AMENDI	MENT OF SOLICITATION	ON/MODIFICATION OF	CONTRAC	Т	1. CONTRAC	CT ID CODE	PAGE 1 OF 4 PAGES
2. AMENDN	AMENDMENT/MODIFICATION NO. 0050 3. EFFECTIVE DATE See Block 16.c.			4. REQUISITION/PURCHASE FREQ. NO. (If app.			
Nation Sandia P.O. B	BY epartment of Energy al Nuclear Security Adm a Field Office ox 5400, MS 0184 uerque, NM 87185-5400	CODE	7. ADMINISTI	ERED B'	Y (If other than	Item 6) Co	DDE
8. NAME AN	ND ADDRESS OF CONTRACTO	OR (No., street, county, state, ZIP	Code)	9A. A	MENDMENT	OF SOLICITATIO	N NO.
1515 Eut	Technology & Engineer bank Blvd SE rque, New Mexico 87123	ing Solutions of Sandia, I -3453	LLC		MODIFICATION	TEM 11) ON OF CONTRAC	T/ORDER NO.
					DE-NA000	3525	
CODE		FACILITY CODE			DATED (SEE 12/16/2016		
[] The share		S ITEM ONLY APPLIES TO A					
extended.	e numbered solicitation is amen	ded as set forth in Item 14. The	hour and date s	pecified	for receipt of C	offers is extend	ed, 🗌 is not
Offers must	acknowledge receipt of this ame	endment prior to the hour and date	e specified in the	e solicita	tion as amend	ed, by one of the	following methods:
ACKNOWLE SPECIFIED change may prior to the o	ed; or (c) By separate letter or to EDGMENT TO BE RECEIVED A MAY RESULT IN REJECTION of the made by telegram or letter, pening hour and date specified.	ning copies of the amendmelegram which includes a reference. THE PLACE DESIGNATED FOOT OF YOUR OFFER. If by virtue of provided each telegram or letter in	ce to the solicita OR THE RECEIF this amendmen	tion and PT OF O	amendment n FFERS PRIOR	umbers. FAILURI R TO THE HOUR	E OF YOUR AND DATE
12. ACCOUN	NTING AND APPROPRIATION	DATA (If required)	,				
	40 71110 1771						
		A APPLIES ONLY TO MODIFICES THE CONTRACT/ORDER					
CHECK ONE	A. THIS CHANGE ORDER IS ISSU ORDER NO. IN ITEM 10A.	JED PURSUANT TO (Specify authority	y): THE CHANGE	S SET FO	ORTH IN ITEM 1	4 ARE MADE IN TH	
	appropriation date, etc.) SET F	ITRACT/ORDER IS MODIFIED TO RE ORTH IN ITEM 14, PURSUANT TO TI	HE AUTHORITY (OF FAR 43	TIVE CHANGES 3.103(b).	(Such as changes in	paying office,
		MENT IS ENTERED INTO PURSUAN					
X	DOE Organization Act, 42 Regulations and DOE Dire	USC §7101 et seq.; NNSA Actives (Dec 2000) (Deviation)	ct, 50 USC § :	2401 et	seq.; and DI	EAR 970.5204-2	Laws,
	D. OTHER (Specify type of modific	ation and authority):					
14. DESCR	ANT: Contractor is not, In It is not, It is not, In It is not, It	is required to sign this documen Info (Info Info Info Info Info Info Info Info	t and return	ction he	pies to the issu cadings, inch	ing office. uding solicitatio	n/contract
		tract Type and Value; Sect	tion H clause	33 and	136: Section	n J. Appendix	A
Chapter II	Section 1.9 Laboratory I	Directed Research and Dev	elopment (L	DRD);	Section J. A	Appendix A. C.	hapter III.
Section 5.	3, paragraph (ii); and Sect	ion J, Appendix B, List of	Applicable D	irectiv	es and NNS	A Policy Lette	rs
(attachmer	nt 1). See pages 2-4 for ad	ditional detail					
15A. NAME	AND TITLE OF SIGNER (Type of	or print)	16A. NAME AN	ND TITLE	OF CONTRA	CTING OFFICER	(Type or print), ,
	nes, Senior Manager, Pr echnology & Engineerin		Lindsey Va Sandia Fiel			ng Officer	
BY (\$i	ACTOR/OFFEROR gnature of person authorized to : 152-8070 FDITION LINUSABLE		16B. UNITED S BY (Sig		of Contracting (16C. DATE SIGNED 09/27/18

PREVIOUS EDITION UNUSABL 53.243

Prescribed by GSA FAR (48CFR)

The purpose of this modification is to modify the contract as outlined below:

1- Add following inputs in Table 2 in Section B, clause B-2 paragraph (c) for Contract Period "Base Term 10/01/2018 – 09/30/2019".

Contract Period	Estimated Cost	Fixed Fee	Estimated Cost + Fixed Fee
Base Term 10/01/2018 – 9/30/2019	\$1,159,100,000	\$10,431,900	\$1,169,531,900

2- Update Section H clause, H-33, paragraph (a)(2) *Board of Managers Costs* for FY2019. The FY2019 cost ceiling is \$390,000 plus \$140,000 for an additional planning meeting and training. These estimates assume 100% participation.

Contract Period	Cost Ceiling	Mod #
FY2019	\$390,000	M0050
	\$140,000 for an additional planning meeting and training	9,

3- Update Section H clause H-36 Strategic Planning in accordance with the memorandum from the Head of the Contracting Activity dated 05/31/2018; Subject: NNSA 2018 Laboratory, Plant and Site Strategic Planning Guidance.

From:

H-36 STRATEGIC PLANNING

A key element to sound laboratory stewardship and governance is a shared strategic level vision for the future of the laboratory and the strategic investments necessary across mission support areas to assure the laboratory's continued future vitality and capability to perform its missions. To aid in strengthening this alignment, the M&O partner leadership from each NNSA Laboratory shall work in coordination with NNSA site office and HQ functional and program leadership in developing and presenting annual laboratory strategic plans. To enable a uniform and consistent reporting approach and to allow for the process to evolve and change as necessary, NNSA will provide annual report and presentation guidance. The information from these activities provides the starting point for periodic and continuous discussions between the DOE/NNSA and management and operating partners' leadership about the site's future directions, immediate and long range challenges, and resource needs. The results of these activities are intended to ensure alignment with agency goals, priorities, and budgets.

To:

H-36 STRATEGIC PLANNING

The Contractor shall submit to DOE/NNSA a laboratory, plant or site strategic plan annually in accordance with the annual strategic planning guidance and the terms and

conditions of the contract or as directed by the Contracting Officer. The laboratory, plant, or site M&O management team shall present their plans and engage in discussions with senior DOE/NNSA leadership annually in accordance with the annual strategic planning guidance and as directed by the Contracting Officer.

4- Update Section J, Appendix A, Chapter II, Section 1.9 Laboratory Directed Research and Development (LDRD) to align with the approval authority identified in DOE O 413.2C Laboratory Directed Research and Development by removing "Contracting Officer" and adding "NNSA".

From:

Laboratory Directed Research and Development (LDRD)

The Contractor shall submit a LDRD Program Plan for approval by the Contracting Officer to conduct a LDRD 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.

To:

Laboratory Directed Research and Development (LDRD)

The Contractor shall submit a LDRD Program Plan for NNSA approval to conduct a LDRD 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.

5- Replace Section J, Appendix A, Chapter III, Section 5.3, paragraph (ii) in its entirety to remove the duplicative requirements that are otherwise captured in Section I (FAR 52.204-10) and Section J, Appendix A, Chapter III, Section 5.2.2, and to clarify what was provided to meet the deliverable as a part of Contract award.

From:

(ii) A list of the top five most highly compensated executives as defined in FAR 31.205-6(p)(4)(ii) and their total cash compensation at the time of Contract award, and at the time of any subsequent change to their total cash compensation. This should be the same information provided to the System for Award Management (SAM) per FAR 52.204-10.

To:

(ii) A list of the proposed reimbursable base salaries for all Key Personnel at Contract award for Contracting Officer approval.

6- Replace Appendix B, *List of Applicable Directives and NNSA Policy Letters*, in its entirety (see attachment 1).

--- End of contract modification ---

Part III - Section J APPENDIX B List of Applicable Directives and NNSA Policy Letters

In addition to the list of applicable directives referenced 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 referenced below. The Contractor shall comply with the Operating Requirements identified in Appendix B.

Number	Date	Title	Mod #
APPH Chapter X	9/08/98	Accounting Practices & Procedures Handbook (APPH)	Award
Revision 10		Chapter X – Product Cost Accounting	
DOE O 130.1	9/29/95	Budget Formulations	Award
DOE O 140.1	05/14/18	Interface with the Defense Nuclear Facilities Safety Board	Award M0050
DOE O 142.2A, Admin Chg. 1	6/27/13	Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency	Award
DOE M 142.2-1, Admin Chg. 1	6/27/13	Manual for the Implementation of the Voluntary Offer Safeguards Agreement and Additional Protocol with the International Atomic Energy Agency	Award
DOE O 142.3A, Chg 1	1/18/17	Unclassified Foreign Visits and Assignments Program	M0018
DOE O 144.1 Admin Chg. 1	11/6/09	Department of Energy American Indian Tribal Government Interactions and Policy	Award
DOE O 150.1A	3/31/14	Continuity Programs	Award
DOE O 151.1D	8/11/16	Comprehensive Emergency Management System ¹	Award
DOE O 153.1	6/27/07	Departmental Radiological Emergency Response Assets	Award
DOE O 200.1A	12/23/08	Information Technology Management	Award
DOE O 205.1B, Admin Chg. 3	4/29/14	Department of Energy Cyber Security Program ²	Award
NA SD 205.1	7/6/17	Baseline Cybersecurity Program ³	M0032
DOE M 205.1-3, Admin Chg. 1	12/20/12	Telecommunications Security Manual ⁴	Award
DOE O 206.1	1/16/09	Department of Energy Privacy Program	Award
NA SD 206.1	06/22/18	Privacy Program	M0050
DOE O 206.2	2/19/13	Identity, Credential, and Access Management (ICAM)	Award
DOE O 210.2A	4/08/11	DOE Corporate Operating Experience Program	Award
NAP 220.1	06/19/18	Internal Affairs Program	M0050
DOE O 221.1B	9/27/16	Reporting Fraud, Waste, and Abuse to the Office of Inspector General	Award
DOE O 221.2A	2/25/08	Cooperation With the Office of Inspector General	Award

¹ Full implementation will be achieved by July 24, 2020, in accordance with the approved implementation plan.

² SNL will evaluate NNSA RMIP releases to ensure the requirements of CNSSP-300 are adequately implemented.

³ Full implementation will be achieved in accordance with the approved implementation dated 12/7/2017.

⁴ Refer to memorandum from NNSA/HQ/NA-IM-10, Subject: Cable-confined Testing and Transmitter Review Forms (TRF), dated 4/25/12, for clarification to TRF completion Requirements.

Number	Date	Title	Mod #
DOE O 225.1B	3/04/11	Accident Investigations	Award
DOE O 226.1B	4/25/11	Implementation of Department of Energy Oversight Policy	Award
NNSA SD 226.1B	8/12/16	NNSA Site Governance	M008
DOE O 227.1A	12/21/15	Independent Oversight Program	Award
DOE O 231.1B, Admin Chg. 1	11/28/12	Environment, Safety and Health Reporting	Award
DOE O 232.2A	1/17/17	Occurrence Reporting and Processing of Operations Information	Award M0026
DOE O 241.1B Chg. 1	4/26/16	Scientific and Technical Information Management	Award
DOE O 243.1B, Admin Chg. 1	7/8/13	Records Management Program	Award
NA SD 251.1A	01/17/18	Directives Management	M0050
DOE O 252.1A, Admin Chg. 1	3/12/13	Technical Standards Program	Award
DOE O 313.1	11/19/09	Management and Funding of the Department's Overseas Presence	Award
NA SD O 350.1	2/5/09	Management and Operating Contractor Service Credit Recognition	Award
DOE O 410.2, Admin Chg. 1	4/10/14	Management of Nuclear Materials	Award
DOE O 411.2	1/4/17	Scientific Integrity	M0018
DOE O 412.1A, Admin Chg. 1	5/21/14	Work Authorization System	Award
DOE O 413.1B	10/28/08	Internal Control Program	Award
DOE O 413.2C, Change 1	8/2/18	Laboratory Directed Research and Development	Award M0050
DOE O 413.3B, Chg. 5	4/12/18	Program and Project Management for the Acquisition of Capital Assets ⁵	M0018 M0032 M0050
DOE O 414.1D, Admin Chg.1	5/8/13	Quality Assurance	Award
DOE O 415.1, Chg 2	1/13/17	Information Technology Project Management	M0018
NA SD 415.1	9/3/14	Project Oversight for Information Technology	Award
DOE O 420.1C, Chg. 1	2/27/15	Facility Safety	Award
DOE O 420.2C	7/21/11	Safety of Accelerator Facilities	Award
DOE O 422.1, Admin Chg. 2	12/3/14	Conduct of Operations	Award
DOE O 425.1D, Admin Chg. 1	4/2/13	Verification of Readiness to Start up or Restart Nuclear Facilities	Award
DOE O 426.2 Admin Chg. 1	7/29/13	Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities	Award

⁵ The annual Value Management/Engineering progress report required by paragraph 10. of the CRD shall be submitted to Program Offices through the SFO.

Number	Date	Title	Mod #
NNSA SD 430.1	1/18/17	Real Property Asset Management	M0018
DOE O 433.1B, Admin Chg. 1	3/12/13	Maintenance Management Program for DOE Nuclear Facilities	Award
DOE N 435.1	8/9/11	Contact-Handled and Remote-Handled Transuranic Waste Packaging	Award
DOE O 435.1, Chg. 1	8/28/01	Radioactive Waste Management	Award
DOE O 436.1	5/2/11	Departmental Sustainability ⁶	Award
DOE O 440.2C, Admin Chg. 1	6/22/11	Aviation Management and Safety	Award
DOE M 441.1-1 Admin Chg. 1	2/24/16	Nuclear Material Packaging ⁷	Award
DOE O 442.2, Chg 1 (Pg Chg)	10/5/16	Differing Professional Opinions for Technical Issues Involving Environment, Safety, and Health	Award
DOE N 443.1	1/21/16	Protection of Human Research Subjects in Classified Research	Award
DOE O 443.1B, Chg 1	4/21/16	Protection of Human Research Subjects	Award
DOE O 452.1E	1/26/15	Nuclear Explosive and Weapon Surety Program ⁸	Award
DOE O 452.2E	1/26/15	Nuclear Explosive Safety	Award
NA SD 452.2A	10/20/17	Nuclear Explosive Safety Evaluation Process	Award M0032
DOE O 452.3	6/8/05	Management of the Department of Energy Nuclear Weapons Complex	Award
NNSA SD 452.3-1A	2/25/16	Defense Programs Business Process System ⁹	Award
NNSA SD 452.3-2	1/19/17	Phase 6.X Process	M0018
DOE O 452.4C	8/28/15	Security and Use Control of Nuclear Explosives and Nuclear Weapons ¹⁰	Award
DOE O 452.6A	4/14/09	Nuclear Weapon Surety Interface with the Department of Defense	Award
DOE O 452.7	5/14/10	Protection of Use Control Vulnerabilities and Designs	Award
DOE O 452.8	7/21/11	Control of Nuclear Weapons Data	Award
DOE O 456.1A	7/15/16	The Safe Handling of Unbound Engineered Nanoparticles	Award
DOE O 457.1A	8/26/13	Nuclear Counterterrorism	Award
DOE O 458.1, Admin Chg. 3	1/15/13	Radiation Protection of the Public and the Environment	Award
DOE O 460.1D	12/20/16	Hazardous Materials Packaging and Transportation Safety	M0018

⁶ All references to "14001:2004" shall be replaced with "14001:2015". Conformance with "14001:2015" will be achieved no later than October 1, 2018.

Material acquired subject to DOE M 441.1-1 must have an approved container for storage, or must have a NNSA-approved plan to develop a container to comply with the requirements, when it comes on site.

⁸ Clarification to CRD, Item 7c: Concepts for features are to be developed for consideration.

⁹ Changes will be processed as described in Section H, clause H-14(c). CRD Item 6 is achieved through the M&O Contractor Working Group.

¹⁰ Full implementation will be achieved in accordance with the implementation plan for NAP-24A dated 08/25/16.

Number	Date	Title	Mod#
DOE O 460.2A	12/22/04	Departmental Materials Transportation & Packaging Management	Award
DOE M 460.2-1A	6/04/08	Radioactive Material Transportation Practices Manual	Award
DOE O 461.1C	7/20/16	Packaging and Transportation for Offsite Shipment of Materials of National Security Interest	Award
DOE O 461.2	11/1/10	Onsite Packaging and Transfer of Materials of National Security Interest	Award
DOE O 462.1, Admin Chg. 1	7/10/13	Import and Export of Category 1 and 2 Radioactive Sources and Aggregated Quantities	Award
DOE O 470.3C	11/23/16	Design Basis Threat (DBT) ¹¹	Award M0043
DOE O 470.4B, Admin Chg. 2	1/17/17	Safeguards and Security Program 12	M0018
DOE O 470.6, Chg 1	1/11/17	Technical Security Program ¹³	Award M0032
NA SD 470.4-2	06/23/18	Enterprise Safeguards and Security Planning and Analysis Program ¹⁴	M0050
DOE M 470.4-4A	10/12/10	Information Security Manual ¹⁵	Award
DOE O 471.1B	3/1/10	Identification and Protection of Unclassified Controlled Nuclear Information	Award
DOE O 471.3, Admin Chg. 1	1/13/11	Identifying and Protecting Official Use Only Information	Award
DOE M 471.3-1, Admin Chg.1	1/13/11	Manual for Identifying and Protecting Official Use Only Information	Award
DOE O 471.5	3/29/11	Special Access Program	Award
DOE O 471.6, Admin Chg 2	5/15/15	Information Security ¹⁶	Award
DOE O 472.2, Chg. 1	7/9/14	Personnel Security	Award
DOE O 473.3A, Chg. 1	1/2/18	Protection Program Operations ¹⁷	Award M0043
NNSA SD 473.3	9/10/14	Enterprise Mission Essential Task List-Based Protective Force Training Program	M008

¹¹ Will be implemented IAW the NNSA enterprise implementation plan. NTESS will coordinate with NNSA when requirements cannot be implemented within existing resources.

Full implementation will be achieved in accordance with an approved implementation plan. DD254 or DOE F 470.1 shall be provided to SFO for new classified SPP activity. Notification to update the form shall also be provided through the lifecycle of the activity.

¹³ Full implementation will be achieved in accordance with an approved implementation plan.

¹⁴ Will be implemented IAW the NNSA enterprise implementation plan. NTESS will coordinate with NNSA when requirements cannot be implemented within existing resources.

¹⁵ DOE O 471.6, Admin Chg. 1, dated 06/20/2011, replaced DOE M 470.4-4A, except Section D and the classified Technical Surveillance Countermeasures Annex.

¹⁶ Implementation of the "marking of documents in electronic environment requirements" listed in the CRD will be achieved in accordance with an approved implementation plan.

¹⁷ Full implementation will be achieved in October 2018.

Number	Date	Title	Mod #
DOE O 474.2, Admin	9/13/16	Nuclear Material Control and Accountability	Award
Chg. 4			
DOE O 475.1	12/10/04	Counterintelligence Program	Award
DOE O 475.2B	10/3/14	Identifying Classified Information 18	Award
DOE O 483.1B	12/20/16	DOE Cooperative Research and Development	M0018
		Agreements	
DOE O 484.1 Admin	6/30/14	Reimbursable Work for the Department of Homeland	Award
Chg. 2		Security	
DOE O 522.1A	8/2/18	Pricing of Departmental Materials and Services	Award
			M0050
DOE O 534.1B	1/6/03	Accounting	Award
DOE O 551.1D, Chg. 2	8/9/16	Official Foreign Travel	Award
DOE O 5480.30, Chg.	3/14/01	Nuclear Reactor Safety Design Criteria	Award
1			
DOE O 5639.8A	7/23/93	Security of Foreign Intelligence Information and	Award
		Sensitive Compartmented Information Facilities	
NAP 23, Admin Chg. 1	2/9/15	Atomic Energy Act Control of Import and Export	Award
		Activities	
NAP 24A	11/24/15	Weapon Quality Policy ¹⁹	Award
NAP 31	11/22/16	NNSA M&O Off-Site Extended Duty Assignments	M0008
QP 100-1	3/1/13	Quality Requirements to UK and US Procurement	Award
		Contracts and Loan Authorizations for Research,	
		Design, and Development	
NA SD 56XB, Rev. 2	5/10/04	Nuclear Weapon Development and Production ²⁰	M0008
Nevada Field Office	10/9/13	Nevada National Security Site and North Las Vegas	M0018
(NSO) Order 410.X1		Facilities General Use and Operations Requirements	
NFO O 412.X1	6/27/16	Real Estate Operations Permit	M0018
NFO O 421.X1,	4/18/17	Nuclear Facility Safety Management	M0018
Revision 1			
NSO M 450.X2-1	5/30/07	Underground Nuclear Testing, Test Readiness, and	M0018
		Threshold Test Ban Treaty, Verification	
NSO O 450.X5B	9/20/12	Subcritical Experiments	M0018

¹⁸ Full implementation will be achieved in accordance with the February 4, 2015 JORRB. SNL will implement classified email markings by 09/30/2016.

¹⁹ Full implementation will be achieved in accordance with the approved IP dated 8/25/16. Attachment 3, Section 3.3, dated 11/24/15, is replaced with Attachment 3, Section 3.3, dated 6/22/17. The term "prevented" in Attachment 2 Section 3.6.e, 3.6.3 aii, and Attachment 4 Section 1.0 is commensurate with DOE O 452.1E, Section 4.b.1.

²⁰ Changes will be processed as described in Section H, clause H-14(c).