

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES
			1 2
2. AMENDMENT/MODIFICATION NO. 0065	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. 18FE007974	5. PROJECT NO. (If applicable)
6. ISSUED BY SPRO U.S. Department of Energy SPRO 900 Commerce Road East US 492 New Orleans LA 70123	CODE 01601	7. ADMINISTERED BY (If other than Item 6) SPRO U.S. Department of Energy SPRO 900 Commerce Road East US 492 New Orleans LA 70123	CODE 01601
8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code) Fluor Federal Petroleum Operations, LLC Attn: Paul Avery 850 S Clearview Pkwy New Orleans LA 701233401		(X) 9A. AMENDMENT OF SOLICITATION NO.	
CODE 078490442 FACILITY CODE		9B. DATED (SEE ITEM 11)	
		X 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-FE0011020	
		10B. DATED (SEE ITEM 13) 09/18/2013	

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

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule Net Increase: \$13,664,275.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED 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.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: See Block 14
	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.)
Pursuant to the authority Clauses H.2 Modification Authority, H.21 Work Authorization Directives, I. 132 DEAR 970.5232-3 Obligation of Funds, and mutual-agreement of the parties, the following changes are incorporated.

A. Reference Section B, B.5 - Contract Value: The contract value is revised to include the estimated costs for the Life Extension 2 Program through March 31, 2019. The total contract value is increased by \$46,382,129.00 from \$941,694,261.00 to \$988,076,390.00 (See Section B attached).

B. Reference Section B, B.4 - Obligation of Funds: The amount of funding obligated under this contract is increased by \$13,152,000 (for Facilities) and \$512,275 (LE2) from
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect

15A. NAME AND TITLE OF SIGNER (Type or print) PAUL M. AVERY SR. CONTRACTS MANAGER	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Kelly M. Gele
15B. CONTRACTOR/OFFEROR <i>Paul M. Avery</i> (Signature of person authorized to sign)	16B. UNITED STATES OF AMERICA <i>Kelly M. Gele</i> (Signature of Contracting Officer)
15C. DATE SIGNED 5/17/2018	16C. DATE SIGNED 5/17/2018

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
DE-FE0011020/0065

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NAME OF OFFEROR OR CONTRACTOR
Fluor Federal Petroleum Operations, LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>\$932,111,020.60 to \$945,775,295.60. This provides incremental funding to cover estimated requirements through June of 2018.</p> <p>C. Reference Section J, Attachment B - Work Authorization Directives (WADs): The Fiscal Year 2018 WAD titled 'Life Extension 2 Program' Revision 1 for the period October 1, 2017 through September 30, 2018, dated May 16, 2018, is hereby incorporated into Section J, Attachment B (See attached WAD).</p> <p>Delivery Location Code: 01601 SPRO U.S. Department of Energy SPRO 900 Commerce Road East US 492 New Orleans LA 70123</p> <p>Payment: OR for SPRO U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 6017 Oak Ridge TN 37831</p> <p>FOB: Destination Period of Performance: 04/01/2014 to 03/31/2019</p>				

PART I - THE SCHEDULE

SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

PART I -THE SCHEDULE

SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

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SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 SERVICES BEING ACQUIRED

The Contractor shall, in accordance with the terms of this contract, provide the personnel, equipment, materials, supplies, and services (except as may be furnished by the Government) and otherwise do all things necessary for, or incident to managing and operating, in an efficient and effective manner, the Government-owned Strategic Petroleum Reserve (SPR), including operating and maintaining the facilities and related systems, located in Louisiana and Texas, as described in Section C, Performance Work Statement (PWS), or as may be directed by the Contracting Officer within the scope of this Contract.

B.2 TRANSITION COST AND TOTAL AVAILABLE AWARD FEE

(a) Transition Cost

The transition activities shall be conducted during the period specified in the clause in Section F entitled "Period of Performance" and shall be performed in accordance with the clause in Section H entitled "Transition Activities" on a cost-reimbursement basis, and no fee shall be paid for these activities. The estimated transition costs are \$1,714,103.

(b) Total Available Award Fee

- (1) The annual fee base is estimated in accordance with DEAR 970.1504-1, including estimated exclusions, adjustments, and classification factors. In the event the annual fee base deviates by more than plus or minus 15% for any fiscal year from the annual fee base set forth in Column B of the chart below, a new total available award fee for the fiscal year will be calculated by multiplying the maximum available fee for the revised annual fee base by the percentage set forth in Column D below.
- (2) All fee for this contract is performance based. There is no base fee for this contract. The Available Award Fee will be negotiated annually (or any other period as may be mutually agreed to between the parties) between the Contractor and the Government. The Available Award Fee will be equal to or less than the Total Available Award Fee offered set forth in Column E. The Available Award Fee shall be established considering the level of complexity, difficulty, cost effectiveness, and risk associated with specific objectives/incentives defined in the Performance Evaluation and Measurement Plan (PEMP). Higher or lower levels of complexity, difficulty, cost effectiveness, and risk will correspondingly allow a higher or lower available award fee. In the event the parties are unable to reach

agreement on the Available Award Fee amount, the Government reserves the right to unilaterally establish the Available Award Fee amount.

- (3) The total available award fee for the base period of the contract and the option period, if exercised, is shown below.

A	B	C	D	E
Fiscal Year	Annual Fee Base	Maximum Available Fee	Fee Percent	Total Available Award Fee
FY 2014 (6-months)	\$58,805,864	\$4,437,779	94.0	\$4,171,512
FY 2015	\$127,918,868	\$9,197,264	90.2	\$8,295,932
FY 2016	\$129,557,963	\$9,199,561	88.8	\$8,169,210
FY 2017	\$128,735,855	\$9,158,721	87.1	\$7,977,246
FY 2018	\$220,061,467	\$11,554,075	¹ 90.6	\$10,463,038
FY 2019	\$130,349,326	\$9,221,476	84.8	\$7,819,812
FY 2020	\$133,347,360	\$9,325,828	83.9	\$7,824,370
FY 2021	\$136,414,349	\$9,432,582	83.4	\$7,866,773
FY 2022	\$139,551,881	\$9,541,791	82.8	\$7,900,603
FY 2023	\$142,761,575	\$9,653,512	82.3	\$7,944,840
FY 2024 (6-months)	\$73,022,545	\$4,883,901	83.1	\$4,058,522

- (4) At the end of each performance period (fiscal year) specified above, there shall be no adjustment in the amount of total available award fee based on differences between the annual fee base and the actual fee base resulting from performance of the work. Total Available Award Fee is subject to adjustment only under the provisions of the clause in Section I entitled FAR 52.243-2 “Changes – Cost Reimbursement”; and, for the circumstances in Paragraph (1) above.

B.3 AVAILABILITY OF APPROPRIATED FUNDS

The duties and obligations of the Government hereunder calling for the expenditure of appropriate funds shall be subject to the availability of funds appropriated by the Congress, which the DOE may legally spend for such purchases.

B.4 OBLIGATION OF FUNDS

Pursuant to the Section I Clause DEAR 970.5232-4 entitled “Obligation of Funds,” the total amount obligated by the Government with respect to this contract is \$945,775,295.60.

¹ IAW agreed to LE 2 fee approach, 88.3% applied to Facilities maximum fee and 95% applied to LE 2 maximum fee.

B.5 SINGLE FEE

If the Contractor is part of a consortium, joint venture, and/or other teaming arrangement, as described in FAR Subpart 9.6, the team shall share in this contract fee structure. Separate additional subcontractor fee shall not be considered in an allowable cost under the contract if a subcontractor is a team member or, supplier, or lower-tier subcontractor is a wholly owned, majority owned, or affiliate of any team member, any fee or profit earned by such entity shall not be considered an allowable cost under this contract unless otherwise approved by the Contracting Officer.

The subcontractor fee restriction in the paragraph above does not apply to members of the Contractor’s team that are: (1) small business(es); (2) protégé firms as part of an approved mentor-protégé relationship; (3) subcontractors under a competitively awarded firm-fixed-unit-price subcontract; or (4) commercial items as defined in FAR Subpart 2.1, Definitions of Words and Terms.

B.6 CONTRACT VALUE

The contract value, consisting of the estimated costs and total available fee, by fiscal year (base period) is set forth below.

Fiscal Year	Estimated Costs	Available Award Fee	TOTAL
Transition Period (60 days) (02/01/14– 03/31/14)	¹ \$0	\$0	¹ \$0
FY 2014 (6 mos.)	\$62,336,127	\$3,428,152	² \$65,764,279
FY 2015	\$135,959,596	\$7,948,220	² \$143,907,816
FY 2016	\$152,347,025	\$7,503,419	² \$159,850,444
FY 2017	\$218,419,757	³ \$9,261,238	\$227,680,995
FY 2018	\$261,329,157	\$10,463,038	\$271,792,195
FY 2019 (6 mos.)	<u>\$115,170,755</u>	⁴ \$3,909,906	<u>\$119,080,661</u>
Option Period			
FY 2019 (6 mos.)	TBD	TBD	TBD
FY 2020	TBD	TBD	TBD
FY 2021	TBD	TBD	TBD
FY 2022	TBD	TBD	TBD
FY 2023	TBD	TBD	TBD
FY 2024 (6 mos.)	TBD	TBD	TBD
TOTAL Contract Value (Transition and Base Period)	\$945,562,417	\$42,513,973	\$988,076,390

B.7 CONTRACT TYPE

This is a Cost-Plus-Award-Fee Performance-Based Contract.

¹The Transition Period Costs of \$1,391,744 are included in the FY14 costs of \$62,336,127.

²Fiscal Year Total reflects actual costs and earned award fee.

³Negotiated Available Award Fee

⁴Represents Available Award Fee (not including LE 2) ceiling for each FY of the base period. Fee will be negotiated annually IAW Clause B.2.

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

TO


Fluor Federal Petroleum Operations, LLC

Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve

1. TITLE: Life Extension 2 Program

2. WORK AUTHORIZATION NO.: 2018-1.A 3. REVISION: 1

4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
ESTIMATED COSTS: \$82,174,887 FROM 10/01/17 TO 09/30/18

5. DOE CONTRACTING OFFICER: 
Sally Leingang

05/17/2018
Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization Directive

Life Extension 2 Program

I. DESCRIPTION OF WORK

The Life Extension 2 Program Work Authorization Directive (WAD) provides for the management, support, and execution of those activities leading up to and including projects to correct known electro-mechanical issues at the four Strategic Petroleum Reserve (SPR) storage sites. This WAD includes engineering, project planning, and integration in compliance with DOE Order 413.3B, Program and Project Management For The Acquisition of Capital Assets.

A. Planning

The Management and Operating (M&O) Contractor is responsible for the performance of the assigned Life Extension 2 tasks, as well as the effective coordination of other project participants. The basis for performance of the aforementioned tasks shall be the Critical Decision-1 (Approve Alternative Selection and Cost Range) and Critical Decision-3A (Approved Long Lead Procurement) documentation. New Scope identified in FY 2018 now includes drilling new wells into single well caverns at two SPR sites, and a monitoring well at Bayou Choctaw.

B. Execution

In accordance with the Tailoring Strategy contained in the Project Execution Plan for CD-1, the sub-projects comprising the Life Extension 2 Program will each be processed for approval of Critical Decision-2 (Approve Performance Baseline) and Critical Decision-3 (Approve Start of Construction or Execution). The approval of the sub-projects' CD-2/CD-3 is targeted to be accomplished in FY 2020. An additional CD-3A package is planned to be approved in FY 2018 for the Degasification Plant, slated for the Bayou Choctaw site. Earned Value Management System Certification for the Life Extension 2 Program will be required prior to the CD-3 approval phase. The value of the WAD is being increased to include DOE contingency baseline changes as of 4-20-2018.

The M&O Contractor shall perform the following activities:

1. Provide Project Management support to the DOE Federal Project Director, and perform an overall integration role.
2. Coordinate the efforts of other DOE Prime Contractors who may be engaged in Life Extension 2.
3. Commence mobilization and initiation of the Life Extension 2 Program.
4. Commence Preliminary Design, based on Conceptual Design Report of the CD-1 phase.
5. Commence procurement of Long-Lead or Mission Critical equipment, per the approved CD-3A plan.
6. Perform Laser Scanning of the SPR site to support engineering.
7. Upon completion of Preliminary Design, commence Detailed Engineering.
8. Commence development of Earned Value Management System.

II. DELIVERABLES

Deliverables for projects assigned to the M&O Contractor include the following:

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Project Status Report (includes cost and schedule status, safety performances, etc.) (E)	Monthly, and as required at each Quarterly Project Review
2. Interface Meeting Minutes (E)	Weekly or more as required
3. Provide support to the DOE Federal Project Director for monthly reporting in Project Assessment and Report System II as appropriate per DOE O 413.3 (E)	First business day of the month after close-out of previous month's reporting period
4. Life Extension 2 Project Review	Monthly, held on the second Thursday of each month to be scheduled per the schedule of the Project Manager
5. High level project update (E)	Weekly, by noon each Monday
6. Issue updated Project Execution Plan and all other CD-1 documentation (for Engineering phase) and associated planning and controls deliverables.	Within 120 days of project kick-off
7. Issue Contractor Assurance Matrix (CAS) (E)	May 31, 2018
8. Establish cloud environment	October 31, 2017
9. Complete Laser Scanning of all sites	December 31, 2017 (dependent on A-E start date of August 1, 2017)
10. Complete Intergraph CAD Implentation	November 30, 2017
11. Develop CD-1 Level Schedule for St. James Terminal	October 31, 2017
12. Finalize WBS with Condensed Work Packages, new work packages and St. James Terminal	October 31, 2017
13. Develop Earned Value System Description	September 30, 2018

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
14. Establish LE 2 Architect-Engineer's performance baseline (resource loaded schedule, with deliverables list and NTE effort-hour base) for: <ul style="list-style-type: none"> • St. James Terminal • Bayou Choctaw • West Hackberry • Big Hill • Bryan Mound 	October 31, 2017 (dependent on A-E start date of August 1, 2017)
15. Complete three (3) Title 1 Scopes	Per agreed upon A-E schedule milestone
16. Conduct 30% and 60% Design Model Reviews, with associated engineering deliverables	Per agreed upon A-E schedule milestone
17. Perform Process Hazards Analysis at 30% design phase, with updates as required at 60% and 90% phases	Per agreed upon A-E schedule milestone
18. Conduct 90% Design Model Reviews [dependent on sequencing in 2018], with associated engineering deliverables	Per agreed upon A-E schedule milestone
19. Issue Title 1 Estimates	Per agreed upon A-E schedule milestone
20. Issue 30% Estimates	Per agreed upon A-E schedule milestone
21. Complete Environmental Assessments	September 30, 2018
22. Update Project Execution Plan and other Critical Decision deliverables as needed	As Requested

III. PERFORMANCE MEASURES

WAD NUMBER: 2018-1.A

PERFORMANCE AREA: Technical Support and Management – Life Extension 2

FISCAL YEAR: 2018

CRITERIA	PERFORMANCE MEASURE	FY 2018 OUTPUT	
		TARGET	STRETCH
1. Cost Control - Ensure activities leading up to CD-2/CD-3 are performed in a cost-effective manner in accordance with initial baselines.	In the period up to CD-2/CD-3, the following are the major cost categories to be managed by the M&O Contractor: a. A-E scope for Title 1 and Title 2 services (measured in FY 2019). b. CD-3A procurement (measured in FY 2018). c. 3D CAD PLM Budget (measured in FY 2018).	90% of Active (at least 25% complete) or Completed Control Accounts with Cumulative Cost Performance Index (CPI) greater than or equal to 0.90 of the approved baseline budget.	90% of Active (at least 25% complete) or Completed Control Accounts with Cumulative Cost Performance Index (CPI) greater than or equal to 0.95 of the approved baseline budget.
2. Design Performance - Ensure effective management of A-E such that performance meets standards of industry leading A-E firms.	a. Design/Model Reviews (measured in both FY 2018 and FY 2019).	At least 80% completed within Design Management Plan (DMP) baseline schedule.	At least 90% completed within Design Management Plan (DMP) baseline schedule.
	b. Accuracy of Estimate (measured in FY 2020).	Within 15% of Independent Cost Estimate (ICE).	Within 7.5% of Independent Cost Estimate (ICE).

III. PERFORMANCE MEASURES

WAD NUMBER: 2018-1.A

PERFORMANCE AREA: Technical Support and Management – Life Extension 2

FISCAL YEAR: 2018

CRITERIA	PERFORMANCE MEASURE	FY 2018 OUTPUT	
		TARGET	STRETCH
3. Master LE2 Project Milestone Schedule - Ensure effective execution through management and control of project milestones.	a. Percentage of each fiscal year's Level 3 milestones that are completed in compliance with established Control Milestone Change Requests (CMCRs) [measured in both FY 2018 and FY 2019].	Complete at least 90% of all Level 3 milestones by the end of the fiscal year.	Complete at least 95% of all Level 3 milestones by the end of the fiscal year.
	b. Baseline Execution Index (BEI) [measured in both FY 2018 and FY 2019]. For avoidance of duplication, this measure will not include Milestones covered under 2.a. and 4. BEI is defined as activities completed divided by activities scheduled.	The BEI is greater than or equal to 80%.	The ratio of the total number of work package activities that actually complete on or before their baseline finish date. The BEI is greater than or equal to 90%.

III. PERFORMANCE MEASURES

WAD NUMBER: 2018-1.A

PERFORMANCE AREA: Technical Support and Management – Life Extension 2

FISCAL YEAR: 2018

CRITERIA	PERFORMANCE MEASURE	FY 2018 OUTPUT	
		TARGET	STRETCH
4. Critical Milestones – Ensure overall schedule compliance with critical milestones.	a. Completion of Laser Scans at 5 sites (measured in FY 2018).	January 31, 2018	December 31, 2017
	b. Definization of A-E Contract (measured in FY 2018).	December 15, 2017	November 15, 2017
	c. Complete all CD-2 documentation and submit to the FPD for approval (measured in FY 2019).	August 30, 2019 (BM, BC & BC) and November 30, 2019 (WH)	July 31, 2019 (BM, BH & BC) and October 31, 2019 (WH)
	d. Complete all CD-3 documentation and submit to the FPD for approval (measured in FY 2019).	August 30, 2019 (BM, BC & BC) and November 30, 2019 (WH)	July 31, 2019 (BM, BH & BC) and October 31, 2019 (WH)

IV. PERFORMANCE MEASURES

WAD NUMBER: 2018-1.A

PERFORMANCE AREA: Technical Support and Management – Life Extension 2

FISCAL YEAR: 2018

CRITERIA	PERFORMANCE MEASURE	FY 2018 OUTPUT	
		TARGET	STRETCH
4. Critical Milestones – continued	e. Achieve EVMS Certification (Measured in FY 2020).	Within 6 months from date of Outbrief Meeting of DOE-HQ’s EVMS Certification Team’s Onsite Visit, including documented governance and annual surveillance plans.	Within 4 months from date of Outbrief Meeting of DOE-HQ’s EVMS Certification Team’s Onsite Visit, including documented governance and annual surveillance plans.

V. PERFORMANCE MEASURES

WAD NUMBER: 2018-1.A

PERFORMANCE AREA: Technical Support and Management – Life Extension 2

FISCAL YEAR: 2018

CRITERIA	PERFORMANCE MEASURE	FY 2018 OUTPUT	
		TARGET	STRETCH
4. Critical Milestones – continued	f. Effective Management of Major Subcontractors (Measured in FY 2019).	Subcontractor’s Project Controls system is EVM-compliant for integration into FFPO’s validated Performance Baseline. 3 months prior to DOE-HQ Prime contractor EVMS certification commencement	Subcontractor’s Project Controls system is EVM-compliant for integration into FFPO’s validated Performance Baseline 6 months prior to DOE-HQ Prime contractor EVMS certification commencement. Certification Team for verification.
5. Safety in Design	Completed all milestone Process Hazard Analysis (measured in FY 2018).	Complete at least 80% of all Level 3 milestones by the end of the fiscal year.	Complete at least 90% of all Level 3 milestones by the end of the fiscal year.