

August 08, 2013

VIA STRIPES

Mr. Ken Powers
Deputy Lab Director & Chief Operating Officer
National Renewable Energy Laboratory (NREL)
15013 Denver West Parkway
Golden, CO 80401

SUBJECT: Contract No. DE-AC36-08GO28308– Modification No. 732

Dear Mr. Powers:

Subject Modification is hereby submitted for your review. The purpose of this Modification is to delete as a separate requirement the Commercialization Plan from Section C, Paragraph C.5, Performance Goals and Attributes of Performance; change Section H, Clause H.37, Privately Funded Technology Transfer, modify Section I, Clause I.132, 970.5227-10 – Patent Rights; modify Section J, Attachment E, Applicable Laws and Regulations (List A) with the addition of 10 CFR 719, Contractor Legal Requirements; and, incorporate by reference Section J, Attachment J, Performance Evaluation and Measurement Plan, dated June 28, 2013.

Please return one signed copy of the Modification to the Golden Service Center, attention David Lighthall, by close-of-business, **August 22, 2013**.

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

Sincerely,

Jean M. Siekerka
Contracting Officer

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 30
2. AMENDMENT/MODIFICATION NO. 0732	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. 13EE003923	5. PROJECT NO. (If applicable)
6. ISSUED BY Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401-3393	CODE 03601	7. ADMINISTERED BY (If other than Item 6) Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401-3393	CODE 03601
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) ALLIANCE FOR SUSTAINABLE ENERGY, LLC Attn: RONALD D. TOWNSEND 1617 COLE BLVD. MS 1715 GOLDEN CO 804013393		(x) 9A. AMENDMENT OF SOLICITATION NO.	
CODE 805948051		FACILITY CODE	
		x 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC36-08GO28308	
		10B. DATED (SEE ITEM 13) 07/29/2008	
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 15, 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)

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE 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 date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) Clause I.149 970.5243-1 Changes (Dec. 2000)

E. IMPORTANT: Contractor is not, is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 805948051

Modification 732 provides the following funding:

Reason for Modification : Other Administrative Action

Total Amount for this Modification: \$0.00

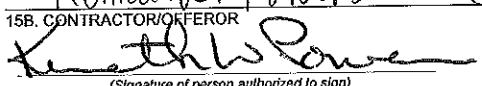
New Total Amount for this Version: \$0.00

New Total Amount for this Award: \$2,457,533,506.44

I. Deletes as a separate requirement the Commercialization Plan from Section C, Paragraph C.5, Performance Goals and Attributes of Performance.

Continued ...

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) Kenneth W. Powers Coo	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Jean M. Siekerka
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	16B. UNITED STATES OF AMERICA Signature on File (Signature of Contracting Officer)
15C. DATE SIGNED 8/13/13	16C. DATE SIGNED 08/08/2013

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
DE-AC36-08G028308/0732

PAGE OF
2 30

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)
	<p>II. Changes Section H, Clause H.37, Privately Funded Technology Transfer.</p> <p>III. Modifies Section I, Clause I.132, 970.5227-10 - Patent Rights.</p> <p>IV. Modifies Section J, Attachment E, Applicable Laws and Regulations (List A) with the addition of 10 CFR 719, Contractor Legal Requirements.</p> <p>V. Incorporates by reference Section J, Attachment J, Performance Evaluation and Measurement Plan, dated June 28, 2013.</p> <p>VI. All other terms and conditions of the contract remain the same.</p> <p>This Contract is to operate and manage the National Renewable Energy Laboratory.</p> <p>Delivery Location Code: 03601 Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401-3393</p> <p>Mark For: Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401-3393</p> <p>Payment: OR for Golden U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 4517 Oak Ridge TN 37831</p> <p>FOB: Destination Period of Performance: 07/29/2008 to 09/30/2013</p> <p>Add Item 10021 as follows:</p>				
10021	<p>Administrative Modification - Modifying Contract Clauses Obligated Amount: \$0.00</p>				0.00

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

- I. Part I, Section C, Paragraph C.5, Performance Goals and Attributes of Performance is hereby deleted in its entirety and replaced with the following to delete the Commercialization Plan from the list of Annual Operational Planning/Execution Documents to be submitted to the Contracting Officer:

C.5 Performance Goals and Attributes of Performance

This section sets forth DOE's expectations for NREL as outcome-oriented Performance Goals and associated performance attributes. These Performance Goals are the foundation of the Performance Evaluation and Measurement Plan (PEMP) and will be used over the entire base contract period of performance. Specific performance metrics (objectives, measures, and targets will be established for each PEMP Performance Goal, and will be reviewed and validated annually.

(a) Mission and Operational Performance Goals

Performance goals 1 through 4 and 5 through 8 define the Mission and Operational Performance Goals, respectively, for this contract.

- (1) *Energy Leadership and Creating Lasting National Value* – Provides the expert leadership required to shape the energy dialogue and attract, coordinate, integrate, and leverage national energy RDD&D investments to accelerate the achievement of national goals. Coordinates and manages EERE's energy efficiency and renewable energy RDD&D interests; creates the intellectual and entrepreneurial environment to produce the disruptive approaches required to accelerate achievement of national goals; attracts and retains scientific, technological, management, and support talent to continuously deliver sustained superior value to the nation; manages Laboratory Director's Research and Development (LDRD) program for strategic contribution; and enhances NREL's global image and core capabilities to serve future generations with distinction.
- (2) *Advancing Science and Technology* – Delivers the world-class, peer reviewed, and definitive research, development, demonstration, and deployment products that advance scientific knowledge and the application of this knowledge to accelerate achievement of national goals.
- (3) *Science and Technology Management, Analysis, and Integration* – Manages scientific, technology, and related endeavors to create the disruptive technologies and strategies necessary to accelerate achievement of our national goals; provides expert analysis and understanding of energy technology, policy, and market factors and the interaction of these factors to inform decision-makers; and identifies opportunities to coordinate and leverage national investments.

- (4) *Accelerating Commercialization* – Creates a linkage between scientific discovery and product development to accelerate the commercialization and market penetration of renewable energy and energy efficiency technologies. Creates the scientific and entrepreneurial environment that develops, captures, matures, and rapidly transfers knowledge and technologies to the public- and private-sectors; facilitates the development of successful renewable energy and energy efficiency businesses; identifies and mitigates potential and actual conflicts of interest; and develops the tools, strategies, and relationships necessary to support achievement of state, national, and international energy goals.
- (5) *Environment, Safety, and Health Management* – Creates a safe and healthful work place and institution based on identified and assessed risks; creates and manages programs to avoid or mitigate these risks; and protects all persons impacted by NREL operations as well as the regional environment, and effectively responds to actual incidents.
- (6) *Business Operations* – Manages business operations to support the RDD&D mission at the lowest cost commensurate with operational risk, and service, safety, quality, and accountability standards.
- (7) *Infrastructure Development and Site Operations* – Maintains the availability and enhances the value of NREL's science and support infrastructure; acquires compelling science and support infrastructure assets that enhance NREL's national image and enable NREL's RDD&D mission; and reduces NREL's energy intensity and environmental footprint.
- (8) *Security and Emergency Management* – Creates a secure work environment based on identified and assessed security vulnerabilities and threats; creates and manages programs to avoid or mitigate these risks; protects computer information networks and proprietary business sensitive and personal information; mitigates potential site emergencies through assessment and planning; and effectively responds to actual emergencies.

(b) Attributes of Performance

The following Performance Attributes are indicative of having achieved DOE's Performance Goals for this contract:

- (1) *Energy Leadership and Creating Lasting National Value* – NREL is widely recognized as a leader in the global energy technology, policy, and market arenas. NREL's credentials are beyond reproach and NREL is viewed as a definitive resource on energy technology, policy, and market matters. NREL's energy technology, policy, and market analysis is world-class and underpins its strategic direction and counsel, and management decisions. NREL encourages and supports a creative environment in which RDD&D innovation will occur and entrepreneurial endeavors flourish. NREL possesses the capability and capacity to undertake new strategic opportunities while maintaining existing commitments to clients, and delivers superior overall value. LDRD program contributes to NREL's scientific and technologic viability, anticipates DOE's future programmatic needs, and encourages science, business, and management staff to envision and create the high-risk, high-value products necessary to impact national goals.

NREL mission and operational performance is routinely assessed and this information is used to improve performance. NREL communication products inform a wide spectrum of stakeholders. NREL contributes to the advancement of science, management, and deployment education. Corporate parent(s) of NREL's management team contribute the leadership and resources necessary to fully implement its strategy and achieve its vision, and contributes to accomplishment of DOE's overall mission. Governance activities provide necessary corporate oversight and assurances. Assures the integrity of operational systems and systems performance through regular assessment and disclosure of assessment results to DOE. NREL is a state, regional, and local economic resource.

- (2) *Advancing Science and Technology* – Scientific work products are peer-reviewed and acknowledged as cutting edge by the national and international science community. NREL produces world-class exploratory, translational, and applied research that advances the nation's understanding of the underlying science critical to the understanding and full use of these technologies. NREL coordinates and leverages EERE investments with public- and private-sector RDD&D initiatives to accelerate and increase market impact. NREL conducts development, demonstration, and deployment engineering activities to scale these technologies to accelerate and increase market impact.
- (3) *Science and Technology Management, Analysis, and Integration* – Science and technology RDD&D is planned, managed, assessed, and coordinated to ensure these efforts deliver the promised products within scope, cost, and schedule. NREL assesses the energy technology, policy, and market arenas for market signals and opportunities to inform, coordinate, and manage the national RDD&D investment, private- and public-sector decision makers, and NREL planning to achieve highest national value. RDD&D efforts are systematically reviewed for quality, synergies, and long-term national relevance and NREL advises DOE on RDD&D program and portfolio direction. The breadth and complexity of the overall RDD&D effort, as well as the interaction of program elements, is integrated to reduce risk and maximize the potential for technology readiness. Systems Integration ensures all requirements are being addressed; tracks and measures the progress of projects; conducts independent analysis to aid the multiple programmatic decisions that need to be made over the course of the program; and identifies and quantifies programmatic and technical risks to ensure the program is proactive in response to issues and challenges. NREL discretionary RDD&D investments advance the fundamental understanding of energy technology, policy, and market factors and increases NREL's strategic value to the nation.
- (4) *Accelerating Commercialization* – Commercialization is an integral component of NREL's mission. Market conditions and signals inform strategic planning and commercialization activities. Commercialization strategies are well developed, are reflected in strategic planning and decision making, and create a linkage between scientific discovery and product development. Strategies recognize the impact of market dynamics and the conditions for successful product development. Commercialization activities are closely coordinated with EERE to ensure full use of all EERE-sponsored intellectual property. NREL identifies inventions and innovations, matures promising technologies, and rapidly transfers these technologies to the public- and private-sectors. NREL provides timely, insightful, accurate, and objective analysis of energy technology, policy, and market issues; system and component testing, validation, and optimization; and performance information necessary to reduce risk for public- and private-sector decision-makers to achieve state and national energy goals. NREL anticipates and defines potential and actual conflicts of interests, identifies these matters promptly to DOE, and mitigates these matters to ensure that NREL's FFRDC integrity and brand are protected.

- (5) *Environment, Safety, and Health Management* – NREL creates and maintains a safe workplace for all persons impacted by NREL operations and protects the environment consistent with Integrated Safety Management System principles, applicable environmental, safety, and health laws and standards; and industry best practices. NREL work is planned, risks identified and mitigated, and work execution monitored to ensure superior operational awareness and to reduce the potential for serious safety, health, or environmental incidents. NREL ensures all work is managed in accordance with the National Environmental Policy Act (NEPA), anticipates and prepares NEPA documents to support the timely accomplishment of all activities, and coordinates all NEPA activities across all NREL operations and with DOE. NREL ensures all on-site subcontractors perform work in accordance with all ES&H requirements. NREL maintains safety, health, and environmental emergency response capabilities commensurate with risk, responds to actual incidents promptly, and reporting incidents consistent with applicable requirements. NREL provides leadership on ES&H matters in relevant public- and private-sector forums.
- (6) *Business Operations* – Develops, operates, and maintains risk-based business capabilities and systems that support effective accomplishment of the mission and maintain service, safety, quality, and accountability standards. Business operations support DOE's socioeconomic efforts, and Small and Small Disadvantaged Businesses are actively engaged at NREL. Management and accountability systems meet widely accepted corporate performance expectations.
- (7) *Infrastructure Development and Site Operations* – NREL manages its physical and scientific infrastructure to industry and DOE standards and maintains infrastructure viability through proactive and defensible reinvestment planning and budget requests. NREL reduces energy intensity and environmental footprint to the lowest reasonably achievable levels. NREL identifies opportunities for using private-sector expertise and capital to satisfy site energy management and infrastructure investment. NREL anticipates and develops strategic, supporting, and sustaining infrastructure investments linked to EERE's strategic need, and prepares complete and compelling mission and financial justifications. NREL project designs are compelling and advance DOE's strategic goals and NREL's image. NREL employs internal and external reviews, uses tools such as Earned Value Management, and maintains superior operational awareness to ensure project baselines are achieved.
- (8) *Security and Emergency Management* – NREL creates and maintains a secure workplace for all individuals impacted by NREL operations. NREL maintains superior operational security awareness. Physical, operational, and cyber security programs reflect assessed risks and threats and are compliant with applicable DOE Directives. NREL maintains the security and emergency management capabilities and external relationships necessary to effectively respond to site emergencies.

(c) Deliverables

The Contractor will provide the following deliverables electronically to the Contracting Officer:

- (1) Annual Operational Planning/Execution Documents (30 days prior to the start of each fiscal year):
 - (i) Annual Operating Plans
 - (ii) Indirect Cost Proposal
 - (iii) Ten-Year Site Plan
 - (iv) Five-Year Strategic Plan
- (2) Performance Self-Assessment (30 days following closure of each performance period).
- (3) Any additional reports, analysis, services, etc., as required by the Contracting Officer.

II. Part I, Section H, Clause H.37, Privately Funded Technology is deleted in its entirety and replaced with:

H.37 Privately-Funded Technology Transfer

(a) Contractor's Commitment

- (1) For the Contractor's privately-funded technology transfer (PFTT) effort during the 5-year Base Period of this Contract, the Contractor shall commit on behalf of itself and others, a minimum of one million seven hundred fifty thousand (\$1,750,000) of private (i.e., non-Federal) monies for expenses including but not limited to those related to patenting, marketing, licensing, technology maturation and development of Subject Inventions prior to the Contract expiration date of October 1, 2013.
- (2) The Contractor shall indicate whether a Subject Invention will be pursued under its PFTT program within six (6) months after the Subject Invention is reported to DOE by the Contractor, unless an extension is otherwise agreed to in writing by the DOE field Patent Counsel. The Contractor is free to elect any or all Subject Invention(s) into the PFTT program or to remove Subject Inventions at its discretion subject to the provisions of the M&O contract and this clause. DOE may choose whether to accept title or transfer to the GFTT program, if offered by the Contractor, to Subject Inventions or software that are removed from the PFTT program. In addition:
 - i. Subject Inventions (including continuations, requests for continued examination, divisional applications, continuations in part, reissue applications and foreign counterparts) reported to DOE by the Contractor during the six (6) month period before Alliance assumed management and operating responsibilities (i.e., October 1, 2008) of Prime Contract No. DE-AC36-08GO28308 up to the effective date of this Modification will be eligible for election as described in subparagraph (2) above and

commercialization pursuant to the PFTT program. Election into Contractor's PFTT Program pursuant to this paragraph (i) shall end six (6) months after the effective date of this Modification

- ii. Subject Inventions (including continuations, requests for continued examination, divisional applications, continuations in part, reissue applications and foreign counterparts) reported to DOE prior to April 1, 2008, or not elected into Contractor's PFTT Program pursuant to (i) above, which are not included in an executed license, assignment or other commercialization agreement (hereinafter "Agreement"), may be added to the PFTT program at any time provided that Contractor complies with all of the conditions set forth in this Paragraph (a), provided further that the Contractor reimburses the Government or the Laboratory overhead account, at the discretion of the Contracting Officer, for such Subject Inventions. Such reimbursement shall be \$1,000 per Subject Invention that has not been filed in the U.S. or any foreign Patent Office, \$2,000 for a provisional application, \$15,000 per issued U.S. patent and \$8,000 per issued foreign counterpart issued patent. The reimbursement for pending U.S. and foreign patent applications shall be reduced by a factor of 30% of the scheduled reimbursement of their respective U.S. and foreign counterpart issued patents. No refund of fees paid will be made for Subject Inventions added to the PFTT program by the Contractor should those inventions be eliminated from the program at a later date. In addition, if the Contractor has previously taken credit for third party contributions against Contractor's commitment of \$1.75 million with respect to Subject Inventions subsequently returned to the GFTT program, Contractor shall eliminate such contribution from its commitment calculation.
- iii. Any Subject Invention (including continuations, requests for continued examination, divisional applications, continuations in part, reissue applications and foreign counterparts) included in an Agreement may be added to the PFTT program at any time provided that it does not interfere with the GFTT program and the Contractor commits to a maturation/development investment in such Subject Invention equal to the amount of Federal funds previously expended on the documented external patenting costs of the Subject Invention, and provided further that Contractor complies with all of the conditions set forth in this subparagraph (2). In the absence of substantiating cost documentation the commitment shall be as earlier set forth in subparagraph (a)(2)(ii), above.
- iv. For every Subject Invention that the Contractor adds to the PFTT program the Contractor must notify the Contracting Officer and provide a concise statement of its strategy and proposed milestones for commercialization of the invention for information purposes only. The Contractor will summarize its PFTT program and provide semi-annual status updates, including milestones, for each Subject Invention (excluding any proprietary and/or business confidential information) elected into the program against its commercialization strategy in the NREL Commercialization Plan.
- v. For every Subject Invention that the Contractor wishes to add to the PFTT program pursuant to (ii) or (iii) above, it will provide a justification as to why the Subject Invention should be permitted to be added to the PFTT program (e.g., bundling IP will facilitate commercialization; new technology combined with older, shelved technology will allow the older technology to be commercialized; inclusion in PFTT will not

adversely affect the GFTT program, DOE mission, or NREL as an institution, etc.). Additions of Subject Inventions to the Contractor's PFTT program pursuant to (ii) or (iii) above shall be subject to the DOE Contracting Officer's approval, in concurrence with the DOE Field Patent Counsel.

(b) Transfer of Patent Rights to a Successor Contractor

As consideration for the Contractor's commitment to expend private monies in its privately-funded technology transfer (PFTT) effort under this Contract, including but not limited to expenses related to patenting, marketing, licensing, technology maturation, and development of Subject Inventions, the Parties agree that at the termination or expiration of this Contract, the following terms and conditions shall apply to Subject Inventions that were elected to be pursued under the Contractor's privately-funded technology transfer program, and to the licenses and royalties generated therefrom:

- (1) If Contractor has in place an Agreement (as defined in paragraph (a) above), at the time it receives notice from DOE that the Department expects to terminate or allow this Contract to expire, title to such Subject Inventions (and/or software to which DOE has approved assertion of statutory copyright) and the distribution of gross income from royalties, equity, or any other consideration received or to be received under such agreement shall remain as prior to such notice of Contract termination or expiration and shall continue for the duration of such agreement. Administration of agreements related to such Subject Inventions shall remain with the Contractor. If the Contracting Officer finds that Contractor has not substantially complied with each of the commitments under this clause relating to each individual Subject Invention at the time of such notice, upon request, title to such Subject Invention shall be transferred to the Successor Contractor, or such other entity designated by the Government. For the purpose of clarification and in the event the Contractor receives notice from DOE that DOE expects to terminate this Contract before the end of the Base Period, then effective as of the date of such termination, the Parties agree that said termination shall end Contractor's commitment to fund PFTT and any of such private (i.e., non-Federal) monies that have not been expended under such PFTT program shall remain the property of the Contractor.
- (2) If Contractor has not executed an Agreement to a Subject Invention, upon request, title to such Subject Invention shall be transferred to the Successor Contractor, or to such other entity designated by the Government, unless Contractor can demonstrate that it has expended at least twenty thousand dollars (\$20,000) of private monies in its privately-funded technology transfer program toward commercialization (to include patenting costs, including payments to DOE under paragraphs (a)(2)(ii) or (iii), licensing, technology maturation, marketing and/or development, etc.) of such Subject Invention, and the Contractor has fulfilled all of the commitments under the intellectual property provisions of this Contract relating to such Subject Inventions. In the event Contractor retains title to a Subject Invention under this paragraph, the distribution of royalties, fees, equity or other consideration from an agreement shall be as set forth in paragraphs (e) and (f) below.
- (3) If Contractor retains title to Subject Inventions under subparagraphs (1) or (2) above, and executes an Agreement (as defined in paragraph (a) above) to such Subject Inventions after the termination or expiration of this Contract, the distribution of royalties, fees, equity or other consideration from such Agreement shall be as set forth in paragraphs (e) and (f) below.
- (4) The Contractor and the Government shall enter into negotiations prior to such termination or expiration with respect to retention of the title to Subject Inventions. Such negotiations shall consider the equities of the Parties with respect to each Subject Invention and shall take into consideration the presence of private investment, DOE's need for continued operation of the Facility, potential commercial use, assumption of patent related liabilities, effective technology transfer, and the need to market the

technology. Such negotiations shall not change the disposition of title provided for in subparagraphs (1) and (2) above if the Contractor has fulfilled its obligations under either subparagraph (1) or (2) above unless mutually agreed by the Contractor and DOE.

- (5) For any Subject Invention to which the Contractor maintains title or administration of an Agreement under subparagraphs (a)(1)-(2) above, the Contractor agrees that, to the extent it is able to do so in view of prior licenses or assignments, it will negotiate in good faith to enable the Successor Contractor to practice such Subject Invention under any CRADAs, Work For Others agreements, licenses or other appropriate agreements, in order to fulfill the missions and programs of the Facility, including the technology transfer mission. It is the intention of the Contractor to enable the Successor Contractor to continue operation of the Facility and fulfill the missions of the Laboratory. In any event, the Successor Contractor retains the nonexclusive royalty-free right to practice the Subject Invention on behalf of the U.S. Government.
- (6) If at any time the Contracting Officer believes that Contractor has not substantially complied with any commitment under this clause regarding any Subject Inventions, the Contracting Officer shall provide written notice to the Contractor of any such non-compliance and the Contractor shall have a reasonable opportunity to either demonstrate that it is in fact in compliance or cure any such non-compliance.
- (7) The provisions of paragraphs (b)(1), (2), (3), and (5) above survive expiration or termination of the Contract.

(c) Costs

- (1) Except as otherwise specified in the clause of this Contract entitled, "Technology Transfer Mission," as allowable costs for conducting activities pursuant to provisions of that clause, no costs are allowable as direct or indirect costs for the preparation, filing, or prosecution of patent applications or the payment of maintenance fees or licensing and marketing costs after the Contractor elects to pursue commercialization of a Subject Invention under its privately-funded technology transfer program pursuant to paragraph (a) above.
- (2) If an extension of time for election of a Subject Invention for privately funded technology transfer is approved in accordance with paragraph (a) above, Contractor shall reimburse the Laboratory and the Department of Energy for costs in the form of a one-time flat fee of \$1,000 with respect to such Subject Invention during the time period of the extension as reasonable reimbursement for such costs under the circumstances. Such fee is deemed to include, among other things, all patent costs which are incurred under the Contract for all Subject Inventions elected to be treated under privately-funded technology transfer, regardless of when such costs are incurred, and is in addition to the fee set forth in (a)(2)(ii).
- (3) In the case of the Contractor's PFTT program, the Contractor shall annually report and certify that all costs incurred, including those for patenting, marketing, technology maturation, and development and licensing after the Contractor elects to treat a Subject Invention as PFTT, have been and will be paid solely from private monies supporting the Contractor's PFTT program, and do not include the use of any Federal funds. Private monies may include industry funding for CRADAs, WFOs and other forms of technology partnership agreements. However, the Contractor shall not have to report and/or certify normal and customary infrastructure-related costs (e.g., the use of the IP Manager database or other databases, Technology Portal, legal files, computers, phones, office space, NREL website, etc.) and incidental costs of effort equivalent to less than 15 minutes provided Contractor pays DOE a yearly fee of \$10,000 (as remuneration for such costs) at the beginning of each applicable fiscal year, or other appropriate prorated amount for a lesser period of such fiscal year.

- (4) Within 90 days after the end of each Contract year, including after termination of the Contract, the Contractor shall submit a report covering the previous Contract year which:
- (i) lists the Subject Inventions elected and/or patent applications filed under its PFTT program;
 - (ii) certifies the total amount of private monies expended during the Contract year, including those expenses related to patenting, marketing, technology maturation, development and licensing of Subject Inventions; and
 - (iii) certifies the amount of gross income received from its PFTT program during the Contract year; and
 - (iv) contains the status summary of its PFTT program required under paragraph (a)(2)(iv) above.

(d) Liability of the Government

- (1) Subject to subparagraph (4) below and paragraph (c)(3) above, all costs, including litigation costs, associated with and attributed to Contractor's privately-funded technology transfer program are unallowable regardless of the stage of technology development or background intellectual property existing at the time the Subject Invention is chosen for management with the privately-funded technology transfer program, and notwithstanding the inclusion of publicly funded intellectual property in the Contractor's privately-funded technology transfer program activities.
- (2) The Contractor shall not include in any license agreement or assignment with respect to any Subject Invention under this clause any guarantee or requirement that would obligate the Government to pay any costs or create any liability on behalf of the Government.
- (3) The Contractor shall include in all licensing agreements or any assignment of title with respect to any Subject Invention under this clause the following clauses unless otherwise approved or directed by the Contracting Officer following consultation with DOE field Patent Counsel:
 - (i) "This agreement is entered into by the Alliance for Sustainable Energy, LLC (Alliance) in its private capacity. It is understood and agreed that the U.S. Government is not a party to this agreement and in no manner whatsoever shall be liable for nor assume any responsibility or obligation for any claim, cost or damages arising out of or resulting from the agreement or the subject matter licensed/assigned."
 - (ii) "Nothing in this Agreement shall be deemed to be a representation or warranty by Alliance or the U.S. Government of the validity of the patents or the accuracy, safety, or usefulness for any purpose, of any TECHNICAL INFORMATION, techniques, or practices at any time made available by Alliance. Neither the U.S. Government nor Alliance nor any Member of Alliance shall have any liability whatsoever to LICENSEE or any other person for or on account of any injury, loss, or damage of any kind or nature sustained by, or any damage assessed or asserted against, or any other liability incurred by or imposed upon LICENSEE or any other person, arising out of or in connection with or resulting from:
 - (A) The production, use, or sale of any apparatus or product, or the practice of the INVENTIONS;
 - (B) The use of any TECHNICAL INFORMATION, techniques, or Practices disclosed by Alliance; or
 - (C) Any advertising or other promotion activities with respect to any of the foregoing, and LICENSEE shall hold the U.S. Government, Alliance, and any member company of Alliance harmless in the event the U.S. Government, Alliance, or any

Member of Alliance is held liable. Alliance represents that it has the right to grant all of the rights granted herein, except as to such rights as the Government of the United States of America may have or may assert.”

- (4) If the Contractor desires to defend or initiate litigation to resolve an infringement claim or lawsuit which involves Subject Inventions under both the PFTT and the GFTT programs (e.g., if such inventions are bundled together), the Contractor shall seek approval to initiate such litigation from the Contracting Officer through the DOE field Patent Counsel, and if such approval is granted the parties may share litigation expenses and any settlement, subject to negotiation. In such instances, sharing of expenses and settlement monies will be negotiated by the parties and is subject to the approval of the Contracting Officer, who will consult with the DOE field Patent Counsel. If Contracting Officer approval is not granted the Government shall not share in any judgment or settlement, if any, associated with either the defense or initiation of litigation.

(e) Privately-Funded Technology Transfer - Distribution of Gross Income

If the Contractor engages in a privately-funded technology transfer program under the clause of this Contract entitled “Patent Rights - Management and Operating Contracts, Nonprofit Organization or Small Business Firm Contractor” such that private funds are utilized for technology transfer after the Contractor elects to pursue privately-funded commercialization of the Subject Invention or private funds are utilized for technology transfer of copyrighted software where DOE has approved assertion of statutory copyright by the Contractor and has approved the pursuing of commercialization under the privately funded technology transfer program, gross income from such privately-funded technology transfer program shall be distributed as follows:

(1) Basic Distribution

For the purposes of clarification “gross income” equals all revenue received by Contractor minus the inventor’s share less any payments (royalties, fees, etc.) to third parties by virtue of license agreements or inter-institutional agreements with third parties (e.g., joint university or other collaboration with for-profit company) which obligates Contractor to royalty sharing with those third parties. Except as provided in (2) below, sixty-five percent (65%) of gross income shall be retained and may be used as the Contractor deems appropriate, whether at the Facility or not, consistent with 35 USC §200 *et seq.* The remaining thirty-five (35%) will be used at the Facility consistent with 35 USC §200 *et seq.* The amount of gross income shall be calculated on an annual basis consistent with the Contractor’s accepted accounting practices.

(2) Adjustment of Distribution

- (i) Until such time as the Contractor recovers its commitment of \$1.75 million on an ongoing basis, the Contractor’s share of gross income shall be ninety percent (90%). Thereafter the Basic Distribution set forth in subparagraph (e)(1) above shall apply unless otherwise adjusted under (ii) or (iii) below.
- (ii) In the event the cumulative gross income under the Contractor’s privately-funded technology transfer program exceeds one million seven hundred fifty thousand dollars (\$1.75 million) during the Base Period of the Contract, the Contractor’s share of the gross income shall increase in accordance with the following rubric from that point forward (all figures in cumulative gross income dollars):

In excess of \$1.75 million, up to and including \$4 million	65% of cumulative gross income up to \$1.75 million; plus 70% of cumulative gross income in excess of \$1.75 million, up to and including \$4 million cumulative gross income
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In excess of \$4 million, up to and including \$8 million	75% of cumulative gross income in excess of \$4 million, up to and including \$8 million cumulative gross income
In excess of \$8 million	80% of income in excess of \$8 million cumulative gross income

- (1) The Contractor shall be entitled to receive the greater distribution of (i) or (ii) above during the Base Period.

For Contract periods beyond the Base Period, the highest last rate under the Base Period determined under (1) or (2)(ii) above will apply, with additional incentive rates subject to negotiation.

- (4) The foregoing distributions shall also apply to equity interests received from third parties pursuant to paragraph (f).
- (5) If this distribution of income structure is determined by the Parties to be detrimental to attracting investors and growing the laboratory's technology commercialization program, the parties agree to negotiate a new structure more favorable to the investment community at the time such determination is made.

(f) Equity Plan

It is the intent of the Government and the Contractor that the Contractor shall, in its discretion, take reasonable and prudent actions from both a commercial and stewardship of the Facility's technology transfer perspective related to the ownership of equity received from third parties under this Contract. The Contractor shall submit to the Contracting Officer a plan which shall set forth principles for the Contractor's acquisition, retention and disposition of equity received from third parties as consideration for licenses or assignments granted to such third party. Such plan shall consider, at a minimum,

- (1) With respect to PFTT, the manner in which the Contractor shall acquire such equity in a third party and a description of how the Contractor shall apportion capital contributions to such third party between the related value of Contractor contributions and the value of contributions representing a license under a Subject Invention;
- (2) Where IP bundling has resulted in the use of both privately and publically funded technology transfer, a discussion regarding the recoupment of cost related to licensing, marketing and development;
- (3) the manner in which the Contractor shall hold such equity, given that the Government has an undivided interest in that portion of such equity representing the value of contributions resulting from a license to such Subject Invention;
- (4) the manner in which the Contractor shall dispose of such equity, giving due consideration to the potential for a conflict of interest between the interests of the Government and the Contractor in accordance with the Contractor's DOE-approved Conflict of Interest Management and Implementation Plan, and
- (5) the manner in which Contractor's inventors are compensated.
- (6) mitigation of any conflicts of interest.

- (g) In its privately-funded technology transfer program, the Contractor shall be substantially guided by the U.S. Competitiveness and Fairness of Opportunity as set forth herein. For the purpose of clarification and to facilitate technology transfer, the Contractor, in its capacity as operator of the Laboratory, shall be permitted to enter into either traditional CRADA/WFO agreements or and any other subsequently developed or authorized DOE agreement.
- (h) The Contractor shall establish procedures implementing its privately-funded technology transfer program including the Contractor's criteria for selecting technologies for the privately-funded technology transfer program. Such implementing procedures shall be provided to the Contracting Office for review and approval as soon as possible (estimated forty-five (45) days) after execution of the Contract modification authorizing privately-funded technology transfer. The Contracting Officer shall have the equivalent period of time that it took for the Contractor to submit, but no less than thirty (30) days thereafter, to approve or require specific changes to such procedures and if the Contracting Officer does not act within the period established above for approval, said procedures shall be deemed approved.
- (i) In the case of the Contractor's privately-funded technology transfer program, the Contractor shall certify as part of the report required under subparagraph (c) (4) above, that subject to paragraph (c)(3) above all costs of its PFTT Program, including but not limited to licensing, marketing, technology maturation and development incurred after the Contractor elects to treat a subject invention as PFTT have been and will be paid solely from the Contractor's privately-funded technology transfer program.
- (j) To the extent the Department determines that the Laboratory's mission or function is being negatively impacted by the PFTT Program, DOE retains the right to require the Contractor's privately-funded technology transfer program to be administered solely by a nonlaboratory employee(s) who shall not utilize any laboratory facilities without the written approval of the Contracting Officer.
- (k) When requesting approval from DOE to assert statutory copyright pursuant to the clause entitled "Rights in Data—Technology Transfer" (Clause I.125 of this Contract), the Contractor may request that commercialization of such software proceed under the PFTT program (i.e., the provisions of this Clause H.37). If permission to assert copyright (consistent with the requirements of the Copyright Act of 1976, as amended and 17 U.S.C. § 302(c)) and trademark rights (consistent with the requirements of the Trademark Act of 1946 ("Lanham Act") as amended and 15 U.S.C. § 1058) is approved by DOE, subject to subparagraph (e)(3) above, no costs of such commercialization thereafter shall be allowable, and the proceeds of such commercialization shall be treated in accordance with subparagraph (e)(1) above as if such proceeds had resulted from the commercialization of a Subject Invention. Further, any software may be added to the PFTT program at any time, provided that the Contractor secures or has secured such authorization to assert statutory copyright. For every piece of copyrighted software that the Contractor adds to the PFTT Program, the Contractor must notify the Contracting Officer and provide a concise statement of its strategy and proposed milestones for information purposes only. If software earlier added to the PFTT Program is later determined by the Contractor and DOE to be required or identified for inclusion in DOE mission work, or other Government work, using GFTT funds or other Government funding, the character of any enhanced or otherwise derivative software (Enhanced Software) resulting from such work shall be deemed to be GFTT, not PFTT. Enhanced Software may also be added to the PFTT Program based upon the requirements set forth in this paragraph for software. Upon termination or expiration of the Contract, such software, or Enhanced Software, will be treated as if such software, or Enhanced Software were a Subject Invention elected under the Contractor's PFTT program. Disposition of title to such software, or Enhanced Software, will be governed by the provisions of subparagraphs (b)(1)-(b)(5) above, except that the \$20,000 expenditure requirement for Subject Inventions set forth in subparagraph (b)(2) is not applicable to such software or Enhanced Software. The Contractor shall comply with the obligations set forth in the Rights in Data—Technology Transfer" (Clause I.125 of this Contract) related to computer software or data. However, the Contractor shall not be required to furnish an abstract suitable for publication or the source or object code for such software (or Enhanced Software) program to the Energy Science and Technology Software Center or provide an abstract of the data or copy of such data to the Office of Scientific and Technical Information.

(l) (1) Except as provided in (2) below, all records associated with Contractor's PFTT program shall be treated as Contractor-owned records under the provisions of paragraph (b) of Clause I.111. and shall not be subject to any other provisions of Clause I.111.

(2) DOE may inspect and copy any of Contractor's financial records which demonstrate: (i) the unallowable costs associated with Contractor's PFTT Program, and (ii) revenue derived from said Program. DOE acknowledges that Contractor asserts that any and all such records are privileged or confidential commercial and/or financial information which is exempt from release under the Freedom of Information Act pursuant to exemption (b)(4).

(m) If DOE extends the Contractor's Contract pursuant to Clause I.25, to Extend the Term of the Contract, the Parties agree Alliance's PFTT program shall remain in effect, for all Subject Inventions, software or Enhanced Software whether previously or subsequently elected into Contractor's PFTT Program subject to Alliance's fulfillment of all obligations under this Clause H. 37, for the period of October 1, 2013 through September 30, 2018. The Contracting Officer shall determine whether obligations under this Clause have been fulfilled as part of the Contractor's annual performance assessment and at other times as deemed necessary by the Contracting Officer.

III. Part II, Section I, Clause I.132, DEAR 970.5227-10, Patent Rights – Management and Operating Contracts, Nonprofit Organizations or Small Business Firm Contractor (Aug 2002) is deleted in its entirety and replaced with:

I.132 970.5227-10 Patent Rights – Management and Operating Contracts, Nonprofit Organization or Small Business Firm Contractor (Aug 2002)

(a) Definitions.

- (1) DOE licensing regulations means the Department of Energy patent licensing regulations at 10 CFR Part 781.
- (2) Exceptional circumstance subject invention means any subject invention in a technical field or related to a task determined by the Department of Energy to be subject to an exceptional circumstance under 35 U.S.C. 202(a)(ii) and in accordance with 37 CFR 401.3(e).
- (3) Invention means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).
- (4) Made when used in relation to any invention means the conception or first actual reduction to practice of such invention.
- (5) Nonprofit organization means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

- (6) Patent Counsel means the Department of Energy (DOE) Patent Counsel assisting the DOE contracting activity.
 - (7) Practical application means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.
 - (8) Small business firm means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, are used.
 - (9) Subject Invention means any invention of the contractor conceived or first actually reduced to practice in the performance of work under this contract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) shall also occur during the period of contract performance.
- (b) Allocation of Principal Rights.
- (1) Retention of title by the Contractor. Except for exceptional circumstance subject inventions, the contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the Contractor retains title, the Federal government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.
 - (2) Exceptional circumstance subject inventions. Except to the extent that rights are retained by the Contractor in a determination of exceptional circumstances or granted to a contractor through a determination of greater rights in accordance with subparagraph (b)(4) of this clause, the Contractor does not have a right to retain title to any exceptional circumstance subject inventions and agrees to assign to the Government the entire right, title, and interest, throughout the world, in and to any exceptional circumstance subject inventions.
 - (i) Inventions within or relating to the following fields of technology are exceptional circumstance subject inventions:
 - (A) uranium enrichment technology;
 - (B) storage and disposal of civilian high-level nuclear waste and spent fuel technology; and
 - (C) national security technologies classified or sensitive under Section 148 of the Atomic Energy Act (42 U.S.C. 2168).
 - (ii) Inventions made under any agreement, contract or subcontract related to the following are exceptional circumstance subject inventions:
 - (A) DOE Steel Initiative and Metals Initiative;

- (B) U.S. Advanced Battery Consortium; and
 - (C) any funding agreement which is funded in part by the Electric Power Research Institute (EPRI) or the Gas Research Institute (GRI).
 - (D) (Deviation) Solid State Lighting (SSL) program if the contractor is a participant in the "Core Technology Program."
- (iii) DOE reserves the right to unilaterally amend this contract to modify, by deletion or insertion, technical fields, tasks, or other classifications for the purpose of determining DOE exceptional circumstance subject inventions.
- (3) Treaties and international agreements. Any rights acquired by the Contractor in subject inventions are subject to any disposition of right, title, or interest in or to subject inventions provided for in treaties or international agreements identified at Part III, Section J, Attachment U, Treaties and International Agreements to this contract. DOE reserves the right to unilaterally amend this contract to identify specific treaties or international agreements entered into or to be entered into by the Government after the effective date of this contract and to effectuate those license or other rights which are necessary for the Government to meet its obligations to foreign governments, their nationals and international organizations [*81060] under such treaties or international agreements with respect to subject inventions made after the date of the amendment.
- (4) Contractor request for greater rights in exceptional circumstance subject inventions. The Contractor may request rights greater than allowed by the exceptional circumstance determination in an exceptional circumstance subject invention by submitting such a request in writing to Patent Counsel at the time the exceptional circumstance subject invention is disclosed to DOE or within eight (8) months after conception or first actual reduction to practice of the exceptional circumstance subject invention, whichever occurs first, unless a longer period is authorized in writing by the Patent Counsel for good cause shown in writing by the Contractor. DOE may, in its discretion, grant or refuse to grant such a request by the Contractor.
- (5) Contractor employee-inventor rights. If the Contractor does not elect to retain title to a subject invention or does not request greater rights in an exceptional circumstance subject invention, a Contractor employee-inventor, after consultation with the Contractor and with written authorization from the Contractor in accordance with 10 CFR 784.9(b)(4), may request greater rights, including title, in the subject invention or the exceptional circumstance invention from DOE, and DOE may, in its discretion, grant or refuse to grant such a request by the Contractor employee-inventor.
- (6) Government assignment of rights in Government employees' subject inventions. If a Government employee is a joint inventor of a subject invention or of an exceptional circumstance subject invention to which the Contractor has rights, the Government may assign or refuse to assign to the Contractor any rights in the subject invention or exceptional circumstance subject invention acquired by the Government from the Government employee, in accordance with 48 CFR 27.304-1(d). The rights assigned to the Contractor are subject to any provision of this clause that is applicable to subject inventions in which the Contractor retains title, including reservation by the Government of a nonexclusive, nontransferable, irrevocable, paid-up license, except that the Contractor shall file its initial patent application claiming the subject invention or exceptional circumstance invention within one (1) year after the assignment of such

rights. The Contractor shall share royalties collected for the manufacture, use or sale of the subject invention with the Government employee.

- (c) Subject Invention Disclosure, Election of Title and Filing of Patent Application by Contractor.
- (1) Subject invention disclosure. The contractor will disclose each subject invention to the Patent Counsel within two months after the inventor discloses it in writing to contractor personnel responsible for patent matters. The disclosure to the agency shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s) and all sources of funding by B&R code for the invention. It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. The disclosure shall include a written statement as to whether the invention falls within an exceptional circumstance field. DOE will make a determination and advise the Contractor within 30 days of receipt of an invention disclosure as to whether the invention is an exceptional circumstance subject invention. In addition, after disclosure to the Patent Counsel, the Contractor will promptly notify the agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the contractor. The Contractor shall obtain approval from Patent Counsel prior to any release or publication of information concerning any nonelectable subject invention such as an exceptional circumstance subject invention or any subject invention related to a treaty or international agreement.
 - (2) Election by the Contractor. Except as provided in paragraph (b)(2) of this clause, the Contractor will elect in writing whether or not to retain title to any such invention by notifying the Federal agency within two years of disclosure to the Federal agency. However, in any case where publication, on sale or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.
 - (3) Filing of patent applications by the Contractor. The Contractor will file its initial patent application on a subject invention to which it elects to retain title within one year after election of title or, if earlier, or prior to the end of any 1-year statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Contractor will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application or six months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.
 - (4) Contractor's request for an extension of time. Requests for an extension of the time for disclosure, election, and filing under subparagraphs (c)(1), (2) and (3) may, at the discretion of Patent Counsel, be granted.
 - (5) Publication Approval. During the course of the work under this contract, the Contractor or its employees may desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract. In order that public disclosure of such information will not

adversely affect the patent interest of DOE or the Contractor, approval for release or publication shall be secured from the Contractor personnel responsible for patent matters prior to any such release or publication. Where DOE's approval of publication is requested, DOE's response to such requests for approval shall normally be provided within 90 days except in circumstances in which a domestic patent application must be filed in order to protect foreign rights. In the case involving foreign patent rights, DOE shall be granted an additional 180 days with which to respond to the request for approval, unless extended by mutual agreement.

(d) Conditions When the Government May Obtain Title.

The Contractor will convey to the DOE, upon written request, title to any subject invention-

- (1) If the Contractor fails to disclose or elect title to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain title; provided, that DOE may only request title within sixty (60) days after learning of the failure of the Contractor to disclose or to elect within the specified times.
- (2) In those countries in which the Contractor fails to file a patent application within the times specified in subparagraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in subparagraph (c) above, but prior to its receipt of the written request of the DOE, the Contractor shall continue to retain title in that country.
- (3) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.
- (4) If the Contractor requests that DOE acquire title or rights from the Contractor in a subject invention to which the Contractor had initially retained title or rights, or in an exceptional circumstance subject invention to which the Contractor was granted greater rights, DOE may acquire such title or rights from the Contractor, or DOE may decide against acquiring such title or rights from the Contractor, at DOE's sole discretion.

(e) Minimum Rights of the Contractor and Protection of the Contractor's Right to File.

- (1) Request for a Contractor license. The Contractor may request the right to reserve a revocable, nonexclusive, royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. DOE may grant or refuse to grant such a request by the Contractor. When DOE approves such reservation, the Contractor's license will normally extend to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the contractor's business to which the invention pertains.
- (2) Revocation or modification of a Contractor license. The Contractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR Part 404 and DOE licensing regulations at 10 CFR Part 781. This license will not be revoked in the field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the subject invention reasonably

accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Contractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application of the subject invention in that foreign country.

- (3) Notice of revocation or modification of a Contractor license. Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed thirty days (or such other time as may be authorized by DOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable regulations in 37 CFR part 404 and DOE licensing regulations at 10 CFR part 781 concerning the licensing of Government owned inventions, any decision concerning the revocation or modification of the license.
- (f) Contractor Action to Protect the Government's Interest.
- (1) Execution of delivery of title or license instruments. The Contractor agrees to execute or to have executed, and promptly deliver to the Patent Counsel all instruments necessary to accomplish the following actions:
 - (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the Contractor elects to retain title, and
 - (ii) convey title to DOE when requested under subparagraphs (b) or paragraph (d) of this clause and to enable the Government to obtain patent protection throughout the world in that subject invention.
 - (2) Contractor employee agreements. The Contractor agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to Contractor personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor, each subject invention made under this contract in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.
 - (3) Notification of discontinuation of patent protection. The contractor will notify the Patent Counsel of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than thirty days before the expiration of the response period required by the relevant patent office.
 - (4) Notification of Government rights. The contractor agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with government support under (identify the contract) awarded by (identify the Federal agency). The government has certain rights in the invention."

- (5) Invention Identification Procedures. The Contractor shall establish and maintain active and effective procedures to ensure that subject inventions are promptly identified and timely disclosed and shall submit a written description of such procedures to the Contracting Officer so that the Contracting Officer may evaluate and determine their effectiveness.
 - (6) Invention Filing Documentation. If the Contractor files a domestic or foreign patent application claiming a subject invention, the Contractor shall promptly submit to Patent Counsel, upon request, the following information and documents:
 - (i) the filing date, serial number, title, and a copy of the patent application (including an English-language version if filed in a language other than English);
 - (ii) an executed and approved instrument fully confirmatory of all Government rights in the subject invention; and
 - (iii) the patent number, issue date, and a copy of any issued patent claiming the subject invention.
 - (7) Duplication and disclosure of documents. The Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause; provided, however, that any such duplication or disclosure by the Government is subject to the confidentiality provision at 35 U.S.C. 205 and 37 CFR Part 40.
- (g) Subcontracts.
- (1) Subcontractor subject inventions. The Contractor shall not obtain rights in the subcontractor's subject inventions as part of the consideration for awarding a subcontract.
 - (2) Inclusion of patent rights clause-non-profit organization or small business firm subcontractors. Unless otherwise authorized or directed by the Contracting Officer, the Contractor shall include the patent rights clause at 48 CFR 952.227-11, suitably modified to identify the parties, in all subcontracts, at any tier, for experimental, developmental, demonstration or research work to be performed by a small business firm or domestic nonprofit organization, except subcontracts which are subject to exceptional circumstances in accordance with 35 U.S.C. 202 and subparagraph (b)(2) of this clause. The subcontractor retains all rights provided for the contractor in the patent rights clause at 48 CFR 952.227-11.
 - (3) Inclusion of patent rights clause-subcontractors other than non-profit organizations and small business firms. Except for the subcontracts described in subparagraph (g)(2) of this clause, the Contractor shall include the patent rights clause at 48 CFR 952.227-13, suitably modified to identify the parties, in any contract for experimental, developmental, demonstration or research work. For subcontracts subject to exceptional circumstances, the contractor must consult with DOE patent counsel with respect to the appropriate patent clause.
 - (4) DOE and subcontractor contract. With respect to subcontracts at any tier, DOE, the subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to the matters covered by the clause; provided, however, that nothing in this

paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (j) of this clause.

- (5) Subcontractor refusal to accept terms of patent clause. If a prospective subcontractor refuses to accept the terms of a patent rights clause, the Contractor shall promptly submit a written notice to the Contracting Officer stating the subcontractor's reasons for such a refusal, including any relevant information for expediting disposition of the matter, and the Contractor shall not proceed with the subcontract without the written authorization of the Contracting Officer.
- (6) Notification of award of subcontract. Upon the award of any subcontract at any tier containing a patent rights clause, the Contractor shall promptly notify the Contracting Officer in writing and identify the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Contractor shall furnish a copy of a subcontract.
- (7) Identification of subcontractor subject inventions. If the Contractor in the performance of this contract becomes aware of a subject invention made under a subcontract, the Contractor shall promptly notify Patent Counsel and identify the subject invention.
- (h) Reporting on Utilization of Subject Inventions. The Contractor agrees to submit to DOE on request, periodic reports, no more frequently than annually, on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceeding undertaken by DOE in accordance with paragraph (j) of this clause. As required by 35 U.S.C. 202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without permission of the Contractor.
- (i) Preference for United States Industry. Notwithstanding any other provision of this clause, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any product embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.
- (j) March-in Rights. The Contractor agrees that, with respect to any subject invention in which it has acquired title, DOE has the right in accordance with the procedures in 37 CFR 401.6 and any DOE supplemental regulations to require the Contractor, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and, if the Contractor, assignee or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that-
 - (1) Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical

application of the subject invention in such field of use;

- (2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee, or their licensees;
 - (3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or
 - (4) Such action is necessary because the agreement required by paragraph (i) of this clause has not been obtained or waived, or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.
- (k) Special Provisions for Contracts With Nonprofit Organizations. If the Contractor is a nonprofit organization, it agrees that-
- (1) DOE approval of assignment of rights. Rights to a subject invention in the United States may not be assigned by the Contractor without the approval of DOE, except where such assignment is made to an organization which has as one of its primary functions the management of inventions; provided, that such assignee will be subject to the same provisions of this clause as the Contractor.
 - (2) Small business firm licensees. It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms, and that it will give a preference to a small business firm when licensing a subject invention if the Contractor determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the Contractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor. However, the Contractor agrees that the Secretary of Commerce may review the Contractor's licensing program and decisions regarding small business firm applicants, and the Contractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when that Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of this subparagraph (k)(2).
 - (3) Contractor licensing of subject inventions. To the extent that it provides the most effective technology transfer, licensing of subject inventions shall be administered by Contractor employees on location at the facility.
- (l) Communications. The Contractor shall direct any notification, disclosure or request provided for in this clause to the Patent Counsel assisting the DOE contracting activity.
- (m) Reports.
- (1) Interim reports. Upon DOE's request, the Contractor shall submit to DOE, no more frequently than annually, a list of subject inventions disclosed to DOE during a specified period, or a statement that no subject inventions were made during the specified period; and a list of subcontracts containing a patent clause and awarded by the Contractor during a specified period, or a statement that no such subcontracts were awarded during the specified period.

- (2) Final reports. Upon DOE's request, the Contractor shall submit to DOE, prior to closeout of the contract, a list of all subject inventions disclosed during the performance period of the contract, or a statement that no subject inventions were made during the contract performance period; and a list of all subcontracts containing a patent clause and awarded by the Contractor during the contract performance period, or a statement that no such subcontracts were awarded during the contract performance period.
- (n) Examination of Records Relating to Subject Inventions.
- (1) Contractor compliance. Until the expiration of three (3) years after final payment under this contract, the Contracting Officer or any authorized representative may examine any books (including laboratory notebooks), records, documents, and other supporting data of the Contractor, which the Contracting Officer or authorized representative deems reasonably pertinent to the discovery or identification of subject inventions, including exceptional circumstance subject inventions, or to determine Contractor compliance with any requirement of this clause.
 - (2) Unreported inventions. If the Contracting Officer is aware of an invention that is not disclosed by the Contractor to DOE, and the Contracting Officer believes the unreported invention may be a subject invention, including exceptional circumstance subject inventions, DOE may require the Contractor to submit to DOE a disclosure of the invention for a determination of ownership rights.
 - (3) Confidentiality. Any examination of records under this paragraph is subject to appropriate conditions to protect the confidentiality of the information involved.
 - (4) Power of inspection. With respect to a subject invention for which the Contractor has responsibility for patent prosecution, the Contractor shall furnish the Government, upon request by DOE, an irrevocable power to inspect and make copies of a prosecution file for any patent application claiming the subject invention.
- (o) Facilities License. In addition to the rights of the parties with respect to inventions or discoveries conceived or first actually reduced to practice in the course of or under this contract, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice or acquired by the Contractor at any time through completion of this contract and which are incorporated or embodied in the construction of the facility or which are utilized in the operation of the facility or which cover articles, materials, or product manufactured at the facility (1) to practice or have practiced by or for the Government at the facility, and (2) to transfer such license with the transfer of that facility. Notwithstanding the acceptance or exercise by the Government of these rights, the Government may contest at any time the enforceability, validity or scope of, or title to, any rights or patents herein licensed.
- (p) Atomic Energy.
- (1) Pecuniary awards. No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, may be asserted with respect to any invention or discovery made or conceived in the course of or under this contract.
 - (2) Patent agreements. Except as otherwise authorized in writing by the Contracting Officer, the Contractor shall obtain patent agreements to effectuate the provisions of subparagraph (p)(1) of this clause from all persons who perform any part of the work

under this contract, except non-technical personnel, such as clerical employees and manual laborers.

(q) Classified Inventions.

- (1) Approval for filing a foreign patent application. The Contractor shall not file or cause to be filed an application or registration for a patent disclosing a subject invention related to classified subject matter in any country other than the United States without first obtaining the written approval of the Contracting Officer.
 - (2) Transmission of classified subject matter. If in accordance with this clause the Contractor files a patent application in the United States disclosing a subject invention that is classified for reasons of security, the Contractor shall observe all applicable security regulations covering the transmission of classified subject matter. If the Contractor transmits a patent application disclosing a classified subject invention to the United States Patent and Trademark Office (USPTO), the Contractor shall submit a separate letter to the USPTO identifying the contract or contracts by agency and agreement number that require security classification markings to be placed on the patent application.
 - (3) Inclusion of clause in subcontracts. The Contractor agrees to include the substance of this clause in subcontracts at any tier that cover or are likely to cover subject matter classified for reasons of security.
- (r) Patent Functions. Upon the written request of the Contracting Officer or Patent Counsel, the Contractor agrees to make reasonable efforts to support DOE in accomplishing patent-related functions for work arising out of the contract, including, but not limited to, the prosecution of patent applications, and the determination of questions of novelty, patentability, and inventorship.
- (s) Educational Awards Subject to *35 U.S.C. 212*. The Contractor shall notify the Contracting Officer prior to the placement of any person subject to *35 U.S.C. 212* in an area of technology or task (1) related to exceptional circumstance technology or (2) which is subject to treaties or international agreements as set forth in paragraph (b)(3) of this clause or agreements other than funding agreements. The Contracting Officer may disapprove of any such placement.
- (t) Annual Appraisal by Patent Counsel. Patent Counsel may conduct an annual appraisal to evaluate the Contractor's effectiveness in identifying and protecting subject inventions in accordance with DOE policy.

IV. In support of the changes documented in Paragraphs I and III above, the Table of Contents for the List of Documents, Exhibits and Other Attachments as found in Part III, Section J, is deleted its entirety and replaced as follows to change Attachment O, from “Commercialization Plan” to “Reserved” and to incorporate Attachment U, Treaties and International Agreements.

PART III

SECTION J

LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

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- V. Part III, Section J, Attachment O, Commercialization Plan, is hereby deleted in its entirety and replaced with:

Attachment O Reserved

- VI. Part III, Section J, Attachment U, Treaties and International Agreements represents a new Attachment and is hereby incorporated as follows:

Attachment U Treaties and International Agreements

Intellectual property rights for subject inventions made under NREL's award under the JCERDC will be allocated as set forth in the Agreement between the Department of Energy of the United States of America and the Government of the Republic of India of November 4, 2010 for Cooperation on a Joint Clean Energy Research and Development Center (JCERDC), and its "Project Annex on Intellectual Property Allocation."

- VII. Part III, Section J, Attachment E, Applicable Laws and Regulations is deleted in its entirety and replaced with the following to incorporate Title 10, Chapter III, Part 719, Contractor Legal Requirements:

Attachment E

Applicable Laws And Regulations (List A)

**Necessary and Sufficient Environmental,
Safety and Health Standards
Revised: 09/24/2012**

CODE OF FEDERAL REGULATIONS (CFR)
7 CFR 340-Biotechnology Permits
10 CFR 8.4 - Interpretation by the General Counsel: AEC Jurisdiction
10 CFR 707 Workplace Substance Abuse Programs at DOE Sites
10 CFR 719 – Contractor Legal Requirements
10 CFR 835 - Occupational Radiation Protection
10 CFR 851 – Worker Safety and Health Program
10 CFR 1008 Records Maintained on Individuals (Privacy Act)
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 79 - Registration of Fuels and Fuel Additives
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 166 - Exemption of Federal and State Agencies for use of Pesticides under Emergency Conditions
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 13423 – Strengthening Federal Environmental, Energy, and Transportation Management
EO 13514 – Federal Leadership in Environmental, Energy, and Economic Performance
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 Wells
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 1002-31 - Basic Standards and Methodologies for Surface Water
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 -1 - Primary Drinking Water Regulations
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 1101-8, Conveyance Regulations
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) 2009
International Fire Code (IFC) 2009
INTERNATIONAL STANDARDS ORGANIZATION (ISO), OCCUPATIONAL HEALTH AND SAFETY ASSESSMENT SERIES (OHSAS)

ISO 14001:2004, Environmental Management Systems
OHSAS 18001, Health and Management Systems
OTHER LOCAL STANDARDS
Jefferson County Dept. of Health and Environment, Individual Sewage Disposal Sys. Reg.
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

- VIII. The FY2013 Performance Evaluation and Measurement Plan, dated June 28, 2013, is hereby incorporated by reference to Section J, Attachment J.

- IX. All other terms and conditions of the contract remain unchanged.