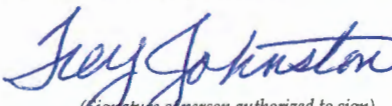
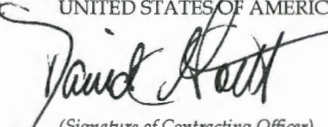


AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE 1 OF 4
2. AMENDMENT/MODIFICATION NO. 645	3. EFFECTIVE DATE See block 16 c.	4. REQUISITION/PURCHASE REQ. NO. NA27344		5. PROJECT NO. (If applicable)
6. ISSUED BY CODE		7. ADMINISTERED BY (If other than Item 6)		CO DE
U.S. Department of Energy/NNSA SC M&O Contract Support Division P.O. Box 5400 Albuquerque, NM 87185-5400		U.S. Department of Energy/NNSA Livermore Site Office M/S L-293 7000 East Avenue Livermore, CA 94550		
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State, and ZIP Code)			9A. AMENDMENT OF SOLICITATION NO.	
Lawrence Livermore National Security, LLC Lawrence Livermore National Laboratory M/S L-019 7000 East Avenue Livermore, CA 94550				
			9B. DATED (SEE ITEM 11)	
			X 10A. MODIFICATION OF CONTRACT/ ORDER NO. DE-AC52-07NA27344	
			10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE	May 8, 2007		
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS				
The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 25, and returning ____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.				
12. ACCOUNTING AND APPROPRIATION DATA (If required) see attached				
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.				
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN CONTRACT/ORDER NO. IN ITEM 10A.				
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).				
X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Clause H-19 Modification Authority, Clause I-120 changes, and Mutual Agreement				
D. OTHER (Specify type of modification and authority)				
E. IMPORTANT: Contractor <u>X</u> is not, <u> </u> is required to sign this document and return <u>2</u> copies to the issuing office.				
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) See page 2.				
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.				
15A. NAME AND TITLE OF SIGNER (Type or print) Joseph (Trey) Johnston Director, Prime Contract Management		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) David P. Goett, Contracting Officer U.S. Department of Energy/NNSA		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED	
 (Signature of person authorized to sign)	5/1/17	By  (Signature of Contracting Officer)	5/3/17	

A. The following changes are hereby incorporated into the contract:

1. Part I– Clause H-6 is changed as follows:

Paragraph (d), the table is changed to update/add actual cost for the FY16 Parent Oversight Plan:

Contract Period	Actual Costs	Mod #
10/01/2007-09/30/2008	\$2,063,577	164
10/01/2008-09/30/2009	\$1,915,649.36	513
10/01/2009-09/30/2010	\$1,514,809.56	513
10/01/2010-09/30/2011	\$1,613,780.66	513
10/01/2011-09/30/2012	\$1,872,615.91	513
10/01/2012-09/30/2013	\$1,715,412.09	513
10/01/2013-09/30/2014	\$1,298,617.39	513
10/01/2014-09/30/2015	\$1,389,360.74	580
10/01/2015-09/30/2016	\$1,442,238.43	645
10/01/2016-09/30/2017		
10/01/2017-09/30/2018		
10/01/2018-09/30/2019		
10/01/2019-09/30/2020		
10/01/2020-09/30/2021		

2. Part I - Clause H-8 is changed as follows:

Paragraph (b) (1), the table is changed to update/add actual cost for FY16:

Contract Period	Estimated Cost	Actual Cost	Mod #
10/01/2007-09/30/2008	\$925,000	\$724,863.00	M-107
10/01/2008-09/30/2009	\$2,000,000	\$1,824,512.47	513
10/01/2009-09/30/2010	\$4,000,000	\$ 224,859.19	513
10/01/2010-09/30/2011	\$1,250,000	\$ 613,086.77	513
10/01/2011-09/30/2012	\$500,000	\$236,406.80	513
10/01/2012-09/30/2013	\$500,000	\$326,360.55	513
10/01/2013-09/30/2014	\$500,000	\$161,934.51	513
10/01/2014-09/30/2015	\$500,000	\$351,280.82	569
10/01/2015-09/30/2016	\$500,000	\$382,482.47	645
10/01/2016-09/30/2017	\$500,000		
10/01/2017-09/30/2018			
10/01/2018-09/30/2019			
10/01/2019-09/30/2020			
10/01/2020-09/30/2021			

3. Clause I-088 is changed to revise the date of the clause to April 2015 and change the title to Strategic Partnership Projects Program (SPP). All other references to Work for Others (WFO) throughout this clause have been changed to Strategic Partnership Projects (SPP).
4. Clause I-098 is changed to replace all references to Work for Others (WFO) throughout this clause to Strategic Partnership Projects (SPP).

5. Clause I-099 is changed to replace all references to Work for Others (WFO) throughout this clause to Strategic Partnership Projects (SPP).
6. Clause I-114 is changed to revise the date of the clause to April 2015 and change the title to Strategic Partnership Projects Funding Authorization. All other references to Work for Others (WFO) throughout this clause have been changed to Strategic Partnership Projects (SPP).
7. Clause I-117 is changed to replace all references to Work for Others (WFO) throughout this clause to Strategic Partnership Projects (SPP).
8. Clause I-142 FAR 52.203.98 Prohibition of Contracting with Entities that require certain Internal Confidentiality Agreements-Representation (Deviation 2015-02) was added in Mod 619 per Policy Flash 2015-22.
9. Clause I-143 FAR 52.203-99 Prohibition of Contracting with Entities that require certain Internal Confidentiality Agreements (Deviation 2015-02) was added in Mod 619 per Policy Flash 2015-22.
10. Section J, Appendix B, Statement of Work has been updated to replace “Work for Others” to “Strategic Partnership Projects”
11. Section J, Appendix D, Key Personnel has been updated for the following: remove Dona L. Crawford as the Associate Director for Computation and Simulation and replacing her with Bruce A. Hendrickson, Ph.D.
12. Section J, Appendix E, Small Business Subcontracting Plan has been updated to add the revised FY17 Small Business Subcontracting Plan by reference.
13. Section J, Appendix F, Performance Evaluation and Measurement Plan for FY 2017 has been added.
14. Section J, Appendix G, List of Applicable Directives is revised as follows:

DOE Directive	Change
DOE O 142.3A Chg 1 (MinChg)	Replaces DOE O 142.3A
DOE O 151.1D	Updated to 1D.
DOE O 200.1A Chg 1 (MinChg)	Updated to Chg 1 (MinChg)
DOE O 221.1B	Updated to 1B
DOE O 232.2A	Updated to A
DOE O 413.3B Chg 3 (PgChg)	Updated to Chg 3 (PgChg)
DOE O 415.1 Chg 2 (MinChg)	Updated to Chg 2 (MinChg)
DOE O 442.2 Chg 1 (PgChg)	Updated to Chg 1 (PgChg)
DOE O 470.4B Chg 2 (MinChg)	Updated to Chg 2 (MinChg)
DOE O 470.6	Added
DOE O 474.2 Chg 4 (PgChg)	Updated to Chg 4 (PgChg)
DOE O 483.1B	Updated to B
DOE O 551.1D, Chg 2 (Minor Revision)	Updated to Chg 2 (Minor Revision)
DOE O 580.1A, Admin Chg 1	Deleted
DOE-STD-3016-2016	Updated to 2016.

15. Section J, Appendix J, Parent Oversight Plan has been updated to add FY18 Plan by reference.

16. Note: Due to a Headquarters system error with STRIPES, there is no Mod number 634.

B. All other terms and conditions remain unchanged.