May 2, 2012

VIA STRIPES

The Office of Chief Operating Officer National Renewable Energy Laboratory (NREL) 15013 Denver West Parkway Golden, CO 80401

SUBJECT:

Contract No. DE-AC36-08GO28308-Modification No. 510

To Whom it May Concern:

Subject Modification is hereby submitted for your review and execution. The purpose of this Modification is to:

- I. Delete and replace Section I, Clause I.15, 52.204-9 Personal Identity Verification of Contractor Personnel (Jan 2011)
- II. Delete and replace Section J, Appendix A, Attachment B Key Personnel
- III. Delete and replace Section J, Attachment F, Operating and Administrative Requirements (List B)

Please return one signed copy of the Modification to the Golden Field Office, attention Jessica Finley, by close-of-business, June 2, 2012.

If you have questions regarding this modification, please contact me at 720-356-1778.

Sincerely,

Jean M. Siekerka

Jee. 05.02.11. email documenting officer

ogreement with Steel Sastl

to delete reference to appendix #

Spline Motogone

	CATION OF CONTRACT	1. CONTRACT ID CODE	PAGE OF PAGES
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	1 2
510		12EE004143	5. PROJECT NO. (II applicable)
6, ISSUED BY CODE	See Block 16C 03601	7. ADMINISTERED BY (If other than item 6)	CODE 03601
Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401-3393		Golden Field Office U.S. Department of Ener Golden Field Office 1617 Cole Blvd. Golden CO 80401-3393	03001
B. NAME AND ADDRESS OF CONTRACTOR (No., street	I nowsky State and 71D Cadel	(x) 9A. AMENDMENT OF SOLICITATION NO.	
ALLIANCE FOR SUSTAINABLE ENEMALT: RONALD D. TOWNSEND 1617 COLE BLVD. 4S 1715 GOLDEN CO 804013393		9B. DATED (SEE ITEM 11) X 10A. MODIFICATION OF CONTRACT/ORD DE-AC36-08G028308	
		10B. DATED (SEE ITEM 13)	
CODE 805948051	FACILITY CODE	07/29/2008	
Olfers must acknowledge receipt of this emendment potents 8 and 15, and returning copseparate letter or telegram which includes a reference THE PLACE DESIGNATED FOR THE RECEIPT OF C Virtue of this emendment you design to change an offer to the solicitation and this emendment, and is received 12. ACCOUNTING AND APPROPRIATION DATA (if required)	iles of the antendment; (b) By acknowle to the solicitation and amendment num DFFERS PRIOR TO THE HOUR AND I raiready submitted, such change may prior to the opening hour and date spe	dging recept of this amendment on each copy of I bera. FAILURE OF YOUR ACKNOWLEDGEMEN NATE SPECIFIED MAY RESULT IN REJECTION (10 made by telegram or teller, provided each telegi	the offer submitted; or (c) By IT TO BE RECEIVED AT OF YOUR OFFER, If by
13, THIS ITEM ONLY APPLIES TO MO	DDIFICATION OF CONTRACTS/ORDE	s, it modifies the contractionder no. A	S DESCRIBED IN ITEM 14,
CHECK ONE A. THIS CHANGE ORDER IS ISSUED P. ORDER NO. IN ITEM 10A.	URSUANT TO: (Specify authority) TH	CHANGES SET FORTH IN ITEM 14 ARE MADE	IN THE CONTRACT
B. THE ABOVE NUMBERED CONTRAC appropriation date, etc.) SET FORTH	T/ORDER IS MODIFIED TO REFLECT IN ITEM 14, PURSUANT TO THE AU	THE ADMINISTRATIVE CHANGES (such as cha HORITY OF FAR 43,103(b).	nges in paying office,
C. THIS SUPPLEMENTAL AGREEMENT	'IS ENTERED INTO PURSUANT TO A	UTHORITY OF:	-
D. OTHER (Specify type of modification a	nid authority)		
X Clause I.149 970.5243	3-1 Changes (Dec. 20	00)	
	X Is required to sign this document an		•
4. DESCRIPTION OF AMENDMENT/MODIFICATION (C	Organized by UCF section headings, in	cluding solicitation/contract subject matter where t	easible.)
UNS Number: 805948051 dministrative modification 5 DE-AC36-08GO28308:	10 provides the fol	lowing significant revisi	ons to Contract
eason for Modification : Oth otal Amount for this Modific ew Total Amount for this Ver ew Total Amount for this Awa	ation: \$0.00 sion: \$0.00		
		52.204-9 Personal Identit	r Vamifiantian af
	on I, Clause I.15,		y verification or
ontractor Personnel.	on I, Clause I.15,		y verification of
ontractor Personnel.		, as heretofore changed, remains unchanged and	
ontractor Personnel. ontinued copt as provided herein, all terms and conditions of the A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING O	In full force and effect,
Deletes and replaces Section tractor Personnel. Ontinued A NAME AND TITLE OF SIGNER (Type or print) OTHER TOWN A. S.	document referenced in Hom 9A or 10/	Jean M. Siekerka	In full force and effect. FFICER (Type or print)
ontractor Personnel. ontinued copt as provided herein, all terms and conditions of the A. NAME AND TITLE OF SIGNER (Type or print)	document referenced in Hom 9A or 10/	16A. NAME AND TITLE OF CONTRACTING O Jean M. Siekerka 16B. United States of America	In full force and effect,
ontractor Personnel. ontinued copt as provided herein, all terms and conditions of the A. NAME AND TITLE OF SIGNER (Type or print)	document referenced in Hom 9A or 10/	Jean M. Siekerka	In full force and effect. FFICER (Type or print)

Prescribed by GSA FAR (48 CFR) 53.243

00170114700101657	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
CONTINUATION SHEET	DE-AC36-08G028308/510	2	2

NAME OF OFFEROR OR CONTRACTOR
ALLIANCE FOR SUSTAINABLE ENERGY, LLC

item no. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	2. Deletes and replaces Section J, Appendix A,				
	Attachment B Key Personnel.				
	3. Deletes and replaces Section J, Attachment F,				
	Operating and Administrative Requirements (List				
	B).				
	Delivery: 05/02/2011	j			
	Delivery Location Code: 03601				
	Golden Field Office				
	U.S. Department of Energy				
	Golden Field Office				
•	1617 Cole Blvd.				
	Golden CO 80401-3393				
	Mark For:				Ĺ
	Golden Field Office)			
1	U.S. Department of Energy				·
	Golden Field Office				
	1617 Cole Blvd.				
	Golden CO 80401-3393				
	FOB: Destination		İ		
	Period of Performance: 07/29/2008 to 09/30/2013				
	,				
	Add Item 10014 as follows:				
.0014	Administrative Modification - Modifying Contract				0.0
	Clauses				
	Obligated Amount: \$0.00				
l					
	A 05.02.10	ļ	-		
	See 05.02.12 email documenting agreement with Steel 5 cott to celete reference to	ĺ			
	tenic agreement				
	Wallen d	- 1			
	1 DTales & cott la	ļ			
	with sie	1		_	
-	a do To alserence he				
	cecles of 1				
	a monder of.	l			
	appendix A. Selium Motazode				
1	Silien Morage				
l		1			
	Y	İ			
1					
j		1	- 1		
		ļ		•	
		ĺ			
•		ĺ			
	· .			ļ	
Į					
-					
				ļ	
			1		



The National Renewable Energy Laboratory, a national laboratory of the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy, is managed and operated by Alliance for Sustainable Energy, LLC

ALLIANCE FOR SUSTAINABLE ENERGY, LLC DELEGATION OF AUTHORITY

The undersigned, in my capacity as President of the Alliance for Sustainable Energy, LLC (Alliance or Company) do hereby take the following action consistent with the authority delegated to me via the Statement of Unanimous Consent in Lieu of a Special Meeting of the Member Directors of the Alliance for Sustainable Energy, LLC:

Steven Silbergleid, in his capacity as the Interim Deputy Chief Operating Officer (IDCOO), of the National Renewable Energy Laboratory, is hereby delegated authority effective April 26, 2012 to:

• Execute contract modifications to the Company's Prime Contract No. DE-AC36-08GO28308 with the Department of Energy for an unlimited amount on behalf of the Company. This delegation shall expire on February 25, 2013.

Notwithstanding the foregoing, the authority described above shall be without power to further re-delegate.

Ву: _

Dan E. Arvizu, President

Alliance for Sustainable Energy, LLC

Contract # DB-AC36-08GO28308 Modification M510 Page 1 of 8 This Modification incorporates the following significant changes to contract DE-AC36-08GO28308:

- I. Section I, Clause I.15, 52.204-9 Personal Identity Verification of Contractor Personnel (Nov 2006) is hereby deleted and replaced as follows
- I.15 52.204-9 Personal Identity Verification of Contractor Personnel (Jan 2011)
- (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.

II. Section J. Appendix A, Attachment B Key Personnel, is hereby deleted and replaced as follows

Attachment B Key Personnel

Pursuant to the clause entitled "Key Personnel," the following positions are considered to be essential to work being performed.

Name	Parent Organizati on	Title	Responsibilities	Accountabilities
Dan Arvizu, Ph.D.	MRI Global	Laboratory Director & President, Alliance	Overall Contract Performance. Sets Laboratory vision, strategy, & standards and expectations for ES&H	Alliance Board of Directors
Kenneth W. Powers	Alliance for Sustainable Energy	Deputy Laboratory Director & COO	Manage business and site operations. Develop plans, priorities and directs resources to enable RDD&D infrastructure, IMS & ESSH&Q owner	Laboratory Director
Bobi Garrett	Battelle	Sr. VP Integrated Planning, Analysis and Assessment	Provide expertise and tools for analysis of technology policy and market issues for new energy technologies. Coordinates development of annual and 5-year strategic plans and advises on LDRD investments.	Laboratory Director
Dana C. Christensen	Alliance for Sustainable Energy	Deputy Laboratory Director S&T	Manage the S&T portfolio. Lead high-risk, high-value exploratory, translational and applied RD&D across the renewable energy research portfolio	Laboratory Director
TBD	Alliance for Sustainable Energy	Sr. VP Commercialization and Deployment	Manage and deploy Laboratory IP. Engage private sector in technology deployment and economic development. Directs investment in technology maturation and commercialization.	Laboratory Director

I See 05.02.11 email do eunienting ogreement evieth strue Scott to delete reference to appendix A. Splice Motazali III. Section J, Attachment F, OPERATING AND ADMINISTRATIVE REQUIREMENTS (LIST B) is deleted and replaced as follows to reflect deletions and additional DOE Directives:

SECTION J - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

OPERATING AND ADMINISTRATIVE REQUIREMENTS (LIST B) Prime Contract No. DE-AC36-08GO28308

Prime Contract No. DE-AC36-08GO28308

The operating and administrative requirements, including the Contractor Requirements Documents of DOE directives listed below are applicable in whole or in part in accordance with clauses H-18 Application of DOE Contractor Requirements Documents and 970.5204-2, Laws, Regulations, and DOE Directives (DEC 2000). The concurrence analysis documenting applicability for each requirement below is maintained in the DOE Master File as well as any assurances as required by Clause H-18, are made a part of this Contract by reference and are managed through a formal change control process.

Operating and Administrative Requirements	Applicability
DOE O 130.1 CRD	CRD applicable in
Budget Formulation	whole
Approyed: 09/29/95	
DOE O 142,3A CRD ·	CRD applicable in
Unclassified Foreign Visits and Assignments Program	whole
Approved: 10/14/2010	
DOE O 151.1C CRD	CRD applicable in
Comprehensive Emergency Management System	whole
Approved: 11/02/05	
DOE O 200.1A	CRD applicable in
Information Technology Management	whole
Approved: 12/23/2008	<u> </u>
DOE N 203.1 CRD	CRD applicable in
Software Quality Assurance	whole
Approved: 10/02/00	
DOE O 205.1B CRD	CRD applicable in part
Department of Energy Cyber Security Program	
Approved: 05/16/11	
DOE N 206.3 CRD	CRD applicable in part
Personal Identity Verification	
Approved: 11/22/05	
(DOE N 251.67 extends DOE N 206.3 until 03/22/07)	
DOE O 210,2A CRD	CRD applicable in
DOE Corporate Operating Experience Program	whole
Approved: 04/08/11	

Operating and Administrative Requirements	Applicability
DOE O 221.1A CRD Reporting Fraud, Waste, and Abuse to the Office of Inspector General Approved: 04/19/08	CRD applicable in whole
DOE O 221.2 CRD Cooperation with the Office of Inspector General Approved: 03/22/01	CRD applicable in whole
DOE O 225.1B CRD Accident Investigations	CRD applicable in whole
Approved: 03/04/11 DOE O 226.1B CRD Implementation of Department of Energy Oversight Policy	CRD applicable in whole
Approved 04/25/11 DOE O 227.1 CRD Independent Oversight Program Approved: 08/30/11	CRD applicable in whole
DOE M 231.1-1A CRD Change 2 Environment, Safety and Health Reporting Manual	CRD applicable in whole
Approved: 03/19/04 Change 2: 06/12/07 DOE O 232.2 CRD	CRD applicable in
Occurrence Reporting and Processing of Operations Information Approved: 08/30/11 DOE O 241.1B CRD	whole CRD applicable in
Scientific and Technical Information Management Approved: 12/13/10	whole
DOE O 243.1 CRD Records Management Program Approved: 02/03/06	CRD applicable in whole
DOE O 243.2 CRD Vital Records Approved: 02/02/06	CRD applicable in whole
DOE O 350.1 CRD(s) Change 1 Contractor Human Resource Management Programs Approved: 09/30/96	CRD applicable in whole
Change 1: 05/08/98 DOE O 350.2B CRD Use of Management and Operating or Other Facility Management Contractor Employees for Services to DOE in Washington, D.C. Area	CRD applicable in whole
Approved: 05/31/11 DOE O 412.1 CRD Work Authorization System Approved: 04/20/99	CRD applicable in whole
OOE O 413.1A CRD Management Control Program Approved: 04/18/02	CRD applicable in whole

Operating and Administrative Requirements	Applicability
DOE O 413.2B CRD Laboratory Directed Research and Development	CRD applicable in whole
Approved: 04/19/06 DOE O 413.3B CRD Program and Project Management for the Acquisition of Capital Assets	CRD applicable in whole
Approved: 11/29/2010 DOE O 414.1D CRD Quality Assurance	CRD applicable in part
Approved: 04/25/11 DOE O 430.1B CRD Change 2	CRD applicable in
Real Property Asset Management Approved: 09/24/03	whole
DOE O 430.2A CRD Departmental Energy and Utilities Management Approved: 04/15/02	CRD applicable in whole
DOE O 436.1 CRD Departmental Sustainability Approved: 05/02/11	CRD is applicable in whole
DOE O 442.1A CRD Department of Energy Employee Concerns Program Approved: 06/06/01	CRD applicable in whole
DOE O 442.2 CRD Differing Professional Opinions for Technical Issues Involving Environmental, Safety, and Health Technical Concerns Approved: 07/29/11	CRD applicable in whole
DOE O 450.1A CRD Environmental Protection Program Approved: 06/04/08	CRD applicable in whole
DOE M 450.4-1 CRD Integrated Safety Management System Manual Approved: 11/01/06	CRD applicable in whole
DOE O 456.1 CRD The Safe Handling of Unbound Engineered Nanoparticles Approved: 05/31/11	CRD applicable in part
DOE O 458.1 Chg 2 Radiation Protection of the Public and the Environment Approved: 06/06/11	CRD applicable in part
DOE M 470.4-2 CRD Change 1	CRD applicable in part
Physical Protection Approved: 08/26/05 Change 1: 03/07/06	
DOE M 470.4-3 CRD Change 1	CRD applicable in part
Protective Force Approved: 08/26/05 Change 1: 03/07/06	

Operating and Administrative Requirements	Applicability
DOE O 470.4B CRD	CRD applicable in part
Safeguards and Security Program	11
Approved: 07/21/11	
DOE O 471.3 CRD	CRD applicable in
Identifying and Protecting Official Use Only Information	whole
Approved: 04/09/03	
DOE M 471.3-1 CRD	CRD applicable in
Manual for Identifying and Protecting Official Use Only Information	whole
Approved: 04/09/03	
DOE O 472.2 CRD	CRD applicable in part
Personnel Security	
Approved: 07/21/11	
DOE O 475.1 CRD	CRD applicable in
Counterintelligence Program	whole
Approved: 12/10/04	
DOE O 482,1 CRD	CRD applicable in
DOE Facilities Technology Partnering Programs	whole
Approved: 01/12/01	
DOE O 483.1 CRD	CRD applicable in
DOE Cooperative Research and Development Agreements	whole
Approved: 01/12/01	
DOE O 484.1 CRD	CRD applicable in
Reimbursable Work for the Department of Homeland Security	whole
Approved: 08/17/06	
DOE O 522.1 CRD	CRD applicable in
Pricing of Departmental Materials and Services	whole
Approved: 11/03/04	
DOE O 534.1B CRD	CRD applicable in
Accounting	whole
Approved: 01/06/03	
DOE O 551.1C CRD	CRD applicable in
Official Foreign Travel	whole
Approved: 06/24/08	***************************************
DOE O 580.1 CRD	CRD applicable in
Department of Energy Personal Property Management Program	whole
Approved: 12/07/05	

Summary of Modifications to Attachment F Operating and Administrative Requirements Mod 510

Deleted	DOE O 551.1B CRD Official Foreign Travel Approved: 08/19/03	CRD applicable in whole
Added	DOE O 551.1C CRD Official Foreign Travel Approved: 06/24/08	CRD applicable in whole

IV. All other terms and conditions of the contract remain the same.