN VISTS AND ASSIGNMENTS		
7/26/99	N 205.1	CRD - UNCLASSIFIED CYBER SECURITY PROGRAM		
7/15/97	N 440.1	CRD - INTERIM CHRONIC BERYLLIUM DISEASE PREVENTION PROGRAM		
9/30/95	N 441.1	RADIOLOGICAL PROTECTION FOR DOE ACTIVITIES (using ORNL/TM-11497 in lieu of Attachment 1)		
9/19/96	N 441.2	EXTENSION OF DOE N 441.1, RADIOLOGICAL PROTECTION FOR DOE ACTIVITIES		
9/17/97	N 441.3	EXTENSION OF DOE N 441.1, RADIOLOGICAL PROTECTION FOR DOE ACTIVITIES		
11/20/98	N 441.4	EXTENSION OF DOE N 441.1, RADIOLOGICAL PROTECTION FOR DOE ACTIVITIES		
9/29/95	O 130.1	CRD - BUDGET FORMULATION PROCESS		
9/25/95 10/26/95 8/21/96	O 151.1 Change 1 Change 2	CRD - COMPREHENSIVE EMERGENCY MANAGEMENT SYSTEM		
9/30/96	O 200.1	CRD - INFORMATION MANAGEMENT SYSTEM		
9/27/95 10/26/95 5/1/95	O 210.1 Change 1 Change 2	CRD - PERFORMANCE INDICATORS AND ANALYSIS OF OPERATIONS INFORMATION		
12/8/97	O 224.1	CRD - CONTRACTOR PERFORMANCE-BASED BUSINESS MANAGEMENT PROCESS		
11/26/97	O 225.1A	CRD - TYPE A AND B ACCIDENT INVESTIGATIONS		
9/30/95 10/26/95 11/7/96	O 231.1 Change 1 Change 2	CRD - ENVIRONMENT, SAFETY & HEALTH REPORTING		
8/1/97	O 232.1A	CRD - OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION (As modified by letter Grahn/Gordon, dated 4/10/98, effective 5/5/98)		
7/21/97	M 232.1-1A	OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION (As modified by letter Grahn/Gordon, dated 4/10/98, effective 5/5/98)		
8/17/98	O 241.1	CRD - SCIENTIFIC AND TECHNICAL INFORMATION (STI) MANAGEMENT		
1/30/98	O 251.1A	CRD - DIRECTIVES SYSTEM		

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		DIRECTIVES LIST		
DATE	DOE DIRECTIVE NUMBER	SUBJECT TITLE		
12/30/96	O 311.1A	CRD - EQUAL EMPLOYMENT OPPORTUNITY AND DIVERSITY PROGRAM		
9/30/96	O 350.1	CRD - CONTRACTOR HUMAN RESOURCE MANAGEMENT PROGRAMS		
5/8/98	Change 1	CRD - EMPLOYEE BENEFITS		
12/6/95	O 413.1	CRD - MANAGEMENT CONTROL PROGRAM		
3/5/97	O 413.2	CRD - LABORATORY DIRECTED RESEARCH AND DEVELOPMENT		
11/24/98	O 414.1	CRD - QUALITY ASSURANCE		
10/13/95 11/16/95 10/24/96	O 420.1 Change 1 Change 2	CRD - FACILITY SAFETY		
11/5/98 5/26/99	O 420.2 Change 1	CRD - DOE O 420.2, SAFETY OF ACCELERATOR FACILITIES		
12/28/98	O 425.1A	CRD - DOE O 425.1A, STARTUP AND RESTART OF NUCLEAR FACILITIES, DATED 12/28/98		
10/14/98	O 430.1A	CRD - LIFE CYCLE ASSET MANAGEMENT		
6/13/96	O 430.2	IN HOUSE ENERGY MANAGEMENT (NO CONTRACTS REQUIREMENT DOCUMENT)		
3/27/98	O 440.1A	CRD - WORKER PROTECTION MANAGEMENT FOR DOE CONTRACTOR EMPLOYEES		
9/25/95 10/13/95 10/26/95	O 440.2 Change 1 Change 2	CRD - AVIATION		
2/1/99	O 442.1	CRD - DEPARTMENT OF ENERGY EMPLOYEE CONCERNS PROGRAM		
10/2/96	O 460.1A	CRD - PACKAGING AND TRANSPORTATION SAFETY		
9/27/95 10/26/95	O 460.2 Change 1	CRD - DEPARTMENTAL MATERIALS TRANSPORTATION AND PACKAGING MANAGEMENT		
9/28/95 6/21/95	O 470.1 Change 1	CRD - CONTRACTOR SAFEGUARDS AND SECURITY PROGRAM REQUIREMENTS		
12/23/98	O 470.2	CRD - SAFEGUARDS AND SECURITY INDEPENDENT OVERSIGHT PROGRAM		
9/25/95	O 471.1	CRD - IDENTIFICATION AND PROTECTION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION		
3/27/97	O 471.2A	CRD - INFORMATION SECURITY PROGRAM		
1/6/99	M 471.2-1B	CRD - PROTECTION AND CONTROL OF CLASSIFIED MATTER		

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		DIRECTIVES LIST	
DATE	DOE DIRECTIVE NUMBER	SUBJECT TITLE	
8/3/99	M 471.2-2	CRD - CLASSIFIED INFORMATION SYSTEMS SECURITY MANUAL	
3/24/97	O 472.1B	CRD - PERSONNEL SECURITY ACTIVITIES	
5/22/98	M 472.1-1	PERSONNEL SECURITY PROGRAM MANUAL (See CRD for DOE O 472.1B)	
8/11/99	O 474.1	CRD - CONTROL AND ACCOUNTABILITY OF NUCLEAR MATERIALS	
8/11/99	M 474.1-1	CRD - MANUAL FIOR CONTROL AND ACCOUNTABILITY OF NUCLEAR MATERIALS	
5/8/98	M 475.1-1	CRD - IDENTIFYING CLASSIFIED INFORMATION	
9/30/96	O 481.1	CRD - WORK FOR OTHERS (NON DOE FUNDED WORK)	
9/29/95	O 534.1	CRD - ACCOUNTING	
6/23/92	1270.2B	SAFEGUARDS AGREEMENT WITH THE INTERNATIONAL ATOMIC ENERGY AGENCY	
5/19/92	1300.2A	DEPARTMENT OF ENERGY TECHNICAL STANDARDS PROGRAM	
8/23/90	1300.3	POLICY ON THE PROTECTION OF HUMAN SUBJECTS	
11/10/86 2/5/87 6/17/87 12/22/87 3/30/89 5/18/90 2/28/92 7/6/94	1500.3 Change 1 Change 2 Change 3 Change 4 Change 5 Change 6 Change 7	FOREIGN TRAVEL AUTHORIZATION	
5/18/92	2030.4B	REPORTING FRAUD, WASTE, AND ABUSE TO THE OFFICE OF INSPECTOR GENERAL	
1/27/93	2100.8A	COST ACCOUNTING, COST RECOVERY, & INTERAGENCY SHARING OF INFORMATION TECHNOLOGY FACILITIES	
7/14/88 10/5/88 5/18/92	2110.1A Change 1 Change 2	PRICING OF DEPARTMENTAL MATERIALS AND SERVICES	
6/8/92	2300.1B	AUDIT RESOLUTION AND FOLLOWUP	
5/18/92	2320.1C	COOPERATION WITH THE OFFICE OF INSPECTOR GENERAL	
2/10/94	4330.4B	MAINTENANCE MANAGEMENT PROGRAM (Nuclear Facilities Portion Only)	
11/9/88 6/29/90	5400.1* Change 1	GENERAL ENVIRONMENTAL PROTECTION PROGRAM	

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DIRECTIVES LIST				
DATE	DOE DIRECTIVE NUMBER	SUBJECT TITLE		
2/8/90 6/5/90 1/7/93	5400.5* Change 1 Change 2	RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT		
5/15/84 5/16/88 5/16/89 9/20/91	5480.4* Change 1 Change 2 Change 3	ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS		
7/9/90 5/18/92	5480.19 Change 1	CONDUCT OF OPERATIONS REQUIREMENTS FOR DOE FACILITIES		
11/15/94	5480.20A	PERSONNEL SELECTION, QUALIFICATION AND TRAINING REQUIREMENTS FOR DOE NUCLEAR FACILITIES		
12/24/91	5480.21	UNREVIEWED SAFETY QUESTIONS		
2/25/92 9/15/92 1/23/96	5480.22 Change 1 Change 2	TECHNICAL SAFETY REQUIREMENTS		
4/10/92 3/10/94	5480.23 Change 1	NUCLEAR SAFETY ANALYSIS REPORTS		
1/19/93	5480.30	NUCLEAR REACTOR SAFETY DESIGN CRITERIA		
9/20/91	5530.1A	ACCIDENT RESPONSE GROUP		
1/14/92 4/10/92	5530.3 Change 1	RADIOLOGICAL ASSISTANCE PROGRAM		
5/8/85	5560.1A	PRIORITIES AND ALLOCATIONS PROGRAM		
8/1/80	5610.2	CONTROL OF WEAPON DATA		
7/15/94	5632.1C*	PROTECTION AND CONTROL OF SAFEGUARDS AND SECURITY INTERESTS		
4/13/94	5632.7A	PROTECTIVE FORCE PROGRAM		
5/26/94	5660.1B	MANAGEMENT OF NUCLEAR MATERIALS		
9/4/92	5670.3	COUNTERINTELLIGENCE PROGRAM		
5/18/92	5700.7C	WORK AUTHORIZATION SYSTEM		
9/26/88	5820.2A*	RADIOACTIVE WASTE MANAGEMENT		

ACCOUNTING PRACTICES AND PROCEDURES HANDBOOK			
5/2/83 Chapter V INVENTORIES			
6/30/80 Chapter X PRODUCT COST ACCOUNTING			

Appendix I - Part II

PARTIAL DELETIONS OF DIRECTIVES				
DATE	DOE DIRECTIVE NUMBER	SUBJECT TITLE	DELETION DIRECTIVE DATE	SECTIONS DELETED
11/9/88 6/29/90	5400.1 Change 1	GENERAL ENVIRONMENTAL PROTECTION PROGRAM	O 231.1 9/30/95 Change 1 10/26/95 Change 2 11/7/96	Paras. 2d, 2b, 4b & 4c of Chap II; Paras 2d & 3b of Chap III; Para 10(c) of Chap IV
2/8/90 6/5/90 1/7/93	5400.5 Change 1 Change 2	RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT	O 231.1 9/30/95 Change 1 10/26/95	Chapter II: Para 1a(3) (a)
5/15/84 5/16/88 5/16/89 9/20/91	5480.4 Change 1 Change 2 Change 3	ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS	O 440.1 9/30/95 Change 1 10/26/95	Attachment 2: Paras 2c, 2d(2) - (3), 2e(1) - (8); and Attachment 3: Paras 2c, 2d(2) - (3), 2e(1) - (7)
7/15/94	M5632.1C-1	MANUAL FOR PROTECTION AND CONTROL OF SAFEGUARDS AND SECURITY INTERESTS	O 470.1 9/28/95 O 471.2A 3/27/97	Chapter XI Chapter III, Paras 1, 2, 4-9
9/26/88	5820.2A	RADIOACTIVE WASTE MANAGEMENT	O 430.1A 10/14/98	Chapter V

APPENDIX M SPALLATION NEUTRON SOURCE

Appendix M

Spallation Neutron Source (SNS)

The Contractor will support the Spallation Neutron Source Project in Oak Ridge, Tennessee, as outlined in the Memorandum of Agreement (MOA) dated January 16, 1998 and signed by the Directors of the five Laboratories supporting the Spallation Neutron Source Project. Said MOA is hereby incorporated into the contract as an attachment to this appendix. Any subsequent revisions to the MOA, which are executed by the five Laboratories, will supercede the MOA attached to this appendix upon written notification to the Contractor that said revision has been accepted by the cognizant Contracting Officer for this contract. Should there be any conflict between any provision in the MOA, or revisions thereto, and other provision(s) of this contract, said conflict shall be governed by the clause of this contract entitled, "Order of Precedence".

Attachment: Memorandum of Agreement (MOA)

Memorandum of Agreement
between
the Spallation Neutron Source Project
and
Argonne National Laboratory,
Brookhaven National Laboratory,
Lawrence Berkeley National Laboratory,
Los Alamos National Laboratory,
and
Oak Ridge National Laboratory

I. Introduction

The Spallation Neutron Source (SNS) Project is being accomplished by a partnership between five Laboratories—Argonne National Laboratory (ANL), Brookhaven National Laboratory (BNL), Lawrence Berkeley National Laboratory (LBNL), Los Alamos National Laboratory (LANL) and Oak Ridge National Laboratory (ORNL). This MOA provides the overall framework for the business relationship between the project and the partner laboratories for the design, construction, installation and commissioning of the SNS. DOE through ORNL provides funding for this work to the partner laboratory conducting the work.

II. Scope

This MOA formalizes the mutual agreement to the technical, cost and schedule baselines established by the SNS Project and the partner laboratories. It represents the agreement of all of the signatory laboratories to manage the project, as outlined below, and expresses their commitment to perform the tasks agreed to in a safe, environmentally-benign, high-quality, timely, responsible and cost-effective manner. The signatories commit to making available the resources from their laboratories that are necessary to execute the approved work plans and to be accountable for project deliverables assigned to their laboratories as derived from the project technical, cost and schedule baseline documents.

III. Roles and Responsibilities

1. Spallation Neutron Source Management

The SNS management will be responsible for the overall project management and project leadership.

2. Participating Laboratories

The five participating laboratories will be full partners in the project. They will be responsible and accountable for their respective assigned work products.

3. Department of Energy

The Department of Energy (DOE) will be responsible for oversight of the project.

IV. Provisions

1. Introduction

Overall executive authority for managing the SNS will be vested in an Executive Director with a rank equivalent to the Director at ORNL. The SNS Project is to be managed to the greatest extent possible as if it were contained within a single institution. Lines of authority and responsibility will follow the organization structure established by SNS management and documented in an organization chart updated monthly. Emphasis is placed on minimizing the effects of boundaries between laboratories, with reporting lines moving through the project organization, and across laboratory boundaries as indicated by the approved organization chart. Human resource, project control and other management policies will reflect this philosophy.

2. Project Baselines and Management

Project baselines detailing the technical scope of work, cost estimates and project schedule, will be developed, reviewed and approved by the project and relevant partner laboratories as a prerequisite to formalizing the MOA. These baselines, once approved, will be under configuration management; changes must follow the procedures outlined in the management documents described below.

The Project Execution Plan (PEP), and the Project Controls Manual (PCM) contain the project management structures and methodologies to be employed in the conduct of the project, including reporting, communication, reviews, performance metrics, change control, funding mechanism and handling of contingency.

3. Assignment of Work

Work plans will be developed, at least on a yearly basis, by the appropriate task leaders according to the baselines, and will be reviewed and approved by SNS management. Responsibilities for work and deliverables from each of the partner laboratories will be contained in these work plans. Partner laboratories will review and concur with these work plans, and accept the responsibilities contained therein, as a prerequisite to funding allocations from the project office.

4. Accountability

As specified in the PEP, regular reports of progress on the approved work plans will be compiled and submitted to the SNS project office and laboratory management by appropriate responsible managers. These reports shall include financial information, as well as documentation of technical progress, required deliverables and milestones.

Anticipated or actual cost and/or schedule variances that would be in excess of thresholds established in the PEP should be clearly identified as soon as known and reported to SNS and laboratory management. An action plan to correct the problem will be proposed, endorsed by senior laboratory management and forwarded to SNS management. Progress will be reported on this plan until correction is complete.

To ensure high performance, SNS management will recommend performance ratings at least annually to the DOE for each of the partner laboratories consistent with the SNS performance measures contained in their M&O contracts.

SNS management may reassign work among participating laboratories for non-performance or as might be required to ensure maximum efficiency for the conduct of the project, consistent with the project's change control process.

5. Project Staffing

Each laboratory will provide staff with the required skills and experience to properly discharge the responsibilities assumed by the laboratory. Staff assigned to work on the SNS project will be fully accountable to the project for this work, and will be flexible with regard to work location to best suit the needs of the project.

Responsibility for personnel actions, including placement in and removal from positions in the project, performance appraisals, and compensation recommendations will lie within the line management of the SNS Project as defined by the current organization chart, crossing laboratory boundaries where indicated. Appropriate laboratory management will participate in these actions. As part of the SNS Project organization, the Senior Team Leader at each laboratory will be responsible for personnel within their laboratory. All personnel actions must respect existing labor agreements at the partner laboratories.

6. Indirect Costs

Each partner laboratory shall set indirect costs charged to the SNS project in accordance with their disclosed cost accounting practices in order to: 1) ensure the appropriate causal/beneficial relationship of indirect costs applied to the project; and 2) minimize the fluctuations in the indirect cost charges over the life of the project. The accounting treatment for indirect costs will be reviewed during the annual negotiations on the projected work plans between the partner laboratories and SNS management.

7. Equipment Disposition

Upon completion of construction, any SNS-funded equipment not moved to ORNL, nor deemed by SNS management to be useful to the operation or upgrade of the SNS facility, shall become the property of the purchasing laboratory at no further cost to the SNS Project or the purchasing laboratory. Exceptions to this policy require specific agreement between SNS management and the partner laboratory prior to purchase. Each partnering laboratory will track and maintain an inventory of all the items for the project in accordance with their property management system.

V. MOA Implementation

1. Enactment

This document, when properly executed, will supersede the earlier version of this MOA, marked "Revision 1.1" dated 1/16/98.

2. Change Procedure

In the event of necessity for changes in this Memorandum of Agreement, such changes are implemented by mutual agreement of the SNS Project and the partner laboratories and will become effective upon reissue of the properly signed MOA. This new MOA shall bear a revision number and effective date as a footer on each page.

3. Effective Time

This Memorandum of Agreement shall become effective upon the latter date of signature of the parties. It shall remain in effect until superseded, or ten years from the effective date, whichever occurs first. In the event of cancellation of the SNS Project, a revised MOA shall be issued specifically designed to handle closeout procedures including orderly termination of ongoing work and responsibilities and disposal of assets accrued by the SNS Project.

The undersigned concur with the terms of this Memorandum of Agreement: you & Clang 10-8-99 Yoon I. Chang Date Interim Director, Argonne National Laboratory John Marsings <u> 10-8-99</u> John H. Marburger Date Director, Brookhaven National Laboratory 10-8-99 Charles V. Shank **Date** Director, Lawrence Berkeley National Laboratory Joh Gleon John C. Browne Date **Director, Los Alamos National Laboratory** trespon 10-13-99 Alvin W. Trivelpiece Date Director, Oak Ridge National Laboratory 10-18-99 David E. Moncton Date

SNS Executive Director

4. Approvals: