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| 2. AMENDMENT/MODIFICATION NO. 344 | 3. EFFECTIVE DATE (M/D/Y) See Block 16C | 4. REQUISITION/PURCHASE REQ. NO. |
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|-------------------|--|
| 6. ISSUED BY CODE | 7. ADMINISTERED BY (If other than Item 6) CODE |
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**U.S. Department of Energy
Office of River Protection
P. O. Box 450, MS H6-60
Richland, WA 99352**

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| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP code) | 9A. AMENDMENT OF SOLICITATION NO. |
|---|-----------------------------------|

**Bechtel National, Inc.
2435 Stevens Center Place
Richland, WA 99354**

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| <input type="checkbox"/> | 9B. DATED (SEE ITEM 11) |
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| <input checked="" type="checkbox"/> | 10A. MODIFICATION OF CONTRACT/ ORDER NO. DE-AC27-01RV14136 |
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| <input checked="" type="checkbox"/> | 10B. DATED (SEE ITEM 13) December 11, 2000 |
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| CODE 396A5 | FACILITY CODE 153392068 | |
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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.**

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| 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) |
| <input checked="" 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 type="checkbox"/> | D. OTHER (Specify type of modification and authority) |

E. IMPORTANT: Contractor is not, is required to sign this document and return ___ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation contract subject matter where feasible.)

Reference Continuation 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.

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| 15A. NAME AND TITLE OF SIGNER (Type or print) | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) George F. Champlain Contracting Officer |
| 15B. CONTRACTOR/OFFEROR | 16B. UNITED STATES OF AMERICA |
| 15C. DATE SIGNED | 16C. DATE SIGNED |
| _____ (Signature of person authorized to sign) | BY George F. Champlain (Signature of Contracting Officer) 30 March 2015 |

Modification Purpose:

1. The purpose of this modification is to issue a change order as follows:
 - a. Section C, *Statement of Work*, is revised to initiate procurement of the Balance of Facilities (BOF) modifications and LAW Valve Vault materials to support Direct Feed of LAW (DFLAW) in the contract and add Interface Control Documents.
 - b. The Contractor is directed to proceed with the workscope in Section C, *Statement of Work, Standard 4 Construction, Procurement, and Acceptance Testing*, paragraph (k) specified in the Modification Description below. The Contractor is directed to begin work immediately. The Contractor is authorized to incur costs up to a not-to-exceed (NTE) value of \$5,119,000 consistent with the other contract terms and conditions and pending definitization of this change.
2. The Contractor shall provide change order accounting in accordance with Clause I.83, FAR 52.243-6, Change Order Accounting (APR 1984).
3. 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.2, *Obligation and Availability of Funds and Contract Value*, and clause I.66, FAR 52.232-22 Limitation of Funds (Apr 1984).

Modification Definitization:

This Change Order will be definitized during negotiations of CLINs 2.2 and 2.3, estimated to be December 31, 2015. BNI shall submit the proposal for this Change Order with the proposal for CLINs 2.2 and 2.3, no-later-than June 30, 2015.

Modification Description:

1. Section C, *Statement of Work, Standard 4 Construction, Procurement, and Acceptance Testing*, is revised to incorporate the following language:

(k) Procurement of BOF Utility Modifications and LAW Valve Vault Materials:

The current BOF Utility Facilities are designed for full WTP Operation, therefore modification of these facilities will be required to support reduced throughput during DFLAW operation. Procurements based upon design modifications shall include; mechanical isolations, piping modifications for extended layup, piping modifications for secondary headers with additional pumps, and new major pieces of equipment such as air compressors.

The LAW Valve Vault provides isolation features that allow routing alignment for receiving waste and for transferring effluents in the DFLAW piping configuration or the PT facility configuration. The Valve Vault shall provide: safe personnel access to the isolation features, secondary containment of leaks and leak detection, sloped to a sump equipped with a sump pump for removal of liquid, sealed or covered to prevent intrusion of rain water, and designed for seismic events.

2. Section C, *Statement of Work, C.9 Interface Control Documents (a)(2)*, is revised to incorporate the following post-award ICDs:

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| ICD 30 | Direct LAW Feed |
| ICD 31 | DF LAW Radioactive, Dangerous Liquid Effluents |

3. A Not-to-Exceed value of \$5,119,000 is hereby established. As a result, the table in Section B, *Supplies or Services and Prices/Costs*, Section B.2, *Obligation and Availability of Funds and Contract Value*, paragraph (c) is revised as follows:

- The Total Estimated Contract Cost (TECC) is increased by \$5,119,000, from \$10,783,664,144 to \$10,788,783,144.
- The Total Estimated Contract Price (TECP) is increased by \$5,119,000, from \$11,378,787,684 to \$11,383,906,684.

The table in Section B, *Supplies or Services and Prices/Costs*, Section B.2, *Obligation and Availability of Funds and Contract Value*, paragraph (c) is deleted in its entirety and replaced in full as follows:

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|--------------|---|--|-------------|----------------|--------------------------|
| Cost: | | | | | |
| | | Total Estimated Contract Cost (TECC) (344) | | | \$ 10,788,783,144 |
| Fee: | | | | | |
| A | Final Fee Determination - Pre-Mod No. A143 | | | \$ 102,622,325 | |
| B | Maximum Available Award Fee (See Table B-2-B-1) | | | \$ 114,501,215 | |
| B.1 | Project Management Incentive | \$ | 55,374,797 | | |
| B.2 | Cost Incentive | \$ | 53,728,760 | | |
| 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 | | |
| | | Total Maximum Available Fee | | | \$ 595,123,540 |
| | | Total Estimated Contract Price (TECP) (344) | | | \$ 11,383,906,684 |

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) | | |
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| 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) | Direction to Implement New Safety Classification Process for the Waste Treatment and Immobilization Plant (WTP) (M141) | 276 |

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| TN 24590-06-03752 | | |
| 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 BCP 24590-06-04784 BCP 24590-06-05085 | Direction to Implement Multiple Operational Readiness Strategy (218) | 282 |
| 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, Chapter V, Systems Engineer Program.</i> (245) | 276 |
| Modification 300 ORP 13-CPM-0099 (05/06/13); Mod 304 ORP 13-CPM-0133 (06/05/13); | 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) | |

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| Modification 313 ORP 13-CPM-0299 (11/25/13) | | |
| 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 | |
| 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 | |
| Modification 334 ORP 14-CPM-0228 | 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 (DFLAW) | |
| Modification 342 ORP 15-CPM-0064 | 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 | |

5. All other terms and conditions remain unchanged.

(End of Modification)