

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE _____ PAGE **1** OF _____ PAGES **6**

2. AMENDMENT/MODIFICATION NO. **381** 3. EFFECTIVE DATE (M/D/Y) **See Block 16C** 4. REQUISITION/PURCHASE REQ. NO. _____ 5. PROJECT NO. (If applicable) _____

6. ISSUED BY CODE _____ 7. ADMINISTERED BY (If other than Item 6) CODE _____
U.S. Department of Energy
Office of River Protection
P. O. Box 450, MS H6-60
Richland, WA 99352

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP code)
Bechtel National, Inc.
2435 Stevens Center Place
Richland, WA 99354

9A. AMENDMENT OF SOLICITATION NO. _____
 9B. DATED (SEE ITEM 11) _____

10A. MODIFICATION OF CONTRACT/ ORDER NO. **DE-AC27-01RV14136**
 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.
Clause I.82, FAR 52.243-2 Changes – Cost Reimbursement (AUG 1987) – Alternate III (APR 1984)

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).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO THE AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

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) _____ 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
Ronald E. Cone Jr.
Contracting Officer

15B. CONTRACTOR/OFFEROR _____ 15C. DATE SIGNED _____ 16B. UNITED STATES OF AMERICA
 BY  16C. DATE SIGNED **11-7-2016**
 (Signature of person authorized to sign) (Signature of Contracting Officer)

Purpose of Modification:

The purpose of this modification is to make the following changes:

1. Section C, *Statement of Work, Standard: 3 Design*, is revised to authorize development and implementation for the engineering redraft process.

This change is based on direction from R.L. Dawson, ORP, to L. W. Baker, BNI, "ORP Concurrence on CO₂ Safety Strategy Summary Document (SSSD)," dated October 11, 2016. And letter from R. L. Dawson and K. W. Smith, ORP, to M. G. McCullough, BNI, "Upgraded Safety Analysis Direction," 15-NSD-0017, dated June 29, 2015.

2. The Contractor is directed to proceed with the work scope in Section C, *Statement of Work, Standard 3: Design*, and paragraph (c) (22). The contractor is authorized to incur costs up to a not-to-exceed (NTE) value of \$199,785 consistent with the other contract terms and conditions and pending definitization of this change.
3. BNI shall submit within 45 days of date of this modification a detailed technical and price proposal. Negotiations will commence within 90 days of the date of this change order. A bi-lateral modification definitizing this change order shall be executed as soon as possible after the date of the change order, not to exceed 180 days.
4. If the anticipated proposed costs are expected to exceed \$750,000 for this change the Contractor shall provide change order accounting in accordance with Clause I.83, FAR 52.243-6, Change Order Accounting (APR 1984).
5. This modification does not add additional funds to the contract. Accordingly, work under the contract, such as that described herein, must be performed within the amount of funds which have been incrementally allotted to the contract in accordance with clause B.3, *Obligation and Availability of Funds and Contract Value*, and clause I.66, FAR 52.232-22 Limitation of Funds (Apr 1984).

Modification Description

1. Section C, *Statement of Work, Standard 3: Design*, (c) is revised to incorporate the following language:
 - (22) Develop an engineering redraft process that would apply to already procured Systems, Structures, and Components (SSCs) as non-Safety to be reclassified as Safety Significant. At a minimum, the engineering redraft process should: (381)
 - (i) Define and evaluate the change in functional classification of the SSCs as it relates to technical requirements,
 - (ii) Determine the adequacy of the SSCs to meet the changed requirements

- (iii) and the proposed safety functions, and Identify any actions to be taken, such as additional testing or inspections, to provide reasonable assurance that the SSCs will reliably provide the proposed safety functions.

2. A Not-to-Exceed value of \$199,785 is hereby established. As a result, the table in Section B, *Supplies or Services and Prices/Costs*, 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) is increased by \$199,785 from \$10,885,739,529 to \$10,885,939,314.
- The revised Total Estimated Contract Cost (TECC) is increased by \$199,785 from \$10,928,308,085 to \$10,928,507,870.
- The Total Estimated Contract Price (TECP) is increased by \$199,785 from \$11,523,606,625 to \$11,523,806,410.

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 (a), is deleted in its entirety and replaced in full as follows:

Cost:

A	Total Estimated Contract Cost (TECC) through Mod 381		<u>\$10,885,939,314</u>
B	Total Estimated Contract Cost (350)		
B.1	CLIN 2: DFLAW Facility Modifications (350)	TBD	
	SUB-CLIN 2.1: DFLAW Design (Target Cost)	\$75,000,000	\$42,568,556 *

Revised Total Estimated Contract Cost through Mod 381

\$10,928,507,870

Fee:

A	Final Fee Determination – Pre-Mod No. A143		\$102,622,325
B	Maximum Available Award Fee (See Table B-2-B-1)		\$105,676,215
B.1	Project Management Incentive	\$63,630,997	
B.2	Cost Incentive	\$36,647,560	
B.3	REA Settlement	\$5,397,658	
C	Schedule Incentive Fee		\$227,000,000
C.1	Activity Milestone Completion	\$173,000,000	
C.2	Facility Milestone Completion	\$54,000,000	
D	Operational Incentive Fee		\$91,000,000
D.1	Cold Commissioning	\$45,000,000	
D.2	Hot Commissioning	\$46,000,000	
E	Enhancement Incentive Fee		\$60,000,000
E.1	Enhanced Plant Capacity	\$15,000,000	
E.2	Sodium Reduction	\$15,000,000	

E.3	Enhanced Plant Turnover	\$15,000,000	
E.4	Sustained Production Achievement	\$15,000,000	
F	Performance-Based Incentive for DFLAW Design Completion (350)		\$9,000,000

Total Maximum Available Fee (346) (350) (369)	<u>\$595,298,540</u>
Total Estimated Contract Price (TECP) (381)	<u>\$11,523,806,410</u>

* Sub-CLIN 2.1 DFLAW (Target Cost) amount decreased by total amount of Change Orders 329, 330 & 339 (\$32,431,444) definitized in Modification 350. \$75,000,000 - \$32,431,444 = \$42,568,556.

4. Contract Section J, *List of Attachments*, Attachment J, *Advance Understanding on Costs*, Table 13-B, *Not-to-Exceeds Not Included in Modification No. A143 Definitization (M155)*, is deleted in its entirety and replaced in full as follows:

13-B. Not-To-Exceeds Not Included in Modification No. A143 Definitization (M155)		
DOCUMENT ID.	TITLE	DEFINITIZATION MODIFICATION NO.
BCP-24590-06-02279	Expansion of DWP Requirements (permit Modifications) (M122) (M130)	A193
ORP 08-NSD-011 (05/20/08) (CCN 179512) TN 24590-06-03487	ORP Direction to Implement New Preliminary Safety Analysis Report (PSAR) Updates (M136)	A164
ORP 08-NSD-057 (10/09/08) (CCN 188218) TN 24590-06-03752	Direction to Implement New Safety Classification Process for the Waste Treatment and Immobilization Plant (WTP) (M141)	276
ORP 08-NSD-059 (10/15/08) (CCN 188217) TN 24590-06-03753	Direction to Implement New Justification for Continued Design, Procurement, and Installation (JCDPI) (M152)	A164
Modification M090 & 09-AMD-205 (07/18/08) (CCN 202423) TN 24590-06-02145 & -02381	Direction to Implement DOE 205.1A, Cyber Security Management Program (M155)	217
Modification M154 TN 24590-06-04133	Direction to Implement Pretreatment Engineering Platform (PEP) dry layup (M155)	A167
Modification M196 BCP 24590-06-04489	Direction to Implement Multiple Operational Readiness Strategy (218)	282

BCP 24590-06-04784 BCP 24590-06-05085		
Modification M196 BCP 24590-06-04853 ORP 10-AMD-139 (05/06/10; CCN 218244)	Direction to Implement CXP Equipment Option (218)	317
Modification 221 ORP 11-WTP-219 (06/17/11; CCN 236247); Modification 247 ORP 11-WTP-437 (12/01/11; CCN 242351); Modification 264 ORP 12-WTP-0109 (03/15/12; CCN 245985); Modification 286 ORP 12-WTP-317 (09/24/12)	Direction to Proceed with Large Scale Testing (MOD 221, MOD 247, MOD 264, MOD 286)	299 - Partial
Modification 273	Direction to participate in the Hanford Site Organizational Climate and Safety Conscious Work Environment (SCWE) Survey	290
Modification 245 ORP 11-WTP-429	Direction to proceed with the implementation of DOE Order (O) 420.1B, <i>Facility Safety</i> , Chapter V, <i>Systems Engineer Program</i> . (245)	276
Modification 300 ORP 13-CPM-0099 (05/06/13); Mod 304 ORP 13-CPM-0133 (06/05/13); Modification 313 ORP 13-CPM-0299 (11/25/13)	Direction to Proceed with Full Scale Vessel Testing Program in lieu of the existing Computational Fluid Dynamics and Large Scale Vessel testing Program as a Design Verification Tool (300, 304, 313)	
Modification 329 ORP 14-CPM-0172	Direction to proceed with Section C, Statement of Work, Standard 3 Design, paragraph (i) Design of BOF Utility Modifications	350
Modification 330 ORP 14-CPM-0181	Direction to proceed with Section C, Statement of Work, Standard 3 Design, paragraph (j) Design of BOF Effluent Management Facility	350
Modification 334 ORP 14-CPM-0228, ORP 15-CPM-0300 (358) 16-CPM-0088 (372)	Direction to proceed with Pretreatment Facility vessel mixing design verification.	
Modification 339 ORP 15-CPM-0008	Direction to proceed with Section C, Statement of Work, Standard 3 Design, paragraph (k) Design of Balance of Facilities Underground and Site-Wide Modifications necessary to support the Direct Feed of LAW	350

	(DFLAW)	
Modification 342 ORP 15-CPM-0064, ORP 16-CPM 0012 (364)	Direction to proceed with the implementation of DOE Order (O) 433.1B, Maintenance Management Program for DOE Facilities and DOE/RL-92-36, Hoisting and Rigging Manual. (342)	
Modification 344 ORP 15-CPM-0092	Direction to proceed with initiation of procurement of BOF modifications and LAW Valve Vault materials to support DFLAW; add Interface Control Documents 30 and 31	
Modification 348 ORP 15-CPM-0128	Direction to proceed with initiation of BOF isolation construction to support DFLAW	
Modification 349 ORP 15-CPM-0136	Direction to proceed with the implementation of DOE Order (O) 414.1D, CRD, Chg. 1, Quality Assurance. (349)	
Modification 354 ORP 15-CPM-0195, ORP 16-CPM-0154 (380)	Direction to proceed with procurement of Effluent Management Facility (EMF) equipment and effluent transfer lines and limited EMF construction (354)	
Modification 371 ORP-CPM-0085	Conduct supplementary analysis of vessels RLD-VSL-00007 and RLD-VSL-00008 beyond the WTP Code of Record and modify the RLD-VSL-00007 and RLD-VSL-00008 vessel design.	
Modification 375 ORP-CPM-0111	Update the Natural Phenomena Hazards (NPH) Assessment by generating a revised site-specific response analysis and design response spectra for WTP incorporating Hanford site-wide Probabilistic Seismic Hazard Analysis (PSHA) report from PNNL, dated November 21, 2014. (375)	
Modification 381 ORP-16-CPM-0155 (381)	Authorization to proceed with the development of an engineering redraft process for Standard 3: Design (c) (22).	

5. All other terms and conditions remain unchanged.

(End of Modification)