

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE	PAGE <b>1</b> OF <b>5</b> PAGES
2. AMENDMENT/MODIFICATION NO. <b>417</b>	3. EFFECTIVE DATE (M/D/Y) <b>See Block 16C</b>	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY <b>U.S. Department of Energy Office of River Protection P. O. Box 450, MS H6-60 Richland, WA 99352</b>	CODE	7. ADMINISTERED BY (If other than Item 6)	CODE
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP code) <b>Bechtel National, Inc. 2435 Stevens Center Place Richland, WA 99354</b>		<input type="checkbox"/>	9A. AMENDMENT OF SOLICITATION NO.
CODE <b>396A5</b>		<input type="checkbox"/>	9B. DATED (SEE ITEM 11)
FACILITY CODE <b>153392068</b>		<input checked="" type="checkbox"/>	10A. MODIFICATION OF CONTRACT/ ORDER NO. <b>DE-AC27-01RV14136</b>
		<input checked="" type="checkbox"/>	10B. DATED (SEE ITEM 13) <b>December 11, 2000</b>

**11. THIS ITEM 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 DATE AND HOUR 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 amendment and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

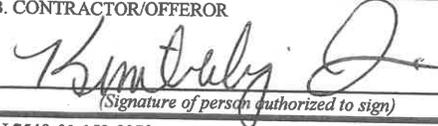
**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS SET FORTH IN ITEM 14.**

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.
<input type="checkbox"/>	
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO AUTHORITY OF FAR 43.103(b).
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO THE AUTHORITY OF:
<input checked="" type="checkbox"/>	D. OTHER (Specify type of modification and authority) <b>Mutual Agreement of the Parties</b>

**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.)  
**See following page(s)**

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) <b>PROJECT MANAGER</b>	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) <b>Ronald E. Cone Jr. Contracting Officer</b>
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED <b>2/15/18</b>
16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)	16C. DATE SIGNED <b>2-15-2018</b>

**Purpose of Modification:**

The purpose of this modification is to incorporate Future Electrical Installation Methods at the Waste Treatment and Immobilization Plant Project specifically for the Effluent Management Facility (EMF), incorporate cost related to mandated DOE National Security Training video attendance for BNI personnel and update Section B, *Supplies or Services and Prices/Costs* to include CLIN values for CLINs 3 & 4 as follows:

- The subject modification incorporates the mutually agreed to price and work scope submitted by BNI with CCN: 242024 for the EMF facility only.
- Update total estimated contract cost to reflect DOE directed training on National Security video of protecting classified and controlled unclassified information for all BNI employees.
- Update Section B, *Supplies or Services and Prices/Costs*, to reflect the mutually agreed to estimated cost changes correctly allocated to the appropriate CLINs:

**CLIN 1.0 Design, Construct, and Commission LBL in the DFLAW configuration:**

Add Mod 417 for DOE directed training on National Security	\$92,728
Less Mod 388 Project services allocations to CLIN 3 & 4	(\$80,000)
Less Mod 396 should have been CLIN 3	(\$900,000)
Less Mod 403 Project services for CLINS 3 & 4	(\$20,022)
Less Mod 412 Project services for CLINS 3 & 4	(\$42,000)
<u>Less Mod 415 Project services for CLINS 3 &amp; 4</u>	<u>(\$22,400)</u>
Total deduction to CLIN 1	(\$971,694)

**CLIN 2.2/2.3 DFLAW Procurement/Construction:**

<u>Add for EMF cable drops</u>	<u>\$85,000</u>
Total estimated cost increase of CLIN 2.2/2.3	\$85,000

**CLIN 3 (HLW) incorporate estimated cost values through**

Mod 384 in the amount of	\$2,740,636,370
Add Mod 417 for DOE directed training on National Security	\$11,860
Add Mod 388 Project services included in CLIN 1	\$28,000
Add Mod 396 Amount previously shown in CLIN 1	\$900,000
Add Mod 403 Project services included in CLIN 1	\$7,008
Add Mod 412 Project services included in CLIN 1	\$33,000
<u>Add Mod 415 Project services included in CLIN 1</u>	<u>\$17,600</u>
Total estimated cost increase of CLIN 3	\$997,468

**CLIN 4 (PT) incorporate estimated cost values through**

MOD 384 in the amount of	\$4,396,545,500
Add Mod 417 for CLIN 4 DOE directed training on National	

Security	\$3,235
Add Mod 388 Project services allocations included in CLIN 1	\$52,000
Add Mod 403 Project services allocations included in CLIN 1	\$13,014
Add Mod 412 Project services allocations included in CLIN 1	\$9,000
Add Mod 415 Project services allocations included in CLIN 1	\$4,800
Total estimated cost increase of CLIN 4	\$82,049

**Mod 417 increases the Total Estimated Contract Cost (TECC) by \$192,823.**

- Revise Section C, Standard 9, (c) to recognize changes to enable greater flexibility with respect to whether the safety evaluation (SE) process or the unreviewed safety question (USQ) process is applied for configuration management of the nuclear facility safety basis during the period from safety basis submission up to the point of safety basis implementation. This change is necessary because of the LAW Facility design and construction status that will be existing at the time of the LAW Facility safety basis submission. Early application of the USQ process as required by the current Standard 9 would create adverse project impacts under these circumstances. This no cost contract change mitigates those potential adverse impacts by enabling use of the SE process as approved through the documented safety analysis implementation plan.
- Revise Section J - List of Attachments, Attachment E – List of Applicable Directives to add a reference to note 14 of 17-QAD-0063. Through this modification BNI is advised that approval and implementation of the QAP implementing DOE 0 414. 1D is not a predecessor to submission of the DSA. Chapter 14 of the DSA requires a description of the essential characteristics of the QAP. The plan to prepare Chapter 14 based on a description of the characteristics of BNI's current QAP, which is based on DOE 0 414. 1C, with the acknowledgement of the intent to develop a separate Commissioning and Operations QAP based on DOE 0 414. 1D as a planned operational improvement.

**Description of Modification:**

1. Contract Section B is revised to reflect the following mutually agreed to changes in total estimated contract cost:
  - A. CLIN 1.0 Design Construct and Commission LBL in the DFLAW Configuration- Recognize costs associated with project services allocation in DOE Change Orders after Mod 384 (As shown above) revising B. 1, CLIN 1 a reduction in CLIN value from \$6,507,985,535 by  $(-\$1,064,422 + 92,728 = -\$971,694)$  to \$6,507,013,841
  - B. Recognize B.2, CLIN 2.2/2.3 increase for electrical cable drops: (BNI, CCN: 242024 for EMF facility only) \$85,000

C. Recognize costs associated with National Security Video Training directed by DOE	
B.1, CLIN 1	\$92,728
B.3, CLIN 3	\$11,860
B.4, CLIN 4	\$3,235
<b>Total</b>	<b>\$107,823</b>

D. Recognize CLIN 3 costs associated with project services allocation in DOE Change Orders after Mod 384 shown in B.1, CLIN 3 an increase in value from \$2,740,636,370 by  $(\$985,608 + \$11,860 = \$997,468)$  to \$2,741,633,838.

E. Recognize CLIN 4 costs associated with project services allocation in DOE Change Orders after Mod 384 shown in B.1, CLIN 4 an increase in value from \$4,396,545,500 by  $(\$78,814 + \$3,235 = \$82,049)$  to \$4,396,627,549.

2. As a result of the mutually agreed to changes, the table in Section B, *Supplies or Services and Prices/Costs*, Contract Section B.3 *Obligation and Availability of Funds and Contract Value*, paragraph (c) is revised as follows:

- Increase the Total Estimated Contract Cost (TECC) by \$192,823, from \$14,082,767,405 to \$14,082,960,228.
- Increase the Total Estimated Contract Price (TECP) by \$192,823, from \$14,675,107,903 to \$14,675,300,726.

3. The table in Section B, *Supplies or Services and Prices/Costs*, Contract Section B.3 *Obligation and Availability of Funds and Contract Value*, paragraph (c), is deleted in its entirety and replaced in full as follows:

Table B.1 – Total Estimated Contract Price

		Cost		
		CLIN Estimated Cost	Increased by Mod No. 417	Total CLIN Estimated Cost
Total Estimated Contract Cost (TECC) through Mod No. 415				<b>\$14,082,767,405</b>
Total Estimated Contract Cost (417)				
B.1	CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration	\$6,507,985,535	(-\$1,064,422 + \$92,728 = -\$971,694)	\$6,507,013,841 \$92,728
B.2	CLIN 2.0: WTP Facility Modifications Necessary to Support DFLAW			
	Sub-CLIN 2.1: DFLAW Design (Target Cost)	\$75,000,000	\$0	\$75,000,000 \$0
	Sub-CLINs 2.2 /2.3 DFLAW Procurement/ Construction	\$362,600,000 <small>(Previous NTE Values)</small>	\$85,000	\$362,685,000 \$85,000
B.3	CLIN 3.0 HLW Facility (Note: For this Mod 417, Initial value is based upon the value of CLIN 3 determined during mod 384)	\$2,740,636,370	(\$985,608 + \$11,860 = \$997,468)	\$2,741,633,838 \$11,860
B.4	CLIN 4.0: PT Facility (Note: For this Mod 417, Initial value is based upon the value of CLIN 4 determined during mod 384)	\$4,396,545,500	(\$78,814 + \$3,235 = \$82,049)	\$4,396,627,549 \$3,235
Revised Total Estimated Contract Cost (TECC) through Mod No. 417				<b>\$14,082,960,228</b>

		Cost		
		Fee		
		Available	Earned	Total
Earned before Mod No. 384				
A1	Final Fee Determination – Pre-Mod No. A143		\$102,622,325	
A2	Final Fee Earned Mod No. A143 – Mod No. 384		\$131,573,553	
Fixed Fee Payment (Attachment B-2-C)***		\$0	\$60,000,000	
Pending Activity Milestones (Attachment B-2-B)		\$0	\$6,667,000	
Maximum Available Award Fee (CY 2016–2022) (Attachment B-2-D)		\$47,235,620	\$7,242,000	
CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration				
E1	LBL Construction Complete Performance Based Incentives (Attachment B-2-E)	\$51,300,000	\$17,100,000	
E2	Commission LBL in the DFLAW Configuration Performance Based Incentive (Attachment B-2-F)	\$159,600,000		
E3	Schedule Incentive Hot Commissioning (Attachment B-2-F)	+/- \$60,000,000 (Max)		
E4	Cost Share Incentive (Attachment B-2-G)	+/- \$50,000,000 (Max)		
CLIN 2.1: Performance-Based Incentive for DFLAW Design Completion (Attachment B-2-H)		\$8,000,000	\$1,000,000	
Total Maximum Available Fee****		\$266,135,620		
Total Fee Earned			\$326,204,878	
Total Estimated Contract Price (TECP) (Total Maximum Available Fee + Total Earned Fee + TECC) 417				\$14,675,300,726

\*\*\* Payment is in satisfaction of all fee entitlement for work accomplished under the Contract from contract Modification No. A143 through the date of this modification (384) that is not included in A2 above.

\*\*\*\* Exclusive of Cost Share and Schedule Incentives.

4. Section C, Standard 9: Nuclear Safety, (c) Second Paragraph is revised to:

The Contractor shall manage changes to the DSA prior to the effective date of the DSA and TSRs as specified in the DSA specific implementation plan. A 10 CFR 830 compliant USQ process shall be implemented by the Contractor when specified by the DSA specific implementation plan and prior to the effective date of the DSA and the TSRs. The effective date for the DSA and associated TSRs will be identified for each DSA in the DSA specific Implementation Plan.

5. Section J list of Attachments, Attachment E, (b) Notes, 14. Is revised to:

The Contractor shall implement DOE O 414.1D, CRD, Chg 1, as described in CCN: 222763, 15-QAD-0014 and 17-QAD-0063.

6. All other terms and conditions remain unchanged.

**(End of Modification)**