

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE 1 OF PAGES 7
2. AMENDMENT/MODIFICATION NO. 448	3. EFFECTIVE DATE (M/D/Y) See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY U.S. Department of Energy Office of River Protection P. O. Box 450, MS H6-60 Richland, WA 99352	7. ADMINISTERED BY (If other than Item 6)	CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP code) Bechtel National, Inc. 2435 Stevens Center Place Richland, WA 99354		<input type="checkbox"/>	9A. AMENDMENT OF SOLICITATION NO.
		<input type="checkbox"/>	9B. DATED (SEE ITEM 11)
		<input checked="" type="checkbox"/>	10A. MODIFICATION OF CONTRACT/ ORDER NO. DE-AC27-01RV14136
		<input checked="" type="checkbox"/>	10B. DATED (SEE ITEM 13) December 11, 2000
CODE 396A5	FACILITY CODE 153392068		

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.

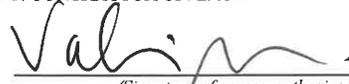
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
<input type="checkbox"/>	
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT ADMINISTRATIVE CHANGES (such as changes 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) FAR 43.103 Types of Contract Modifications (a) Bilateral - Mutual Agreement of the Parties

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) VALERIE McCAIN, PROJECT DIRECTOR		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Katie A. Mair Contracting Officer	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED 29 JAN 19	16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)	16C. DATE SIGNED 1/30/19

Purpose of Modification:

1. The purpose of this modification is to definitize Request for Equitable Adjustments (REA) 2018-004, Engineering Redraft for Lightning Protection and cancelled scope, 2018-005, Engineering Redraft for Caustic Vessels, and REA 2018-006, Engineering Redraft for DSA Impacts to the Carbon Dioxide Gas System. Section B, *Supplies or Services and Prices/Costs*, is updated as follows:
 - Update Section B, *Supplies or Services and Prices/Costs*, to reflect the total negotiated amount of \$228,368 split between CLIN 1 and CLIN 2.2/2.3.
2. Section B, *Supplies or Services and Prices/Costs*, is also updated to correct an error from Contract Modification 445. Attachment B-2-I, REA Fee Post Mod 384, should have been updated to include the fee from definitizing REA 2017-008 Rev. 0 T-1 Office Space for DOE.

Description of Modification:

1. Contract Section B is revised to reflect the following negotiated settlement resulting from REA 2018-004, Engineering Redraft for Lightning Protection and cancelled scope, 2018-005, Engineering Redraft for Caustic Vessels, and REA 2018-006, Engineering Redraft for DSA Impacts to the Carbon Dioxide Gas System :

REA	CLIN 1	CLIN 2.2/2.3	Total CLIN 1 & 2
REA 2018-004	\$74,858	\$ 2,502	\$77,360
REA 2018-005	\$ 31,360	\$2,250	\$33,610
REA 2018-006	\$115,085	\$2,313	\$117,398
Total MOD 448	\$221,303	\$7,065	\$228,368

2. As a result of negotiations and definitizing REAs 2018-004, 2018-005, and 2018-006, 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:
 - The Cost Category (A) Total Estimated Contract Cost (TECC) in the amount of \$14,086,901,907 is carried forward from Contract Modification 445.
 - The Cost Category (B.1) CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration, Increased by Mod No. 448, is \$221,303.
 - The Cost Category (B.1) CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration, Total CLIN Estimated Cost, is increased by \$221,303 from \$6,509,448,537 to \$6,509,669,840.

- The Cost Category (B.2) CLIN 2.0: WTP Facility Modifications Necessary to Support DFLAW, Sub-CLINs 2.2/2.3 DFLAW Procurement/Construction, Increased by Mod No. 448, is \$7,065.
- The Cost Category (B.2) CLIN 2.0: WTP Facility Modifications Necessary to Support DFLAW, Sub-CLINs 2.2/2.3 DFLAW Procurement/Construction, Total CLIN Estimated Cost, is increased by \$7,065 from \$364,031,487 to \$364,038,552.
- The Revised Total Estimated Contract Cost (TECC) is increased by \$228,368 from \$14,086,901,907 to \$14,087,130,275.
- The Total Estimated Contract Price (TECP) (Total Maximum Available Fee + Total Earned Fee + TECC) is increased by \$228,368 from \$14,675,497,798 to \$14,675,726,166.

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		
Total Estimated Contract Cost (TECC) through Mod No. 445				\$14,086,901,907
Total Estimated Contract Cost (448)		CLIN Estimated Cost	Increased by Mod No. 448	Total CLIN Estimated Cost
B.1	CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration	\$6,509,448,537	\$221,303	\$6,509,669,840
B.2	CLIN 2.0: WTP Facility Modifications Necessary to Support DFLAW			
	Sub-CLIN 2.1: DFLAW Design (Target Cost)	\$75,058,200		\$75,058,200
	Sub-CLINs 2.2 /2.3 DFLAW Procurement/ Construction	\$364,031,487 <small>(Previous NTE Values)</small>	\$7,065	\$364,038,552
B.3	CLIN 3.0 HLW Facility	\$2,741,698,522		\$2,741,698,522
B.4	CLIN 4.0: PT Facility	\$4,396,665,161		\$4,396,665,161
Revised Total Estimated Contract Cost (TECC) through Mod No. 448				\$14,087,130,275
Fee				
		Available		Earned
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)		\$39,363,017		\$11,047,961
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

LBL Startup and Commissioning Performance Based Incentive Fee	Fee (\$)
See Figure B-2-F-1 for an illustration of the mechanics of the Schedule Incentive.	

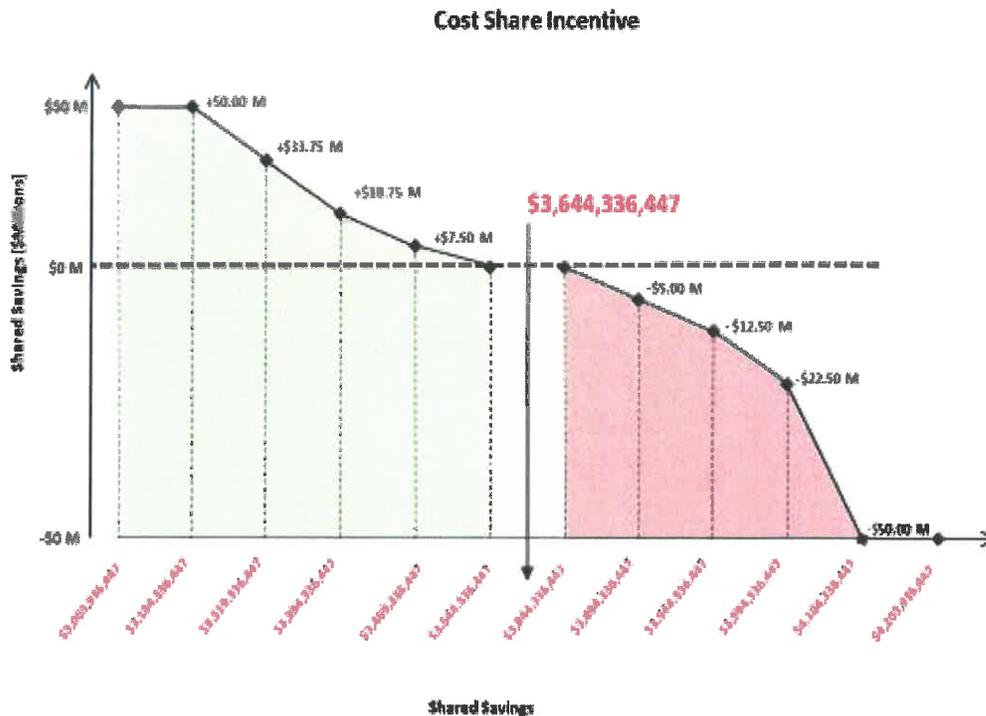
5. Section B, Attachment B-2-G, Incentive Fee G – CLIN 1.0 Cost Share Incentives is revised to increase numbers by \$221,303 as follows:

The Government and BNI will share cost increases/decreases above or below the target cost of **\$3,644,336,447**. The final increase/decrease to earned fee will be based on the actual final cost incurred to complete CLIN 1.0 from January 1, 2014. The increase/decrease will be cumulative and the final amount will be prorated for any final cost falling between the high and low points of any of the final cost bands reflected herein.

Cost Share Incentives	Description	Maximum Incremental Fee Reduction	Maximum Cumulative Fee Reduction
	CLIN 1.0 Cost share incentive will include a +\$200M fee neutral cost band above the price of \$3,644,336,447 and a -\$100M fee neutral band below \$3,644,336,447 .		
Decreases to earned fee will start after the total cost for CLIN 1.0 exceeds \$3,844,336,447 as follows:	Total cost for CLIN 1.0 between \$3,844,336,447 to \$3,894,336,447 , the cost increase will be shared in a ratio of 90% Government and 10% BNI.	-\$5,000,000.00	-\$5,000,000.00
	Total cost for CLIN 1.0 between \$3,894,336,447 to \$3,944,336,447 , the cost increase will be shared in a ratio of 85% Government and 15% BNI.	-\$7,500,000.00	-\$12,500,000.00
	Total cost for CLIN 1.0 between \$3,944,336,447 to \$3,994,336,447 , the cost increase will be shared in a ratio of 80% Government and 20% BNI.	-\$10,000,000.00	-\$22,500,000.00
	Total cost for CLIN 1.0 between \$3,994,336,447 to \$4,104,336,447 the cost increase will be shared in a ratio of 75% Government and 25% BNI.	-\$27,500,000.00	-\$50,000,000.00
	Total Decrement for \$460,000,000 cost increase to price (\$4,104,336,447)	-\$50,000,000.00	
Increases to earned fee will start when costs are below \$3,544,336,447		Maximum Incremental Fee Increase	Maximum Cumulative Fee Increase

Total cost for CLIN 1.0 equal to \$3,544,336,447 to \$3,469,336,447, the cost savings will be shared in a ratio of 90% Government and 10% BNI.	\$7,500,000.00	\$7,500,000
Total cost for CLIN 1.0 between \$3,469,336,447 to \$3,394,336,447, the cost savings will be shared in a ratio of 85% Government and 15% BNI.	\$11,250,000.00	\$18,750,000
Total cost for CLIN 1.0 between \$3,394,336,447 to \$3,319,336,447, the cost savings will be shared in a ratio of 80% Government and 20% BNI.	\$15,000,000.00	\$33,750,000
Total cost for CLIN 1.0 between \$3,319,336,447 to \$3,184,336,447, the cost savings will be shared in a ratio of 75% Government and 25% BNI.	\$16,250,000.00	\$50,000,000
Total Incentive for cost savings	\$50,000,000.00	

6. In Section B, Figure B-2-G-1. Graph Cost Share Incentive Fee CLIN 1.0 is revised to reflect the \$221,303 revision to the Cost Share Incentive Curve as follows:



7. Section B, Attachment B-2-I, REA Fee Post Mod 384, is revised to update the table to include the fee from Contract Modification 445 from definitizing REA 2017-008 Rev. 0 T-1 Office Space for DOE as follows:

REA Number and REA Title	Contract Mod Recognizing Definitization	Dollar Value of Fee Negotiated
REA 2017-002 EMF Differing Subsurface Conditions	420	\$40,522
REA 2016-002 Probabilistic Seismic Hazards Analysis (PSHA) Assessment	429	\$85,627
REA 2016-001 Rev 1 Direction to Evaluate IERT Recommendations for RLD-VAL-00007 & 00008	441	\$139,098
REA 2017-008 Rev. 0 T-1 Office Space for DOE	445	\$56,788
Total		\$322,035

8. **Contractor’s Statement of Release:** In consideration of the Modification 448, agreed to herein as complete equitable adjustment for the Contractor’s Request for Equitable Adjustments (REA) for 2018-004, 2018-005 and 2018-006, the Contractor hereby releases the Government from any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances giving rise to the changes as noted in the modification.

All other terms and conditions remain unchanged.

(End of Modification)