

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE	PAGE OF PAGES 1   2
2. AMENDMENT/MODIFICATION NO. 147	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. 09NE000546	5. PROJECT NO. (If applicable)
6. ISSUED BY Idaho Operations U.S. Department of Energy Idaho Operations 1955 Fremont Avenue Idaho Falls ID 83415	CODE 00701	7. ADMINISTERED BY (If other than Item 6) Idaho Operations U.S. Department of Energy Idaho Operations 1955 Fremont Avenue MS 1221 Idaho Falls ID 83415	CODE 00701
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) BATTELLE ENERGY ALLIANCE, LLC Attn: Lisa A. Sehlke P.O. BOX 1625 IDAHO FALLS ID 834150001		(x) 9A. AMENDMENT OF SOLICITATION NO.	
CODE 152020629 FACILITY CODE		9B. DATED (SEE ITEM 11)	
		x 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC07-05ID14517	
		10B. DATED (SEE ITEM 11) 11/09/2004	

**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) Net Increase: \$1,850,000.00  
RA # 4 Fin Plan

**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) IAW DEAR 970.5232-4 "Obligation of Funds"

**E. IMPORTANT:** Contractor  is not,  is required to sign this document and return 0 copies to the issuing office.

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

RECOVERY ACT - TAS::89 0331::TAS

The objective of this proposal is to complete the pre-pilot scale development of the INL modular hybrid plasma reactor and demonstrate high yield low cost production of nanomaterials, and then scale the proven technology to a 300 KW pilot system.

ID 14517-RA Fin Plan #4

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)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Suzette M. Olson
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED
16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 08/04/2009

**CONTINUATION SHEET**

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
DE-AC07-05ID14517/147

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NAME OF OFFEROR OR CONTRACTOR  
BATTELLE ENERGY ALLIANCE, LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
00001	<p>The Purpose of this Modiciation is to Obligate funds under RA Fin Plan #4. Subj to Retent: N FOB: Destination Period of Performance: 11/09/2004 to 09/30/2014</p> <p>Change Item 00001 to read as follows(amount shown is the total amount):</p> <p>MANAGEMENT AND OPERATIONS OF THE INL</p> <p>Line item value is:\$8,500,000,000.00 Incrementally Funded Amount: \$3,872,682,047.11</p>			8,500,000,000.00	

## SECTION B – SUPPLIES OR SERVICES AND PRICES/COSTS

Clause B. 5, Obligation of Funds is revised to read as follows:

The amount presently obligated under this Contract is as follows:

<b>Contract DE-AC07-05ID14517</b>		
Funds Obligated by Contract Award	\$	-
Funds Obligated by Modification No. A001 (05-01)	\$	367,249,253.48
Funds Obligated by Modification No. A003 (05-02)	\$	46,622,175.07
Funds Obligated by Modification No. A004 (05-03)	\$	42,785,577.35
Funds Obligated by Modification No. A007 (05-04)	\$	20,826,503.81
Funds Obligated by Modification No. A008 (05-05)	\$	1,852,872.81
Funds Obligated by Modification No. A010 (05-06)	\$	6,979,388.33
Funds Obligated by Modification No. A012 (05-07)	\$	27,834,913.22
Funds Obligated by Modification No. A013 (05-08)	\$	46,223,993.31
Funds Obligated by Modification No. A015 (05-09)	\$	12,096,644.77
Funds Obligated by Modification No. A017 (05-10/11)	\$	6,441,459.40
Funds Obligated by Modification No. A018 (05-12)	\$	12,042,862.98
Funds Obligated by Modification No. A021 (05-13)	\$	21,317,013.96
Funds Obligated by Modification No. A023 (05-14)	\$	8,777,137.67
Funds Obligated by Modification No. A024 (05-15)	\$	2,233,234.97
Funds Obligated by Modification No. A026 (06-01)	\$	42,939,585.73
Funds Obligated by Modification No. A027 (06-02)	\$	5,565,617.17
Funds Obligated by Modification No. A029 (06-03)	\$	27,237,117.71
Funds Obligated by Modification No. A030 (06-04)	\$	27,638,705.63
Funds Obligated by Modification No. A031 (06-05)	\$	224,022,725.44
Funds Obligated by Modification No. A036 (06-06)	\$	38,435,364.39
Funds Obligated by Modification No. A038 (06-07)	\$	35,133,130.34
Funds Obligated by Modification No. A039 (06-08)	\$	74,456,830.72
Funds Obligated by Modification No. A042 (06-09/10)	\$	12,151,786.49
Funds Obligated by Modification No. A044 (06-11)	\$	6,313,939.62
Funds Obligated by Modification No. A046 (06-17)	\$	17,558,901.42
Funds Obligated by Modification No. A048 (06-20)	\$	6,030,496.94
Funds Obligated by Modification No. A048 (06-21)	\$	72,858,594.45
Funds Obligated by Modification No. A049 (06-22)	\$	62,441,754.54
Funds Obligated by Modification No. A050 (06-23)	\$	79,975,188.31
Funds Obligated by Modification No. A054 (06-24)	\$	33,717,932.88
Funds Obligated by Modification No. A055 (06-25/26)	\$	7,850,450.36
Funds Obligated by Modification No. A057 (07-01)	\$	38,675,339.17
Funds Obligated by Modification No. A058 (06-27)	\$	-
Funds Obligated by Modification No. A059 (07-02)	\$	143,276,081.68
Funds Obligated by Modification No. A061 (07-03)	\$	58,859,388.04

Funds Obligated by Modification No. A062 (07-04)	\$	4,298,716.92
Funds Obligated by Modification No. A067 (07-05)	\$	54,845,571.13
Funds Obligated by Modification No. A068 (07-06/07)	\$	363,731,607.43
Funds Obligated by Modification No. A071 (07-08)	\$	47,829,641.68
Funds Obligated by Modification No. A074 (07-09)	\$	25,442,640.25
Funds Obligated by Modification No. A078 (07-10)	\$	52,011,950.61
Funds Obligated by Modification No. A080 (07-11)	\$	25,339,983.16
Funds Obligated by Modification No. A081 (07-12)	\$	70,903,168.94
Funds Obligated by Modification No. A084 (07-13)	\$	83,070,783.76
Funds Obligated by Modification No. A086 (07-14)	\$	7,010,481.26
Funds Obligated by Modification No. A088 (08-01)	\$	49,601,009.24
Funds Obligated by Modification No. A089 (08-02)	\$	28,743,591.29
Funds Obligated by Modification No. A091 (08-03)	\$	14,210,908.26
Funds Obligated by Modification No. A094 (08-04)	\$	44,333,176.58
Funds Obligated by Modification No. A096 (08-05)	\$	52,125,035.61
Funds Obligated by Modification No. A098 (08-06)	\$	45,834,236.67
Funds Obligated by Modification No. A099 (08-07)	\$	163,128,858.51
Funds Obligated by Modification No. A101 (08-08)	\$	54,254,677.45
Funds Obligated by Modification No. A103 (08-09)	\$	187,117,499.03
Funds Obligated by Modification No. A104 (08-10)	\$	45,652.16
Funds Obligated by Modification No. A106 (08-11)	\$	14,511,456.93
Funds Obligated by Modification No. A107 (08-12)	\$	5,767,604.59
Funds Obligated by Modification No. A110 (08-13/14)	\$	1,255,709.26
Funds Obligated by Modification No. A112 (08-15)	\$	25,155,561.42
Funds Obligated by Modification No. A113 (08-16)	\$	(4,134,284.06)
Funds Obligated by Modification No. A115 (08-17/18)	\$	9,543,486.86
Funds Obligated by Modification No. A116 (08-19)	\$	16,003,668.43
Funds Obligated by Modification No. A118 (08-20)	\$	19,966,137.09
Funds Obligated by Modification No. A119 (08-21/22)	\$	13,191,043.98
Funds Obligated by Modification No. A123 (09-1)	\$	164,982,682.71
Funds Obligated by Modification No. A126 (09-2)	\$	11,264,584.49
Funds Obligated by Modification No.128 (09-3)	\$	9,346,060.61
Funds Obligated by Modification No. 129 (09-4)	\$	10,530,917.81
Funds Obligated by Modification No.131 (09-5)	\$	40,470,104.32
Funds Obligated by Modification No.132 (09-6)	\$	20,132,428.48
Funds Obligated by Modification No.133 (09-7)	\$	33,141,906.19
Funds Obligated by Modification No.135 (09-8)	\$	264,856,432.74
Funds Obligated by Modification No.137 (09-9)	\$	29,436,778.84
Funds Obligated by Modification No.139 (09-10/11)	\$	24,815,954.58

Funds Obligated by Modification No.140 (09-12)	\$ 65,553,946.05
Funds Obligated by Modification No.141 (RA #1)*	\$ 200,000.00
Funds Obligated by Modification No.142 (09-13-17)	\$ 42,683,838.62
Funds Obligated by Modification No.142 (09-18)	\$ 4,159,674.32
Funds Obligated by Modification No.143 (RA #2)*	\$ 150,000.00
Funds Obligated by Modification No.144 (RA #3)*	\$ 3,000.00
Funds Obligated by Modification No.145 (09-19)	\$ 35,542,200.75
Funds Obligated by Modification No.147 (RA #4)*	\$ 1,850,000.00
<b>Total Funds Obligated</b>	<b>\$ 3,872,682,047.11</b>

Details regarding the obligational authority for this modification are provided separately in the RA Financial Plan Report No 4

\*The following table tracks available budgetary resources for work appropriated under the American Recovery and Reinvestment Act of 2009, Pub. L. 1115 (Recovery Act) and as such is subject to special statutory conditions. Budget Authority in the following table is already included in the total funding table above and is not an additional obligation of funds.

<b>Contract DE-AC07-05ID14517</b>	<b>Funds Obligated by ARRA Funding</b>
Funds Obligated by Modification No.141 (RA #1)	\$ 200,000.00
Funds Obligated by Modification No.143 (RA #2)	\$ 150,000.00
Funds Obligated by Modification No.144 (RA #3)	\$ 3,000.00
Funds Obligated by Modification No.147 (RA #4)	\$ 1,850,000.00
<b>Total Funds Obligated</b>	<b>\$ 2,203,000.00</b>