	AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE PAGE OF P		
					1 13	
2. AMENDMEN	IT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PI	JRCHASE REQ. NO.	5. PROJECT NO. (If applicable)	
1116		See Block 16C	16EE002796			
6. ISSUED BY	CODE	03601	7. ADMINISTERED	BY (If other than Item 6)	CODE	
U.S. Dep Golden 1617 Co	Field Office partment of Energy Field Office le Blvd. CO 80401-3393					
3. NAME AND	ADDRESS OF CONTRACTOR (No., street	, county, State and ZIP Code)	(x) 9A. AMENDME	NT OF SOLICITATION NO.		
ttn: RC 90 BOX 4	FOR SUSTAINABLE ENE NALD TOWNSEND 011 RSF-053	RGY, LLC	9B. DATED (SE			
	0 80402		x 10A. MODIFICA DE-AC36-	TION OF CONTRACT/ORDI	ER NO.	
CODE 80	5948051	FACILITY CODE	07/29/20	,		
00	3940031					
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I. Section J, Attachment B, Key Personnel, is deleted and replaced to update key personnel information.

II. Section J, Attachment E, Applicable Laws and Regulations (List A) is deleted and replaced to add 7 CFR 330, Federal Plant Pest Regulations and to delete 40 CFR 79, Registration of Fuels and Fuel Additives, and 40 CFR 166, Exemption of Federal and State Agencies for use of Pesticides under Emergency Conditions.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect. 15A. NAME AND TITLE OF SIGNER (*Type or print*) 16A. NAME AND TITLE OF CONTRACTING OFFICER (*Type or print*)

		Jean M. Siekerka	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
		Signature on File	07/20/2016
(Signature of person authorized to sign)		(Signature of Contracting Officer)	0772072010
NSN 7540-01-152-8070		STANDARE	FORM 30 (REV. 10-83)
		B	001

	REFERENCE NO. OF DOCUMENT BEING CONTINUED
CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-AC36-08GO28308/1116

NAME OF OFFEROR OR CONTRACTOR

ALLIANCE FOR SUSTAINABLE ENERGY, LLC

И NO.	SUPPLIES/SERVICES	QUANTITY		UNIT PRICE	AMOUNT
A)	(B)	(C)	(D)	(E)	(F)
	III. Section J, Attachment F, Operating and				
	Administrative Requirements (List B) is deleted				
	and replaced to add DOE O 443.1B, CRD, Change 1,				
	Protection of Human Research Subjects.				
	IV. All other terms and conditions of the				
	contract remain the same.				
	Payment:				
	FOB: Destination				
	Period of Performance: 07/29/2008 to 09/30/2018				
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		1			

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This Modification incorporates the following significant changes to contract DE-AC36-08GO28308:

I. Section J, 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 Organization	Title	Responsibilities	Accountabilities
Martin Keller, Ph.D.	UT Battelle (Ends 9/30/16) Alliance (Effective 10/1/16)	Laboratory Director & CEO President of Alliance for Sustainable Energy, LLC	Overall Contract Performance. Sets Laboratory vision, strategy, & standards and expectations for ES&H.	Alliance Board of Directors
Bobi A. Garrett	Battelle	Deputy Laboratory Director/Chief Operating Officer	Integrates and oversees laboratory strategy and execution and all operations for the National Renewable Energy Laboratory (NREL) regardless of where they are performed across the laboratory.	Laboratory Director
Martin Keller, Ph.D.	UT Battelle (Ends 7/31/16)	Acting Deputy Laboratory Director/ Science & Technology Officer	Provides leadership to accomplish world class research and act with the decision authority of the Director on matters involving research and innovation regardless of where they are performed across the laboratory.	Laboratory Director
Peter F. Green, Ph.D.	Alliance (Effective 8/1/16)	Deputy Laboratory Director/ Science & Technology Officer	Provides leadership to accomplish world class research and act with the decision authority of the Director on matters involving research and innovation regardless of where they are performed across the laboratory.	Laboratory Director

Summary of Modification to Attachment B, Key Personnel Modification 1116

Action	Description
Added	Martin Keller, Parent Organization: Clarification of UT Battelle as Parent
	Organization ending 9/30/16 and Alliance as Parent Organization effective
	10/1/16.
Added	Martin Keller as the Acting Deputy Laboratory Director/Science &
	Technology Officer (Ends 7/31/16).
Added	Peter F. Green as the Deputy Laboratory Director/Science & Technology
	Officer (Effective 8/1/16).

II. Section J, Attachment E, Applicable Laws and Regulations (List A), is deleted and replaced as follows.

Attachment E Applicable Laws and Regulations (List A)

General Laws and Regulations

CODE OF FEDERAL REGULATIONS (CFR)
10 CFR 707 - Workplace Substance Abuse Programs at DOE Sites
10 CFR 719 - Contractor Legal Management Requirements
10 CFR 1008 - Records Maintained on Individuals (Privacy Act)

Environmental, Health and Safety Laws, Regulations and Other Requirements

CODE OF FEDERAL REGULATIONS (CFR)

7 CFR 330 – Federal Plant Pest Regulations

7 CFR 340-Biotechnology Permits

10 CFR 8.4 - Interpretation by the General Counsel: AEC Jurisdiction

10 CFR 835 - Occupational Radiation Protection

10 CFR 851 – Worker Safety and Health Program

10 CFR 1021 – DOE NEPA Implementing Regulations

10 CFR Part 1022 Department of Energy Floodplain and Wetland Regulations

10 CFR 1046.11 Medical and Physical Fitness Qualification Standards

14 CFR 77; Objects Affecting Navigable Airspace

27 CFR Part 19; Distilled Spirits Plants

27 CFR Part 22; Distribution and Use of Tax-Free Alcohol

33 CFR 320 - General Regulatory Policies

33 CFR 323 - Permits for Discharges of Dredged or Fill Material into Waters of the United States

33 CFR 325 - Processing of Department of the Army Permits

33 CFR 328 - Definition of Waters of the United States

33 CFR 330 - Nationwide Permits

36 CFR 63 - Determination of Eligibility for Inclusion in the National Register of Historic Places

36 CFR 65 - National Historic Landmarks Program

36 CFR 78 - Waiver of Federal agency responsibilities under section 110 of the National Historic Preservation Act

36 CFR 79 - Curation of Federally-Owned and Administered Archaeological Collections

36 CFR 800 - Protection of Historic and Cultural Properties

40 CFR 50 - National Primary and Secondary Ambient Air Quality Standards

40 CFR Parts 51, 52, 70, and 71 – Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule

40 CFR 60 – Standards of Performance for New Stationary Sources

40 CFR 61- National Emission Standards for Hazardous Air Pollutants

40 CFR 66 - Assessment and Collection of Noncompliance Penalties by EPA

40 CFR 82 - Protection of Stratospheric Ozone

40 CFR Parts 86, 87, 89, 90, 94, 98, 1033, 1039, 1042, 1045, 1051, 1054, and 1065 -

Mandatory Reporting of Greenhouse Gas

40 CFR 88 - Clean-Fuel Vehicles

40 CFR 110 - Discharge of Oil

40 CFR 112 - Oil Pollution Prevention

40 CFR 113 - Liability Limits for Small Onshore Storage Facilities

40 CFR 116 - Designation of Hazardous Substances

40 CFR 117 - Determination of Reportable Quantities for Hazardous Substances

40 CFR 122 - EPA Administered Permit Programs: The National Pollutant Discharge

Elimination System (NPDES)

40 CFR 131 - Water Quality Standards

40 CFR 141 - National Primary Drinking Water Regulations

40 CFR 142 - National Primary Drinking Water Regulations Implementation

40 CFR 171 - Certification of Pesticide Applicators

40 CFR 260-270 - Resource Conservation and Recovery Act (RCRA)

40 CFR 273 - Standards for Universal Waste Management

40 CFR 279 - Standards for the Management of Used Oil

40 CFR 302 - Designation, Reportable Quantities, and Notification (CERCLA)

40 CFR 355 - Emergency Planning and Notification (CERCLA)

40 CFR 370 - Hazardous Chemical Reporting: Community Right - To-Know

40 CFR 401 - General Provisions - Effluent Guideline and Standards

40 CFR 403 - General Pretreatment Regulations for Existing and New Sources of Pollution

40 CFR Parts 1500-1508 – Council on Environmental Quality Regulations for Implementing NEPA

48 CFR 970.5223 – Integration of Environment, Safety and Health into Work Planning and Execution

49 CFR 107-199 - Transportation - Hazardous Materials Regulations

49 CFR 382-399 - Transportation - Federal Motor Carrier Safety Regulations

50 CFR 17 - Endangered and Threatened Wildlife and Plants

50 CFR 402 - Interagency Cooperation - Endangered Species Act of 1973

50 CFR 450 - General Provisions - Endangered Species Exemption Process

50 CFR 451 - Application Process

UNITED STATES CODE (USC)

7 USC 136 et seq. - Environmental Pesticide Control Act

7 USC 136 et seq. - Federal Insecticide, Fungicide, and Rodenticide Act

7 USC 7701 Plant Protection Act 2000 (as amended by the Noxious Weed Control and Eradication Act 2004)

7 USC 2814 – Federal Noxious Weed Act of 1974 as amended

16 USC 431 et seq. - Antiquities Act of 1906

16 USC 470 et seq. - Archaeological Resources Protection Act of 1979 (ARPA)

16 USC 470 et seq. - National Historic Preservation Act of 1966 (NHPA)

16 USC 661 et seq. - Fish and Wildlife Coordination Act

16 USC 668 et seq. - Bald and Golden Eagle Protection Act

16 USC 703 et seq. - Migratory Bird Treaty Act

16 USC 1531 et seq. - Endangered Species Act of 1973

26 USC Chapter 51; Distilled Spirits, Wines, and Beer

33 USC 403 – Rivers and Harbors Act

33 USC 1251, et seq. - Clean Water Act

33 USC 1321 - Oil and Hazardous Substances Liability (Clean Water Act, Section 311)

42 USC Sec. 300f et seq. - Safe Drinking Water Act, and 42 USC 201 - Safe Drinking Water Act Amendments of 1996

42 USC 4321-4347 The National Environmental Policy Act of 1969, as amended

42 USC 6901 et seq. - Resource Conservation and Recovery Act (RCRA)

42 USC 7401 et seq. - Clean Air Act & Amendments

42 USC 9602 - CERCLA, Title I, Section 102 - Reportable Quantities and Additional Designations

42 USC 9603 - CERCLA, Title I, Section 103 - Notices, Penalties

42 USC 11000-11050 - Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA)

42 USC 13101-13109 - Pollution Prevention Act of 1990

42 USC 17094 Sec 438 – Storm Water Runoff Requirements for Federal Development Projects

EXECUTIVE ORDER (EO)

EO 11593 - Protection and Enhancement of Cultural Environment 1971

EO 12114 - Environmental Effects Abroad of Major Federal Actions

EO 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations

EO 13112 - Invasive Species 1999

EO 13186 - Responsibilities of Federal Agencies to Protect Migratory Birds

EO 13690 – Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input

EO 13693 – Planning for Federal Sustainability in the Next Decade

CODE OF COLORADO REGULATIONS (CCR)

2 CCR 402-2 - Water Well Construction

2 CCR 402-4 - Rules for Small Capacity Well Permits in Designated Ground Water Basins

2 CCR 402-10 – Geothermal Walls

2 CCR 406-8 Chapter 10, Article 2 and 3 - Non-Game Wildlife

5 CCR 1001. 1-20 - Colorado Department of Public Health & Environment, Air Quality Control Commission Regulations

5 CCR 1002-11 – Primary Drinking Water Regulations

5 CCR 1002-31 - Basic Standards and Methodologies for Surface Water

5 CCR 1002-38 – Classifications of Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin

5 CCR 1002-41 - The Basic Standards for Groundwater

5 CCR 1002-42 - Site-Specific Water Quality Classifications and Standards for Ground Water (Rocky Flats Area)

5 CCR 1002-61 - Colorado Discharge Permit System Regulations

5 CCR 1002-62 - Regulations for Effluent Limits

5 CCR 1002-63 - Pretreatment Regulations

5 CCR 1002-65 - Regulations Controlling Discharges to Storm Sewers

5 CCR 1003-6 - Guidelines on Individual Sewage Disposal Systems

6 CCR 1007-1, Part 2 - Registration of Radiation Producing Machines

6 CCR 1007-1, Part 4 – Standards for Protection Against Retaliation, Sections 4.33-4.38 Waste Disposal Requirements

6 CCR 1007-1, Part 8 - Radiation Safety Requirements for Analytical X-Ray Equipment

6 CCR 1007-1, Part 17 - Transportation of Radioactive Material

6 CCR 1007-3, Colorado Hazardous Waste Regulations

7 CCR 1101-5, Colorado Boiler and Pressure Vessel Rule

7 CCR 1101-14 – Underground Storage Tanks and Aboveground Storage Tanks

8 CCR 1507-1 – Minimum Standards for the Operation of Commercial Vehicles

8 CCR 1507-25 – Rules and Regulations Concerning the Permitting, Routing & Transportation of Hazardous and Nuclear Materials and the Intrastate Transportation of Agricultural Products in the State of Colorado

COLORADO REVISED STATUTES (CRS)

8 CRS 20.5, Parts 1-3 - Petroleum Storage Tanks

9 CRS 4 – Boiler Inspection

25 CRS 7 - Air Quality Control

25 CRS 8 - Colorado Water Quality Control Act

25 CRS 10 - Individual Sewage Disposal Systems Act

25 CRS 15, Part 1, Part 3 - State Hazardous Waste Management Program

25 CRS 15, Part 1, Part 4 - Infectious Waste

29 CRS 22 - Hazardous Substances Incidents

33 CRS 2 - Nongame and Endangered Species Conservation

33 CRS 6 - Law Enforcement and Penalties

33 CRS 6-109 – Wildlife – Illegal possession

33 CRS 6-128 – Wildlife – Damage or destruction of dens or nests – harassment of wildlife

35 CRS 5 - Pest Control Districts

35 CRS 5.5 - Colorado Weed Management Act

35 CRS 9 - Pesticide Act

35 CRS 10 - Pesticide Applicators Act

37 CRS 90 - 101, et seq. - Colorado Ground Water Management Act

INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS

International Building Code (IBC) 2012

International Fire Code (IFC) 2012

INTERNATIONAL STANDARDS ORGANIZATION (ISO), OCCUPATIONAL HEALTH AND SAFETY ASSESSMENT SERIES (OHSAS)

ISO 14001:2004, Environmental Management Systems

OHSAS 18001: 2007, Occupational Health and Safety Management Systems

OTHER LOCAL STANDARDS

Jefferson County Public Health Department, Onsite Wastewater Treatment System Regulation of Jefferson County, Colorado

Jefferson County Planning and Zoning Land Development Regulation, Section 18 (Drainage) and Section 20 (Floodplain) [Note: applies to offsite locations only.]

Jefferson County Planning and Zoning Storm Drainage and Technical Criteria [Note: applies to offsite locations only.]

Metropolitan Wastewater Reclamation District Rules and Regulations

Pleasant View Water and Sanitation District Rules and Regulations

West Metro Fire Rescue Amendments to the International Fire Code

West Metro Fire Protection District Hazardous Materials Regulations

Denver Fire Department Hazardous Material Regulations

Summary of Modifications to Attachment E Applicable Laws and Regulations Mod 1116

Added	7 CFR 330 – Federal Plant Pest Regulations
Deleted	40 CFR 79 – Registration of Fuels and Fuel Additives
Deleted	40 CFR 166 – Exemption of Federal and State Agencies for use of Pesticides under
	Emergency Conditions

III. Section J, Attachment F, Operating and Administrative Requirements (List B), is deleted and replaced as follows.

Attachment F Operating and Administrative Requirements (List B)

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, and 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
Approved: 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	CRD applicable in
Information Technology Management	whole
Approved: 12/23/2008	
DOE O 205.1B CRD	CRD applicable in part
Department of Energy Cyber Security Program	
Approved: 05/16/11	

DOE O 206.1 CRD	CRD applicable in
Department of Energy Privacy Program	whole
Approved: 01/16/09	whole
DOE O 206.2 CRD	CRD applicable in part
Identity, Credential, and Access Management (ICAM)	eres appricable in part
02/19/13	
DOE O 210.2A CRD	CRD applicable in
DOE Corporate Operating Experience Program	whole
Approved: 04/08/11	
DOE O 221.1A CRD	CRD applicable in
Reporting Fraud, Waste, and Abuse to the Office of Inspector General	whole
Approved: 04/19/08	
DOE O 221.2 CRD	CRD applicable in
Cooperation with the Office of Inspector General	whole
Approved: 03/22/01	
DOE O 225.1B CRD	CRD applicable in
Accident Investigations	whole
Approved: 03/04/11	
DOE O 226.1B CRD	CRD applicable in
Implementation of Department of Energy Oversight Policy	whole
Approved 04/25/11	
DOE O 227.1 CRD	CRD applicable in
Independent Oversight Program	whole
Approved: 08/30/11	
DOE O 231.1B CRD	CRD applicable in
Environment, Safety and Health Reporting	whole
Approved: 06/27/11	
DOE O 232.2 CRD	CRD applicable in
Occurrence Reporting and Processing of Operations Information	whole
Approved: 08/30/11	
DOE O 241.1B CRD	CRD applicable in
Scientific and Technical Information Management	whole
Approved: 12/13/10	
DOE O 243.1B CRD	CRD applicable in part
Records Management Program	
Approved: 03/11/13	
DOE O 350.1 CRD	CRD applicable in
Change 5	whole
Contractor Human Resource Management Programs	
Approved: 09/30/96	
Change 5: 09/30/14	

DOE O 350.2B CRD	CRD applicable in
	whole
Use of Management and Operating or Other Facility Management	whole
Contractor Employees for Services to DOE in Washington, D.C. Area	
Approved: 05/31/11	
DOE O 413.1A CRD	CRD applicable in
Management Control Program	whole
Approved: 04/18/02	
DOE O 413.2B CRD	CRD applicable in
Laboratory Directed Research and Development	whole
Approved: 04/19/06	
DOE O 413.3B CRD	CRD applicable in
Program and Project Management for the Acquisition of Capital Assets	whole
Approved: 11/29/2010	
DOE O 414.1D CRD	CRD applicable in part
Quality Assurance	
Approved: 04/25/11	
DOE O 430.1B CRD Change 2	CRD applicable in
Real Property Asset Management	whole
Approved: 09/24/03	
DOE O 436.1 CRD	CRD is applicable in
Departmental Sustainability	whole
Approved: 05/02/11	
DOE O 442.1A CRD	CRD applicable in
Department of Energy Employee Concerns Program	whole
Approved: 06/06/01	
DOE O 442.2 CRD	CRD applicable in
Differing Professional Opinions for Technical Issues Involving	whole
Environmental, Safety, and Health Technical Concerns	
Approved: 07/29/11	
DOE O 443.1B CRD Change 1	CRD applicable in part
Protection of Human Research Subjects	- Tr - T
Approved: 04/21/16	
DOE O 456.1 CRD	CRD applicable in part
The Safe Handling of Unbound Engineered Nanoparticles	"FFF"
Approved: 05/31/11	
DOE O 458.1 CRD Change 2	CRD applicable in part
Radiation Protection of the Public and the Environment	
Approved: 06/06/11	
DOE O 470.4B CRD	CRD applicable in part
Safeguards and Security Program	
Approved: 07/21/11	
DOE O 471.3 CRD	CRD applicable in
Identifying and Protecting Official Use Only Information	whole
Approved: 04/09/03	
Approved. 04/09/05	

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Manual for Identifying and Protecting Official Use Only Information Approved: 04/09/03wholeDOE O 472.2 CRD Personnel Security Approved: 07/21/11CRD applicable in partDOE O 473.3 CRD Protection Program Operations Approved: 06/29/11CRD applicable in partDOE O 475.1 CRD Counterintelligence Program Approved: 12/10/04CRD applicable in wholeOE O 483.1A CRD DOE C 0483.1A CRD DOE C 0484.1 CRD Reimbursable Work for the Department of Homeland Security Approved: 08/17/06CRD applicable in wholeDOE O 522.1 CRD Pricing of Departmental Materials and Services Approved: 11/03/04CRD applicable in wholeDOE O 534.1B CRD Accounting Approved: 01/06/03CRD applicable in wholeDOE O 551.1D CRD OF 0 551.1D CRDCRD applicable in wholeOF O 551.1D CRD OFFICIAL Foreign TravelCRD applicable in whole	DOE N 471 2 1 CDD	
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Summary of Modifications to Attachment F Operating and Administrative Requirements Mod 1116

Added	DOE O 443.1B CRD Change 1	CRD applicable in
	Protection of Human Research Subjects	part
	Approved: 04/21/16	

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