

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE	PAGE OF PAGES 1   2	
2. AMENDMENT/MODIFICATION NO. 347	3. EFFECTIVE DATE 04/16/2013	4. REQUISITION/PURCHASE REQ. NO. 13EM001532	5. PROJECT NO. (If applicable)	
6. ISSUED BY Savannah River Operations U.S. Department of Energy Savannah River Operations P.O. Box A Aiken SC 29802	CODE 00901	7. ADMINISTERED BY (If other than Item 6) Savannah River Operations U.S. Department of Energy Savannah River Operations P.O. Box A Aiken SC 29802	CODE	00901
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) SAVANNAH RIVER NUCLEAR SOLUTIONS, LLC Attn: LLOYD CLEVINGER 203 LAURENS ST SW AIKEN SC 298012421		(x) 9A. AMENDMENT OF SOLICITATION NO.	9B. DATED (SEE ITEM 11)	
CODE 798861048 FACILITY CODE		x 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC09-08SR22470	10B. DATED (SEE ITEM 13) 01/10/2008	

**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) Section I, DEAR 970.5211-1 Work Authorization (May 2007)

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.)**

A. Reference Modification 035, the purpose of this modification is to incorporate Contract Work Authorization for Project Code 2005000, Project Title: Basic Energy Sciences - Energy Frontier Research Centers, see attachments 1, hereto. The original performance period under Mod 035 was changed in error. The attached Work Authorization restates the project period as intended prior to changed, as cited below:

Work Start Date: From: Aug 2009  
 Expected Completion Date: To: Jul 2014

B. This modification formally incorporates the above referenced contract work authorization as part of the contract. Funds were allocated previously under Mod 035, in 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)	
		James Lovett	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	04/16/2013

NAME OF OFFEROR OR CONTRACTOR  
SAVANNAH RIVER NUCLEAR SOLUTIONS, LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>accordance with the DOE-SR FIN PLAN 19, Fiscal Year 2009, dated August 7, 2009. As stated under DEAR 970.5211-1 Work Authorization (May 2007), paragraph (b), the work authorization, whether issued bilaterally or unilaterally shall become a part of the contract.</p> <p>C. The contract estimated value and all other terms and conditions remain unchanged.</p>				

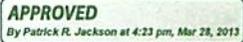
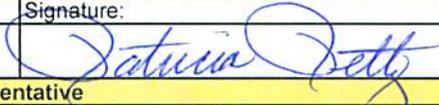
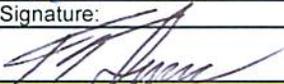
## Attachment 1

**Contract Work Authorization No. Project Code 2005000**

**Project Title: Basic Energy Sciences – Energy Frontier Research  
Centers**

**Note: Three (7) pages, inclusive original WA, Funding Document, copy of page 1 of FINPLAN 19, reference funds previously allocated under Mod 035**

**U. S. DEPARTMENT OF ENERGY  
CONTRACT WORK AUTHORIZATION**

<b>1a. Project Title</b>		<b>1b. Work Proposal Number</b>	
Basic Energy Sciences - Energy Frontier Research Centers		Various; Project Code 2005000	
<b>2. Headquarters Program Point of Contact</b>			
Name: Harriet Kung		Organization Code: SC-22	Telephone: 301-903-3081
<b>3. Headquarters Budget Point of Contact</b>			
Name: Mike Osinski/Donna Gilbert		Organization Code: SC-41.2	Telephone: 301-903-3590
<b>4. Responsible Program</b>		<b>5. Responsible Secretarial Officer</b>	
Office of Science: Basic Energy Sciences		Patricia Dehmer, Deputy Director for Science Programs	
<b>6. Responsible Field Organization</b>			
U.S. Department of Energy, Savannah River Operations			
<b>7a. Site and Facility Management Contractor</b>		<b>7b. Contractor Point of Contact</b>	
Savannah River Nuclear Solutions, LLC		Name: John W. Temple	Telephone No. (803) 952- 7210
<b>8. Work Authorization Number</b>		<b>9. Revision Number</b>	
Various; Project Code 2005000		0	
<b>10. Funds Authorized (See NOTE below)</b>			
NOTE: Work subject to funds availability and an approved "Full Year FY 2013 Continuing Resolution Act."			
<b>Budget and Reporting Code:</b>	<b>Previous:</b>	<b>Change:</b>	<b>Current:</b>
KC0307010	\$1,100,000	\$0	\$1,100,000
<b>11. Performance Period Covered by Funds (See NOTE in Block 10)</b>		<b>12. Work Start Date</b>	<b>13. Expected Completion Date</b>
From: 2/17/09	To: Sep 30, 2014	From: Aug 2009	To: July 2014
<b>14. Statement of Work (Includes attachments)</b>			
Funds in the amount of \$1,100,000 are provided under KC030701 for FWP #SCW0056, entitled "Materials Sciences of Actinides (Lead Institute - University of Notre Dame)." EFRC Director: Burns, Peter. The project period for this FWP is August 7, 2009 through July 31, 2014.			
<b>15. DOE-SR Program Point of Contact</b>			
Name (printed):	Signature:	Date:	
Patrick R. Jackson		3/28/2013	
<b>16. DOE Budget Official</b>			
Name (typed):	Signature:	Date:	
Harold K. Nielsen		3/9/2013	
<b>17. Contractor's Authorized Representative</b>			
Name (typed):	Signature:	Date:	
John Temple		4/10/2013	
<b>18. DOE Contracting Officer (or delegated representative)</b>			
Name (typed):	Signature:	Date:	
Scott Langston		3/9/2013	

**U.S. DEPARTMENT OF ENERGY  
CONTACT WORK AUTHORIZATION**

<b>1a. Project Title:</b> Basic Energy Sciences – Energy Frontier Research Centers (Project code 2005000)		<b>1b. Work Proposal Number (if applicable):</b> Various	
<b>2. Headquarters Program Point of Contact.</b> Name: Harriet H. Kung Organization Code: SC-22 Telephone No.: (301) 903-3081			
<b>3. Headquarters Budget Point of Contact.</b> Name: Mike Osinski/Danna Gilbert (ext 4815) Organization Code: SC-41 Telephone No.: (301) 903-3590			
<b>4. Responsible Program:</b> Basic Energy Sciences		<b>5. Responsible Secretarial Officer:</b> Under Secretary for Science	
<b>6. Responsible Field Organization:</b> Savannah River Operations Office			
<b>7a. Site and Facility Management Contractor:</b> Savannah River Nuclear Solutions, LLC		<b>7b. Contractor Point of Contact.</b> Name: Telephone No.:	
<b>8. Work Authorization Number:</b> KC/SR1/9/ARRA-1		<b>9. Revision Number:</b> 00	
<b>10. Funds Authorized (\$ in thousands).</b> B&R Code: KC030701 Previous: \$0 Change: \$+1,100 Current: \$1,100			
<b>11. Performance Period Covered by Funds.</b> From: 02/17/09 To: 09/30/10		<b>12. Work Start Date:</b> Aug 2009	<b>13. Expected Completion Date:</b> July 2013
<b>14. Statement of Work:</b>  This Work Authorization is issued for the sole purpose of authorizing work in support of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5) (Recovery Act). All contract terms and conditions apply to the work identified herein, in particular contract provision H-999 applies. The work described in this work authorization shall be performed using funds obligated under the contract, appropriated under the Recovery Act and as such is subject to special statutory conditions.  The Office of Science (SC) is committed to conducting all work authorized herein, in a manner that ensures protection of the workers, the public, and the environment. Protecting the workers, the public, and the environment is a direct and individual responsibility of all SC managers and SC-supported contractors. Funds provided by SC will be applied as necessary to ensure that all supported activities are conducted safely and in an environmentally conscientious manner. Only work conducted in this manner will be supported.  <u>Specific Recovery Act Statement of Work:</u>  Funds in the amount of \$1,100,000 are provided under KC030701 for FWP # SCW0056, entitled "Materials Sciences of Actinides (Lead Institute -University of Notre Dame)." EFRS Director, Burns, Peter. The project period for this FWP is August 7, 2009 through July 31, 2013.  Attachment A, Contractor Recovery Act Performance Requirements, identifies the Contractor Recovery Act Schedule Milestones, Performance Measures and Outcomes and Deliverables for this Work Authorization. The contractor's performance against the identified requirements in Attachment A will be evaluated under the Office of Science laboratory appraisal process.			
<b>15. Reporting Requirements (Status reports, scientific and technical information or similar):</b> The recipient of funding in this Work Authorization is responsible for meeting all reporting requirements established by the Department of Energy for activities funded by the American Recovery and Reinvestment Act of 2009.			
<b>16. Work Authorization Program Official.</b> Name (typed): Harriet H. Kung Signature: <i>[Signature]</i> Date: 6/30/09			
<b>17. DOE Field Organization Official.</b> Name (typed): KAREN L HOOKER Signature: <i>[Signature]</i> Date: 9/15/09			
<b>18. Contractor's Authorized Representative.</b> Name (typed): L. FRELIN Signature: <i>[Signature]</i> Date: 9/2/09			
<b>19. DOE Contracting Officer (or delegated representative).</b> Name (typed): SCOTT LANGSON Signature: <i>[Signature]</i> Date: 9/23/09			

SC

SL

DOE-SR SANL/ARRA COR: S.A. Shawee 9/15/09

Office: Basic Energy Sciences, Office of Science  
 Recovery Project Name: Energy Frontier Research Centers (Project code 2005000)

**Major Milestones**

For Grants, Contracts, and Hiring Actions associated with implementing Recovery Act, provide dates for the major milestones. For NEPA reviews, provide the type of review expected and the associated major milestones with dates. Include dollar amounts where appropriate. Add duplicate lines as needed. Provide comments as needed to highlight and clarify milestones.

Weekly/Monthly Milestones Provide weekly milestones through May 8th and Monthly milestones thereafter through Sept. 2011 (add lines as necessary)				
		DATE	Amount (\$M)	Comments
1	Completing merit review process of 261 applications	3/6/2009		
2	Completing merit review process of 261 applications	3/13/2009		
3	Completing merit review process of 261 applications	3/20/2009		
4	Completing merit review process of 261 applications	3/27/2009		
5	BES selects awards, pending SC-1 approval	4/3/2009		
6	SC-1 approval	4/10/2009		
7	Press Release Announcing Awards	4/17/2009		
8		4/24/2009		
9	Process Award Packages	5/1/2009		
10	Process Award Packages	5/8/2009		
11	Process Award Packages	M-09		
12	Chicago Operations Office Receives Packages	J-09		
13	Chicago Operations Office Processes Packages	J-09		
14	Chicago Operations Office Processes Packages/Obligate Funds	A-09		Beginning in August 2009 EFRC research begins. Post Docs, Grad Students, and Under Grads will begin to be hired. Number will not be known until awards are made. Equipment purchases will be made, but again no specifics until awards are made.
15		S-09		
16		O-09		
17		N-09		
18		D-09		
19		J-10		
20		F-10		
21		M-10		
22		A-10		
23		M-10		
24		J-10		
25		J-10		
26		A-10		
27		S-10		
28		O-10		
29		N-10		
30		D-10		
31		J-11		
32		F-11		
33		M-11		
34		A-11		
35		M-11		
36		J-11		
37		J-11		
38		A-11		
39		S-11		

*SJ*  
 9/23/05

**ATTACHMENT A – CONTRACTOR RECOVERY ACT PERFORMANCE REQUIREMENTS**  
**Energy Frontier Research Centers (2005000)**

**Section A: Contractor Recovery Act Schedule or Milestone Requirements**

4Q FY09: Initiate research as a portion of the Energy Frontier Research Center (EFRC) led by the appropriate university, which is funded separately under a financial assistance award (grant). If the Contractor is a participant in more than one EFRC, the Attachment pertains to the Contractor's portion of all those EFRCs.

1Q FY10: First quarterly progress report due.

Progress report due each quarter through 4<sup>th</sup> Q FY 2014.

**Section B: Contractor Recovery Act Performance Outcomes and Measures**

- Perform the contractor's portion of the research proposed for the EFRC(s). Federal program managers will verify the research performance of the whole EFRC through conference calls, site visits, regular EFRC directors' meetings, topical conference meetings attended by EFRC investigators, and annual research progress reports.

**Section C: Contractor Recovery Act Deliverables**

- Quarterly progress reports on the contractor's activities within the EFRC(s).

*S. J.*  
9/23/09

U.S. Department of Energy  
Procurement Request-Authorization

INITIAL PADS DATA ENTRY INFORMATION

1. Awarding Office U.S. Department of Energy - Office of Contracts Management		2. Initiating Office Budget Division - Office of the Chief Financial Officer	
3. PRA Number DE-AC09-09SR22470.19		4. Change Correction in Process? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Description of Work/Purpose of Assistance AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) OF 2009. To provide ARRA funding to Savannah River Nuclear Solution... accomplishment of the ARRA related workscope Has List of Sources Been Attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
6. Awardee Name Savannah River Nuclear Solutions (SRNS) 6a. Division		7. Address 6160 Woodside Executive Court Aiken, SC 29803	
8. Government Share \$1,155,500.00	9. Awardee Share \$0	10. Total \$1,155,500.00	
11. Total Funds This PRA: \$1,155,500.00			
12. Name-Project Manager/Initiator Gary Little Budget Analyst		13. Signature 	14. Date 5/6/09
		15. Office Code CFO 80	
		16. Telephone Number 803-952-9319	

GENERAL AWARD INFORMATION

17. Acquisition <input type="checkbox"/> Advisory & Assistance Services <input type="checkbox"/> A/E Services <input type="checkbox"/> Construction			<input type="checkbox"/> Research & Development <input type="checkbox"/> Supplies			<input type="checkbox"/> Support Services <input type="checkbox"/> Other			18. Financial Assistance <input type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Grant		
19. Product/Service Code (Applies to Acquisition only)						20. CFDA (Applies to Assistance Only)					
21. Master BIN						22. Desired Award Date August 6, 2009					
23. Unsolicited Proposal Number						24. Project Number					

25. ACCOUNTING AND APPROPRIATION DATA

Fund	Year	Alottee	Reporting Entity	SGL	Object Class	Program	Project	WFO	Local Use	26. Dollar Amount	27. Program Budget Official's Signature**
AQ	2009	38	410003	8909100336	254	3166012	2010000	0000000	0000000	\$8,000.00	
WO	2009	36	410003	8909100227	254	2924193	2005000	0000000	0000000	\$1,100,000.00	
ZT	2009	38	410003	8909100331	254	1005098	2004040	0000000	0000000	\$47,500.00	

28. From Continuation Sheet						29. Project Period TOTAL FIN PLAN \$1,155,500.00					
30. Total Funds This PRA Are These Annual Funds? <input type="checkbox"/> Yes <input type="checkbox"/> No						31. Budget Period (Applies to Assistance Awards Only)					
CERTIFYING OFFICIAL: I hereby certify that the funds cited in item 30 are available.											
32. Name and Title H. Kriss Nielsen, Budget Director						33. Signature 			34. Date 8/6/09		
PROGRAM REVIEWING OFFICIAL											
35. Name and Title Nora J. Perrelli, N.M.P.O.						36. Signature 			37. Date 8/6/09		
38. For Initiating Office Local Office Use											
39. Type of Procurement Action (TPA) Code						40. Negotiator Code					
41. Security: Will employees require security clearances for performance of this procurement? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, attach DOE F 5634 2, (05-94) 'Contract Security Classification Specification'											
42. Energy Policy Act: Is this procurement subject to the Energy Policy Act of 1992 (EPA) 10 that directly satisfy an EPACT requirement or objective? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, does it involve either a research and development program or a demonstration of a commercial application? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, see the notice related to this item. Amount of EPACT funding											
Note: ** We hereby certify that funds cited are proper for this procurement and in compliance with applicable Appropriation Acts and Fiscal Law											

## Financial Plan Report - Detail

Parent Plan Number: 19  
 Contract Modification Number: A013  
 Rpt Entry: SR Savannah River Nuclear Solutions, LLC

SR22470 - Savannah River Nuclear Solutions (SRNS)

Report Generated on: August 7, 2009 at 04:12:48 PM

Rpt Entity	Fund Lg	Program	Legacy BKR	Obj. Class	Local Use	Project	WFO	Legacy Order Number	Beginning Unincurred Obs	Previous	BA Change	Revised	Total Available
410003	05/99	AQ	3166012	CJ0100000	25400	0000000	2010900	0000000	0.00	0.00	8,000.00	8,000.00	8,000.00
Total for Program Parent/Control Point: CJ0100000									0.00	0.00	8,000.00	8,000.00	8,000.00
Total for Fund Type: AQ									0.00	0.00	8,000.00	8,000.00	8,000.00
410003	05/99	WO	2924193	KC0307010	25400	0000000	2066000	0000000	0.00	0.00	1,100,000.00	1,100,000.00	1,100,000.00
Total for Program Parent/Control Point: KC0300000									0.00	0.00	1,100,000.00	1,100,000.00	1,100,000.00
Total for Fund Type: WO									0.00	0.00	1,100,000.00	1,100,000.00	1,100,000.00
410003	05/99	ZT	1005098	EB5100000	25400	0000000	2004040	0000000	0.00	50,000.00	47,500.00	97,500.00	97,500.00
Total for Program Parent/Control Point: EB5100000									0.00	50,000.00	47,500.00	97,500.00	97,500.00
Total for Fund Type: ZT									0.00	50,000.00	47,500.00	97,500.00	97,500.00
Total for Reporting Entry: 410003									0.00	50,000.00	1,155,500.00	1,205,500.00	1,205,500.00
Total for SR22470 - Savannah River Nuclear Solutions (SRNS)									0.00	50,000.00	1,155,500.00	1,205,500.00	1,205,500.00

## Cost and Obligation Report YTD Values

**Funding Source: All**

											BEARS			STARS		
Appr Year	Fund Code	Legacy FT	Program	Legacy B&R	Project	WFO	Object Class	Local Use	Purchase Order	BUO	BA Committed	BA Obligated	Curr Yr Obligated	Curr Yr Costs	Ending Uncosted	
Legacy Program Parent: KC0200000																
2009	06199	WO	2924193	KC0307010	2005000	0000000	25400	0000000	SR22470	390,870.18	0.00	0.00	0.00	215,322.86	175,547.32	
Total for Legacy Program Parent: KC0200000										390,870.18	0.00	0.00	0.00	215,322.86	175,547.32	
Report Total										390,870.18	0.00	0.00	0.00	215,322.86	175,547.32	