AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT					I. CONTRAC DE-AC07-0		PAGE 1 OF2 PAGES			
2. AMENDMENT/MODIFICATION NO. M079	3. EFFECTIVE DATE See Block 16c	4. REQUISITION NOPR	N/PUF				NO. (If applicable)			
U.S. Department of Energy Idaho Operations Office (DOE-ID)				AINISTERED BY (If other than Item 6) CODE ane C. Long, Contract Specialist 08) 526-0949						
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and Zip Code)				9A. AN	MENDMENT	OF SOLICITAT	TION NO.			
Battelle Energy Alliance, LLC P.O. Box 1625 Idaho Falls, ID 83415					TED (SEE					
	×	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC07-05ID14517 10B. DATED (SEE ITEM 13)								
CODE			November 9, 2004							
11.	THIS ITEM ONLY APPLIES 1	O AMENDMENT	S OF							
The above numbered solicitation is amended of the substitution of	ent prior to the hour and date spece- copies of the amendment; reference to the solicitation and a OF OFFERS PRIOR TO THE HO already submitted, such change r	cified in the solicitation (b) By acknowledging mendment number UR AND DATE SP nay be made by tel	ion as ai ng recei rs. FAIL ECIFIEI	mended, b ipt of this a LURE OF Y D MAY RE	y one of the formation on your ACKNO SULT IN REJE	llowing methods: each copy of the DWLEDGMENT ECTION OF YOU	e offer submitted; or (c) TO BE RECEIVED AT IR OFFER. If by virtue			
12. ACCOUNTING AND APPROPRIATION		specineo.				_				
N/A										
	ITEM APPLIES ONLY TO MC	DIFICATIONS O	F CON	TRACTS	ORDERS;		_			
A. THIS CHANGE ORDER IS ISSUE	DDIFIES THE CONTRACT/OR ED PURSUANT TO (Specify a		SCRIE	BED IN IT	EM 14.					
THE CHANGES SET FORTH IN I										
B. THE ABOVE-NUMBERED CONT office, appropriation date, etc.) S							changes in paying			
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:										
X D. OTHER (Specify type of modifical			1.0							
IAW Part II, Section H, Contract Clause H.34 entitled "Agreements and Commitments"										
E. IMPORTANT: Contractor is not, X_ Is required to sign this document and return [3] copies to the issuing office.										
14. DESCRIPTION OF AMENDMENT/MOI feasible)	DIFICATION (Organized by U	CF section headii	ngs, ind	cluding so	olicitation/cor	tract subject m	natter where			
The purpose of this modificate Attachment R (See Continuation Except as provided herein, all terms and confull force and effect.	on)									
15A. NAME AND TITLE OF SIGNER (Type Lisa A. Sehlke, Manager	or print)				CONTRACT ADAMS	ING OFFICER	(Type or print)			
Prime Contract & Perfor			Contr	racting	Officer		16C. DATE SIGNED			
BY Swall Selle	8/8/07	BY MILE	wh		. Cross	M	8/21/07			

(Signature of person authorized to sign)
NSN 754-01-152-807030-105

(Signature of Contracting Officer)

STANDARD FORM 30 (REV. 10-83)

PREVIOUS EDITION UNUSABLE

Prescribed by GSA FAR (48 CFR) 53.24

The following changes are made to Section J, Attachment R:

Table 3-1 is deleted in its entirety and replaced with the attached Table 3-1 (dated 7-1-2007)

Resource Commitment No. 21 signed by British Nuclear Fuels – Plc and Resource Commitment No. 22 signed by British Nuclear Fuels – NSTS are deleted in their entirety.

A new Resource Commitment, No. 21 signed by Nexia Solutions, Ltd, is incorporated to honor all of the promises made in the removed Resource Commitment No. 21 and the \$300 M access promise made in removed Resource Commitment No. 22, for a total commitment of \$350 M (3 pages attached)

A new Resource Commitment will be provided, not later than September 30, 2008, that fully honors the \$30 M R&D program funding promise made in removed Resource Commitment No. 22 (1 page attached).

All other terms and conditions remain unchanged

	Table 3-1	Type of Resource	Commitment		Be	enefiting INL Are	
				_		National	S&T and
Provider	Resource Commitment	Direct (1)	Program (2)	Access(3)	Nuclear Energy	Security	Education
Battelle	Upgrades to Advanced Test Reactor research Capability and					_	
nergy	Fuel Line	\$20M	_		4	4	
Alliance	2. Support for Education Programs	\$6M			44		4
	3. Construction Funding Support for the Center for Advanced	\$8.88M					١ ,
Battelle	Energy Studies (CAES)	\$0.00IVI			4	4	4
Memorial	A National Consulting and Append to Battella Ventures		0014	845014			
	4. National Security Consulting and Access to Battelle Ventures		\$2M	\$150M	 	4	4
NA OVT	5. Access to BWXT Lynchburg technology Center (LTC)	04484	\$1.5M	\$100M	4 4	4	4
BWXT	6. Provision of BWXT Integrated Fuel Processor	\$14M	0514	L	 4		
Washington	7. Transfer of Smart Secure System Technology	\$0.25M	\$5M		 	4	4
<u> </u>	8. Construction Funding Support for the CAES	\$1.12M			4	4	4
	9. Establish the Center for Nuclear Fuels and Materials Research			20514			
Electric Power	(CNFMR)		\$41.2M	\$25M	4		.
Research	10. Access to EPRI's Technology Application Centers		\$2.9M	\$20M	4	4	4
nstitute	11. Provision of Technical Support to Critical Infrastructure	ļ			1	_	
	Testbed		\$1.8M	\$10M		4	<u> </u>
State of Idaho	12. State Support for CAES	\$7.2M			4	4	4
	13. Access to the Massachusetts Institute of Technology Reactor				1		
MIT	(MITR)			\$33.9M	4		4 _
North Carolina		!					
State University	14. Access to the North Carolina University's PULSTAR Reactor			\$25M	4		4
Oregon State					1		
Jniversity	15. Access to the Oregon State TRIGA Reactor			\$34M	4		4
The Ohio State							1
Jniversity	16. Access to The Ohio State University Research Reactor	1		\$10M	4 .		4
University of New							
Mexico	17. Access to the University of New Mexico Research Reactor			\$5M	4		4
Electronic Data					1		
Systems	18. Plan for Enterprise-Wide IT Development		\$.24M		4	4	4
	19. Support the Center for Nuclear Fuels and Materials Research		1	-			†
BNFL Inc.	BNFL Ltd.		\$1.5M		4		
Westinghouse	20.Support the Center for Nuclear Fuels and Materials Research	 		_			
Electric Corp	WEC		\$1.5M	1	4		ſ
Nexia Solutions	21. Support the Center for Nuclear Fuels and Materials Research		1				
	Access Funds from 21 & 22			\$350M	4		
	22. Program Funds unresolved as of 7/1/07		-				1
TBD			\$30M		4		1
	23. Support the Center for Nuclear Fuels and Materials Research	-		-			
AREVA	(CNFMR)	\$2M	\$20M	\$50M	4		
JSRA	24. Establish the Center for Space Nuclear Research (CSNR)	\$1.5M	 		4		4
General Atomics	25. Support the Center for Space Nuclear Research (CSNR)		 	\$150M	4		4
	26. Establish the Center for Nuclear Systems Design and		 	1	 		1
	Analysis (CNSDA)	\$0.36M		1	4		4
	27. Support the Center for Nuclear Systems Design and Analysis			1	1	_	<u> </u>
	(CNSDA)	\$0.25M	İ	\$101.5M	4		4
TOTAL		\$61.58M	\$107.64M	\$1.064B			
		- 1100111	Ţ	Ţ			
1) Direct		(2) Program				(3) Access	
	o a specific purpose at INL		or prescribed proj	ect or consulting		Capital or Repl	acement valu
	. , , , , , , , , , , , , , , , , , , ,		* : ::: b. o)			of an asset bei	
			use				

Resource Commitment Form #21 - Nexia Solutions Ltd.

This Resource Commitment combines the two previous Commitments #21 and #22 dated November 2004 given by Nuclear Science and Technology Services (NSTS) to BEA ("the Commitments"). It recognizes the progress made in defining both programs and relationships and the restructuring of the BNFL Group that has taken place since the Commitments were made. Nexia Solutions is responsible for managing BNFL's involvement in UK NE programs and is the owner of the bulk of BNFL's UK-based R&D resource.

I, on behalf of Nexia Solutions, am committing the following resources to INL:

1. Resource Description:

Support for the INL and in particular, the Center for Nuclear Fuels and Materials Research – Nexia Solutions Ltd. Nexia Solutions commits to support BEA in the establishment of a Center for Nuclear Fuels and Materials Research and to provide other support to the INL as may be agreed between Nexia Solutions and BEA (together "the Parties").

Nexia Solutions will establish a US presence for nuclear program support in Idaho Falls. This presence will promote collaboration between the Parties and will co-ordinate joint programs between INL and UK laboratories as well as direct US-wide programs involving research, development and the provision of technical services. The size of the presence will be determined by agreed requirements between the Parties to support the INL mission. On request and subject to terms to be agreed, Nexia Solutions will also provide skilled resources to augment INL staff. The Nexia Solutions expertise will assist INL in achieving international recognition as a leading NE laboratory.

Subject to an appropriate non disclosure agreement being entered into by BEA, Nexia Solutions will facilitate access to the \$350M Sellafield Technology Center's unique state-of-the-art facilities and capabilities for fuel cycle development, including radionuclide laboratories, remote handling hot cells and engineering rig halls. This will minimize the need for INL to create duplicate infrastructure. Access will be provided to INL in compliance with relevant UK Government accounting rules. Nexia Solutions will promote staff exchanges between INL and Nexia Solutions.

In its expected future fuel cycle endeavors, Nexia Solutions has identified programmatic investment which, subject to agreed terms demonstrating value-for-money for its customers, could appropriately be performed at the INL, complementing parallel and concurrent U.S. development projects. Subject to obtaining standard approvals from DOE to conduct this work at INL, the availability of INL resources, current competitive labor rates and UK Government appropriation of funds, this investment will help create joint, leveraged research that addresses Nexia Solutions, DOE and UK program goals.

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In addition, Nexia Solutions will work with INL to jointly identify synergies from expertise and operations, which offer marketable services in national or international research markets and which may be performed at INL or in the UK. One example is the post-irradiation examination facilities at the Sellafield site in Europe, coupled with the materials test reactor of INL, to offer enhanced services to customers. In specific support of these activities, Nexia Solutions commits to developing a joint communications strategy i.e., marketing literature, press articles and joint conference papers etc to promote the research alliance in the areas identified.

Nexia Solutions will provide access to a network of global influence in the nuclear fuels areas, including database information, intellectual property, access to international research partners and a strong communications system under terms to be agreed. These activities, particularly relating to the advanced fuel cycle work, will support the growth of both NGNP and the Nuclear Energy programs as well as support INL's efforts at collaborative partnering. Nexia Solutions further commits to the participation of its Chief Technology Officer and/or such other Directors and senior members of staff as may be agreed, as consultants, reviewers or advisers to BEA.

Furthermore, Nexia Solutions will, subject to the necessary corporate approvals and subject to a non-disclosure agreement being entered into and also if appropriate in the context of US-UK arrangements for Generation IV collaboration, provide INL staff with full access to the comprehensive UK Fast Reactor Archives and database of fuel development and processing information under terms to be agreed. This information will be available for researchers and planners to use to reduce risk, cost and schedule uncertainties and avoid expensive U.S. duplication of UK research that is being or has been carried out.

Finally, to enhance INL international partnerships, Nexia Solutions will provide support for an INL European office under terms to be agreed. This office will build on the already strong links that Nexia Solutions has established within the European Union and with its European partners.

2. Location of Resource:

Nexia Solutions facilities in the UK, with required staff to be seconded to Idaho Falls.

3. Monetary Value:

Estimated Total Monetary Value: \$350M (access to use of state-of-the-art Technology Center at Sellafield and access based on the actual cost [around \$5B] of the R&D programs that generated the information related to INL's mission).

4. Describe which Project/Program would benefit from the resource and why:

Advanced Fuel Cycle Initiative, GNEP and NE through access to expertise and experience gained specifically from the fast reactor-related work and in the ongoing UK Advanced Fuel Cycle program.

5. Date the resource will be provided:

As soon as agreed between the Parties following commencement of the contract.

6. The resource will be provided by:

The commitment is from Nexia Solutions whose address is 1100 Daresbury Park, Daresbury, Warrington, Cheshire, WA4 4GB, UK.

7. Describe any liability related to this resource financial or otherwise?

None, other than payment for agreed services to be provided by Nexia Solutions to support INL.

8. How the resource will be managed:

The resource will be accessed through the on-site Nexia Solutions manager.

9. How the resource will be integrated into the INL:

The INL Director of Technology Partnerships will manage the interface and ensure that an approved information access plan is in place regarding any and all material obtained under this Resource Commitment. The INL Director of Technology Partnerships will further ensure that approvals and supporting systems are in place to allow the projects and programs being conducted at INL to be safely, securely and professionally performed.

10. Other pertinent information (e.g., exclusive rights and control of the resource):

This Resource Commitment is subject to corporate approvals. Nexia Solutions will have full access to and unfettered rights to use in any and all information, intellectual property and technology resulting from shared programs, subject to the joint program agreements. Nexia Solutions' information must be protected in an appropriate manner to the satisfaction of Nexia Solutions and will, in tum, result in Nexia Solutions having access to and unfettered rights to use any and all resulting information, intellectual property and technology directly resulting from the use of the information.

11. Signature of responsible corporate official and date of signature:

Dr. Peter Bleasdale Managing Director Nexia Solutions Ltd.

RESOURCE COMMITMENT NUMBER 22

Resource Commitment No.22, to support the Center for Nuclear Fuels and Materials Research, is hereby assigned to BEA.

Program funding of \$30M (R&D Programs over 10 years) is still an outstanding issue to be honored by BEA. This program funding commitment is to be provided not later than September 30, 2008.