

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE 1 OF 16 PAGES	
2. AMENDMENT/MODIFICATION NO. 476		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.	
				9B. DATED (SEE ITEM 11)	
		<input checked="" type="checkbox"/>		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.**


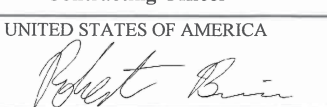
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
<input type="checkbox"/>	
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO AUTHORITY OF FAR 43.103(b).
<input checked="" type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO THE AUTHORITY OF: FAR 43.103 Types of Contract Modifications (a) Bilateral - Mutual Agreement of the Parties
<input type="checkbox"/>	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.)

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.

15A. NAME AND TITLE OF SIGNER (Type or print) Valerie McCain Project Director		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Robert Burrier Contracting Officer	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED 03 Mar 2010	16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)	16C. DATE SIGNED 3-4-2020

Purpose of Modification:

The purpose of this modification is to update Section B, *Supplies or Services and Prices/Costs*, Section I, *Contract Clauses*, and Section J, *List of Attachments*, as follows:

- Replace table in Section B, *Supplies or Services and Prices/Costs*, Attachment B-1 to update REA Fee Post Mod 384 amount and Total Fee Earned.
- Update Section I, *Contract Clauses*, to add Clause I.121 FAR 52.203-13 Contractor Code of Business Ethics and Conduct and add “End of Clause” language to I.120.
- Update and replace table in Section J, *List of Attachments*, Attachment E, *List of Applicable Directives*, paragraph (b) to make the following changes
 - Delete reference in Note 3 for DOE O 221.1B, CRD. This CRD has applicability requirements listed in document.
 - Add OOD-ORP-PPD-OAA-50136, Appendix C to replace CRD O 232.2A (Supplemented Rev. 0) and SCRD DOE Order 232.2A. This new requirement lessens administrative burden and reduces reportability.
 - Update date for DOE O 433.1B, CRD Admin Chg 1 to 03/12/13.
 - Update DOE/RL 92-36 to Rev 1, Release 84 and delete reference to Note 13.
- Update and replace table in Section J, *List of Attachments*, Attachment F, *Key Personnel*.
- Update training on overtime language in Section J, *List of Attachments*, Attachment J, *Advance Understanding on Costs*, to remove Time Period requirement as approved under Revised Deviation Request signed by DOE Head of Contracting Activity on 12 December 2019.

Description of Modification:

1. The table in Attachment B-1 in Section B, *Supplies or Services and Prices/Costs*, is deleted in its entirety and replaced in full as follows:

Incentive Element	Title	Fee type	Performance Measure	Amount of Fee Available	Amount Paid
B-2-A	Final Fee Determination for work prior to Mod No. A 143	Fixed	Determined by Contracting Officer		\$102,622,325
B-2-B	Earned Activity Milestone Completion Incentive Fees, REA Settlement Fees, Enhanced Incentive Fee, Earned Facility Milestone Completion Schedule Fee, and Award Fee earned before mod (384)	Fixed	Determined by Contracting Officer		* \$131,573,553
	Pending Activity Milestones	Fixed	Determined by Contracting Officer	\$0	\$6,667,000
B-2-C	Fixed Fee Payment	Fixed		\$0	\$60,000,000
			TOTAL B-2-C	\$0	\$300,862,878
B-2-D	Award Fee (From Mod (384) to December 2022).	Award Fee	To be established prior to each calendar year. Will be based upon DOE goals set for HLW and PT and Project Management.		

			CY2016	\$0	\$7,242,000
			CY2017	\$0	\$3,805,961
			CY2018	\$0	\$3,767,815
			CY2019	\$7,872,603	
			CY2020	\$7,872,603	
			CY2021	\$7,872,603	
			CY2022	\$7,872,605	
			Total B-2-D	\$31,490,014	\$14,815,776
			Interim Milestones		
		PBI	Install Caustic Scrubber Vessel Milestone	\$0	\$4,275,000
		PBI	Complete Final Assembly of Melter Lid #1 Milestone	\$0	\$4,275,000
		PBI	Complete Final Assembly of Melter Lid #2 Milestone	\$0	\$4,275,000
		PBI	Complete LAW Bulk Cable EL+ 48 Milestone	\$0	\$4,275,000
			Final Milestone		
		PBI	Final LBL Physical Plant Complete Milestone	\$51,300,000	
			TOTAL B-2-E	\$51,300,000	\$17,100,000
			Interim Milestones		
		PBI	Approval of LAW DSA	\$0	\$6,650,000
		PBI	LAB Startup Testing Complete	\$6,650,000	
		PBI	LAW Startup Testing Complete	\$6,650,000	
		PBI	EMF Startup Testing Complete	\$6,650,000	
		PBI	LAB Readiness to Operate	\$6,650,000	
		PBI	LAW DOE HQ ORR Complete	\$6,650,000	
			Final Milestone		
		PBI	Successful Demonstration of Hot Commissioning	\$119,700,000	
	Commission LBL in the DFLAW Configuration Performance Based Schedule Incentive/disincentive		Based upon actual completion date of Successful Demonstration of Hot Commissioning	+/- \$60,000,000	
			TOTAL B-2-F	\$152,950,000	\$6,650,000
	CLIN 1.0 Cost Share Incentives	IF	Cost sharing incentive/disincentive based on final CLIN 1 cost above or below the Target cost as defined in Attachment B-2-G	+/- \$50,000,000	
	DFLAW design completion	PBI	Complete the constructability review milestone	\$0	\$500,000
		PBI	Prepare and issue DFLAW EMF safety basis change package	\$0	\$500,000
	Cost Share incentive for CLIN 2.1	IF	DOE and the contractor will share cost on CLIN 2.1 final total cost at above or below the Target Cost of \$75M in the ratio of 80% DOE and 20% Contractor. Subject to the maximum combined fee limitation of \$9,000,000.	\$8,000,000	
			TOTAL B-2-H	\$8,000,000	\$1,000,000
	REA Fee Post Mod 384 (476)	FF	Fixed Fee payment for REAs Negotiated	\$0	\$605,580
			TOTAL FEE AVAILABLE	\$243,740,414	
			TOTAL FEE EARNED (476)		\$341,034,234

2. Section I, *Contract Clauses*, Table of Contents is updated to add Contract Clause I.121, FAR 52.203-13 Contractor Code of Business Ethics and Conduct. The end of Contract Clause I.120 and I.121 is added as follows:

(End of Clause)

I.121 FAR 52.203-13 Contractor Code of Business Ethics and Conduct (OCT 2015) (476)

(a) *Definitions. As used in this clause-*

“Agent” means any individual, including a director, an officer, an employee, or an independent Contractor, authorized to act on behalf of the organization.

“Full cooperation”-

- (1) Means disclosure to the Government of the information sufficient for law enforcement to identify the nature and extent of the offense and the individuals responsible for the conduct. It includes providing timely and complete response to Government auditors’ and investigators’ request for documents and access to employees with information;
- (2) Does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not require-
 - (i) A Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine; or
 - (ii) Any officer, director, owner, or employee of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; and
- (3) Does not restrict a Contractor from-
 - (i) Conducting an internal investigation; or
 - (ii) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

“Principal” means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (*e.g.*, general manager; plant manager; head of a division or business segment; and similar positions).

“Subcontract” means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

“Subcontractor” means any supplier, distributor, vendor, or firm that furnished supplies or services to or for a prime contractor or another subcontractor.

“United States,” means the 50 States, the District of Columbia, and outlying areas.

(b) *Code of business ethics and conduct.*

- (1) Within 30 days after contract award, unless the Contracting Officer establishes a longer time period, the Contractor shall-
 - (i) Have a written code of business ethics and conduct; and

- (ii) Make a copy of the code available to each employee engaged in performance of the contract.

(2) *The Contractor shall-*

- (i) Exercise due diligence to prevent and detect criminal conduct; and
- (ii) Otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.

(3)

- (i) The Contractor shall timely disclose, in writing, to the agency Office of the Inspector General (OIG), with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of this contract or any subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed-
 - (A) A violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 of the United States Code; or
 - (B) A violation of the civil False Claims Act (31 U.S.C. 3729-3733).
- (ii) The Government, to the extent permitted by law and regulation, will safeguard and treat information obtained pursuant to the Contractor's disclosure as confidential where the information has been marked "confidential" or "proprietary" by the company. To the extent permitted by law and regulation, such information will not be released by the Government to the public pursuant to a Freedom of Information Act request, 5 U.S.C. Section 552, without prior notification to the Contractor. The Government may transfer documents provided by the Contractor to any department or agency within the Executive Branch if the information relates to matters within the organization's jurisdiction.
- (iii) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the Contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract.

- (c) Business ethics awareness and compliance program and internal control system. This paragraph (c) does not apply if the Contractor has represented itself as a small business concern pursuant to the award of this contract or if this contract is for the acquisition of a commercial item as defined at FAR 2.101. The Contractor shall establish the following within 90 days after contract award, unless the Contracting Officer establishes a longer time period:
- (1) An ongoing business ethics awareness and compliance program.
 - (i) This program shall include reasonable steps to communicate periodically and in a practical manner the Contractor's standards and procedures and other aspects of the Contractor's business ethics awareness and compliance program and internal control system, by conducting effective training programs and otherwise disseminating information appropriate to an individual's respective roles and responsibilities.
 - (ii) The training conducted under this program shall be provided to the Contractor's principals and employees, and as appropriate, the Contractor's agents and subcontractors.
 - (2) An internal control system.
 - (i) The Contractor's internal control system shall-
 - (A) Establish standards and procedures to facilitate timely discovery of improper conduct in connection with Government contracts; and
 - (B) Ensure corrective measures are promptly instituted and carried out.
 - (ii) At a minimum, the Contractor's internal control system shall provide for the following:
 - (A) Assignment of responsibility at a sufficiently high level and adequate resources to ensure effectiveness of the business ethics awareness and compliance program and internal control system.
 - (B) Reasonable efforts not to include an individual as a principal, whom due diligence would have exposed as having engaged in conduct that is in conflict with the Contractor's code of business ethics and conduct.

- (C) Periodic reviews of company business practices, procedures, policies, and internal controls for compliance with the Contractor's code of business ethics and conduct and the special requirements of Government contracting, including-
 - (1) Monitoring and auditing to detect criminal conduct;
 - (2) Periodic evaluation of the effectiveness of the business ethics awareness and compliance program and internal control system, especially if criminal conduct has been detected; and
 - (3) Periodic assessment of the risk of criminal conduct, with appropriate steps to design, implement, or modify the business ethics awareness and compliance program and the internal control system as necessary to reduce the risk of criminal conduct identified through this process.
- (D) An internal reporting mechanism, such as a hotline, which allows for anonymity or confidentiality, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.
- (E) Disciplinary action for improper conduct or for failing to take reasonable steps to prevent or detect improper conduct.
- (F) Timely disclosure, in writing, to the agency OIG, with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of any Government contract performed by the Contractor or a subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed a violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 U.S.C. or a violation of the civil False Claims Act (31 U.S .C. 3729-3733).
 - (1) If a violation relates to more than one Government contract, the Contractor may make the disclosure to the agency OIG and Contracting Officer responsible for the largest dollar value contract impacted by the violation.

(2) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract, and the respective agencies' contracting officers.

(3) The disclosure requirement for an individual contract continues until at least 3 years after final payment on the contract.

(4) The Government will safeguard such disclosures in accordance with paragraph (b)(3)(ii) of this clause.

(G) Full cooperation with any Government agencies responsible for audits, investigations, or corrective actions.

(d) *Subcontracts.*

(1) The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts that have a value in excess of \$5.5 million and a performance period of more than 120 days.

(2) In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

(End of clause)

3. The table in paragraph (b) in Section J, *List of Attachments*, Attachment E, *List of Applicable Directives*, is deleted in its entirety and replaced in full as follows:

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
06-AMD-050 (CCN 144548)		DELETED (310)	
		Deleted (376)	
DOE/EM-0093	12/96	Waste Acceptance Product Specifications for Vitrified High-Level Waste Forms (WAPS), Revision 2 (114)	Contract Clause C.8, Specification 1, 1.2.1.4 and 1.2.2.1.1(175)

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE/RL-94-02, Rev 6 (336)	06/2014 (336)	Hanford Emergency Management Plan (197, 310) (Revision 6, June 2014) (336)	Contract Clause C.6, Standard 4(j) and Standard(e)(1) Table S7-1 (175, 197, 336)
DOE M 140.1-1B, CRD	03/30/01	Interface with Defense Nuclear Facilities Safety Board.	Contract Clause C.4 (d) (175)
DOE O 142.3A, CRD	10/14/10	Unclassified Foreign Visits and Assignments Program (047, 124, 204)	The order is effective regardless of comment above at (b) (175)
DOE O 205.1B, Change 1, CRD	12/07/12	Cyber Security Program (387)	Effective with Modification No. 384 and implemented in accordance with CCN: 266220 (14-WTP-0011), Attachment 1, "CRD 205.1B, Chg 2 (Supplemented Rev. 0)" and CCN: 267962 (14-WTP-0051). (387) .
DOE M 205.1-2		DELETED (175)	
DOE M 205.1-5, CRD		DELETED (194)	
DOE M 205.1-6, CRD		DELETED (194)	
DOE M 205.1-7, CRD		DELETED (194)	
DOE M 205.1-8, CRD		DELETED (194)	
DOE O 206.1, CRD	01/16/09	DOE Privacy Program (235)	The order is effective regardless of comment above at (b). Contractor shall implement in accordance with CCN: 231161 (321)
DOE O 206.2, CRD, Supplemented Rev. 1 (425)	02/19/13	Identity, Credential, and Access Management (307)	The order is effective regardless of comment above at (b) (307)
DOE O 210.2A, CRD	04/8/11	DOE Corporate Operating Experience Program (077, 310)	Contract Clause H.49 (175) Refer to Note 10 (310)
DOE O 221.1A, CRD		DELETED (467)	
DOE O 221.1B, CRD	09/27/16	Reporting Fraud, Waste and Abuse to the Office of Inspector General (467)	Refer to Note 3 (467)
DOE O 221.2A, CRD	02/25/08	Cooperation with the Office of Inspector General (133)	Refer to Note 3 (175)
DOE O 226.1B, CRD	04/25/11	Implementation of Department of Energy Oversight Policy (069, 108, 310)	Contract Clause H.46 (175) Refer to Note 11 (310)

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE O 231.1B, CRD (363)	6/27/2011	Environment, Safety, and Health Reporting (033, 310)	Contract Clause C.6, Standard 1(d)(6) (175, 310)
DOE M 231.1-1A, Change 2, CRD		DELETED (332)	
DOE M 231.1-2, CRD		DELETED (256)	
SCRD M 231.1-2		DELETED (256)	
DOE Order 232.2A, CRD (406)	9/29/2017	Occurrence Reporting and Processing of Operations Information (406)	Contract Clause C.6, Standard 1(d)(5) and (6). (406)
OOD-ORP-PPD-OAA-50136, Appendix C (476)	07/22/2019	Facility Representative Contractor Requirements Document (476)	
CRD O 232.2A (Supplemented Rev.0)(406)	9/29/2017	Environmental Mangement Contractor Requirements Document (Supplemented DOE O 232.2A), Occurrence Reporting and Process of Operations Information (406) DELETED (476)	Contract Clause C.6, Standard 1(d)(5) and (6). (406)
SCRD DOE Order 232.2A (406)	9/29/2017	ORP Supplemental Contractor Requirements Document (SCRD), for DOE Order 232.2A, Occurrence Reporting and Processing of Operations Information (406) DELETED (476)	Contract Clause C.6, Standard 1(d)(5) and (6). (406)
HFID 232-1B		DELETED (256)	
DOE N 234.1, CRD		DELETED (310)	
DOE O 241.1, CRD		DELETED (310)	
DOE/RW-0333P	10/01/08	Quality Assurance Requirements and Description for the Civilian Radioactive Waste Management Program (QARD) – Revision 20 (099, 134)	Contract Clause C.6, Standard 2(a)(2)(v), Standard 5(d), and Standard 7(e)(3)(ii)(A) and Contract Clause C.8, Specification 1, 1.2.1.7, 1.2.2.1.1, and 1.3 (175)
DOE O 350.1, Chg 3, CRD	02/23/10	Contractor Human Resource Management Program (171, 175)	Contract Clause H.37 (175)

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE/RW-0351	5/31/07	Waste Acceptance System Requirements Document– (WASRD) - Revision 5 (114)	Contract Clause C.6, Standard 2(a)(3)(vii)(E) and Standard 6(c)(2) and Contract Clause C.8, Specification 1, 1.2.1.3 and 1.2.2.1.1 (175)
DOE O 413.3A, CRD		DELETED (271)	
DOE M 413.3-1		DELETED (271)	
DOE O 413.3B, CRD	11/29/10	Program and Project Management for the Acquisition of Capital Assets. Refer to Note 7 for implementation (271)	Contract Clause C.3, paragraph (b), subparagraph (1), item (ix), C.6, Standard 1, opening paragraph, (a), (b)(3) and (c)(1) and Standard 5(a)(6) and (k)
DOE O 414.1C, CRD	06/17/05	Quality Assurance (066)	Contract Clause C.6, Standard 7(e)(3)(i) & (iv) (175)
DOE 414.1D, CRD, Chg 1	05/08/13	Quality Assurance (349)	The order is effective regardless of comment above at (b) and implemented in accordance with Note 14 (349)
DOE O 420.1C, CRD, Chg 1, Chapter V	02/27/15	Facility Safety (Partial Implementation Only Chapter V. Cognizant System Engineer Program) (369)	The order is effective regardless of comment above at (b) Implemented for LBL commissioning only in accordance with CCN: 276975
DOE O 422.1, Change 1, CRD	06/25/13	Conduct of Operations (207)(387)	Effective with Modification No. 384 and implemented in accordance with CCN: 276479. (387)
DOE-0223	Effective the date of Modification No. 384	RL Emergency Plan Implementing Procedures (384)	Implemented in accordance with 16-CPM-0072
DOE-0336	9/15/2011	Hanford Site Lockout/Tag out (384)	Implemented in accordance with 16-CPM-0072
DOE-0343	3/26/2013	Hanford Site Wide Stop Work Order Procedure (384)	Implemented in accordance with 16-CPM-0072
DOE-0346		Hanford Site Fall Protection Program (HSFPP) (384)	Implemented in accordance with 16-CPM-0072
DOE-0352	11/14/2012	Hanford Site Respiratory Protection Program (HSRPP) (384)	Implemented in accordance with 16-CPM-0072
DOE-0355		Hanford Standardized HAZWOPER Training Program Description (384)	Implemented in accordance with 16-CPM-0072
DOE-0359	11/14/2012	Hanford Site Electrical Safety Program (384)	Implemented in accordance with 16-CPM-0072
DOE-0360		Hanford Site Confined Space Procedure (384)	Implemented in accordance with 16-CPM-0072

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE O 425.1D, Chg 1, CRD	04/16/10	Verification of Readiness to Start Up or Restart Nuclear Facilities (033, 190, 310)	Contract Clause C.6, Standard 5(a)(5), (c)(6), (e)(2), (f)(ii), and (g) (175, 310) Contractor shall implement in accordance with CCN: 281821 (363)
DOE O 433.1B, CRD Admin Chg 1	04/21/10 03/12/13	Maintenance Management Program for DOE Nuclear Facilities (342)	This order is effective regardless of comment above at (b). (342, 387)
DOE O 435.1, Chg 1, CRD	08/28/01	Radioactive Waste Management	Implementation of this DOE CRD using the graded approach; approved by 05-WED-047; CCN: 136281 satisfies the comment above at (b) (130, 175, 278)
DOE M 435.1-1	07/09/99	Radioactive Waste Management Manual	Contract Clause C.8, Specification 2, 2.2.1.13, 2.2.2.23, & 2.4 (175)
DOE M 441.1-1, CRD	03/07/08	Nuclear Material Packaging	The manual is effective regardless of comment above at (b) (130, 175)
DOE O 442.2, Chg 1, CRD	10/05/16	Differing Opinions for Technical Issues Involving Environment, Safety, and Health (271, 440)	The order is effective regardless of comment above at (b) and implemented as described in CCN: 246747
DOE O 442.1A & Supplemented Rev. 3 CRD	06/06/01	Department of Energy Employee Concerns Program (029, 293)	The order is effective regardless of comment above at (b) (175) and implemented as described in CCN: 249676 (293) Contractor shall implement in accordance with CCN: 266683 (332)
DOE M 442.1-1 CRD		DELETED (271)	
DOE M 450.4-1, CRD		DELETED (310)	
DOE O 458.1, Chg. 2		Radiation Protection of the Public and the Environment (384)	Implemented in accordance with 16-CPM-0072
DOE M 470.4-1, CRD	08/26/05	Safeguards and Security Program Planning and Management (136, 171)	Refer to Note 1 (175)
DOE M 470.4-2A, CRD		DELETED (310)	
DOE M 470.4-4A	01/16/09	Information Security Manual (145)	Refer to Note 2 (175)

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE O 471.3, CRD	4/9/03	Identifying and Protecting Official Use Only Information (087)	Contract Clause H.50 (175)
DOE M 471.3-1, Chg 1, CRD	4/9/03	Manual for Identifying and Protecting Official Use Only Information (087, 310)	Contract Clause H.50 (175) Refer to Note 12 (310)
DOE O 475.1, CRD	12/10/04	Counterintelligence Program (071)	Contract Clause C.6, Standard 8(c) (175)
DOE/RW-0511, Volume I, Rev. 4	03/07/08	Integrated Interface Control Document (ICD), High-Level Radioactive Waste and U.S. Department of Energy and Naval Spent Nuclear Fuel to the Civilian Radioactive Waste Management System (114)	Contract Clause C.8, Specification 1,1.2.1.5 and 1.2.2.1.1 (321)
DOE O 551.1D, CRD	04/02/12	Official Foreign Travel. Refer to Note 4 (141, 175, 283)	Contract Clause I.109 (175) . Implemented in accordance with CCN: 243970, and 12-WTP-0272 (CCN: 251792) and Note 4 (283, 363)
DOE-HDBK-1092-2004, Appendix A	12/2004	DOE Electrical Safety Handbook. Refer to Note 6 (209)	The order is effective regardless of comment above at (b)
RL/REG-2000-04		DELETED (215)	
DOE/ORP-2000-06		Deleted through Contract Modification No. M082 (175)	
DOE STD 3009		DELETED (310)	
DOE O 5480.20A, Change 1, CRD		DELETED (310)	
SCSP	05/9/06	Richland Regional Office Site Counterintelligence Support Plan Hanford Site - Bechtel National, Inc. (BNI) (071)	Contract Clause C.6, Standard 8(c) (175)
DOE-0364		DELETED (366)	
HNF-EP-0063	02/01/11	Hanford Site Solid Waste Acceptance Criteria (310)	The order is effective regardless of comment above at (b)
DOE/RL-92-36 Rev 1, Release 84	11/18/14 03/04/20	Hanford Site Hoisting and Rigging Manual (342) (476)	The order is effective regardless of comment above at (b) and implemented in accordance with Note 13

DOCUMENT NUMBER	DATE	TITLE	CROSS REFERENCE
DOE/RL-2001-36, Rev 1E, Appendix I.7	05/01/11	Immobilized low-activity waste (ILAW) Special Packaging Authorization of the Hanford Sitewide Transportation Safety Document (310)	Implemented per C.8, Specification 2, 2.2.1.21 and 2.2.2.10 (293)
DOE/RL-2002-12		Hanford Radiological Health and Safety Document (384)	Implemented in accordance with 16-CPM-0072
DOE O 151.1C, CRD	11/02/05	Comprehensive Emergency Management System (310)	Implemented in accordance with DOE/RL-94-02
DOE O 473.3, CRD	06/29/11	Protection Program Operations (310)	The order is effective regardless of comment above at (b)
DOE O 426.2, CRD	04/21/10	Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities (310)	Contract Clause C.3(f)(6) (321) Refer to Note 8 (310)
DOE O 225.1B, CRD	03/04/11	Accident Investigations (310)	Refer to Note 9 (310)
DOE-STD-3009	1994	Preparation Guide for DOE Nonreactor Nuclear Facility Safety Analysis Reports (Change Notice 3, March 2006) (029, 152, 321)	Contract Clause C.6, Standard 9, paragraph 2 (321) DELETED (472)
DOE-STD-1228	2019	Preparation of Documented Safety Analysis for Hazard Category 3 Nuclear Facilities (472)	Contract Clause C.6, Standard 9, paragraph 2 (472)
DOE-HDBK-1092-2013, Appendix D	07/2013	DOE Electrical Safety Handbook. Refer to Note 15 (353)	The order is effective regardless of comment above at (b)
DOE-STD-1195	09/2016	Design of Safety Significant Safety Instrumented Systems Used at DOE Non-Reactor Nuclear Facilities (384)	Implement clause 11.4 (inclusive of subclauses 11.4.1 through 11.4.9) of International Electrotechnical Commission (IEC) standard 61511-1 (Edition 2.0) concurrent with DOE-STD-1195-2011 as a means of achieving Safety Integrity Level – 2 (SIL-2) for low demand simple Safety Instrumented Functions without requiring redundancy, particularly with respect to final control devices such as valves. (384)

4. In Section J, *List of Attachments*, Attachment E, *List of Applicable Directives*, Notes number 3 is deleted in its entirety and replaced in full as follows:

The Contractor shall implement DOE O 221.1, CRD and DOE O 221.2, CRD into all new subcontract awards beginning January 1, 2003, except for those acquisitions for commercial items and for any new acquisition awards under \$100,000. DOE O 221.1A, CRD and DOE O 221.2A, CRD shall be implemented into all new subcontract awards beginning October 1, 2008, ~~and DOE O 221.1B, CRD into all new subcontract awards beginning November 1, 2019~~ using the same criteria. Flow down of the requirements of these DOE order CRDs to subcontractors using these criteria meets the intent of ensuring compliance with the DOE order CRD requirements.

5. In Section J, *List of Attachments*, Attachment F, *Key Personnel*, the table is deleted in its entirety and replaced in full as follows:

Key Position (M110) (M130) (M133) (M147) (M152) (M158) (A164) (M181) (206) (208) (242) (261) (276) (291) (303) (308) (332) (336) (353) (366) (369) (376) (387) (391) (419) (425) (440) (457) (467) (476)	Current Employee
Project Director	Valerie McCain
Deputy Project Director	Felice Presti
Area Manager, Nuclear Safety	Alan Dobson
Manager of Safety & Health	Michael Zustra
Plant Manager & Nuclear Facility Manager	Kent Smith
Manager of Quality	James Tibble-Raj Jolly
Manager of Engineering and Design Authority	Ian Milgate
Manager of Project Controls and Business Services	Matt McCluskey
Site Director	Rick Holmes

6. In Section J, *List of Attachment*, Attachment J, *Advance Understanding on Costs*, paragraph 21 is revised as follows:

Deviation to FAR 31.205-44 Training and education activity. Costs incurred in connection with Training on Overtime with direct-feed low-activity waste (DFLAW) 24/7 Commissioning Personnel are allowable. This deviation is supported by BNI Business case included in CCN: 286030 and CCN: 315470, and the DOE Senior Procurement Executive revised approval with ~~three (3)~~ two (2) conditions:

- ~~Time Period: The time period covered is 36 months, beginning 6 months prior to the "Loss of Power" test.~~
- Designated Personnel: This approval applies only to those personnel, as described in the Contractor's revised business case (CCN: 292307) dated 21 September 2016, who are directly assigned to DFLAW, working 24/7 operations.

- Costs: The maximum costs for overtime compensation relating to training and education that is allowed is \$17.5M

Overtime costs for training of the Commissioning 24/7 personnel are considered allowable costs under the contract subject to other required tests of allowability under the contract, the *Federal Acquisition Regulation*, and the *Department of Energy Acquisition Regulation*. **(384) (476)**

7. All other terms and conditions remain unchanged.

(End of Modification)