

SOLICITATION, OFFER AND AWARD		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	RATING	PAGE OF PAGES 1 123	
2. CONTRACT NUMBER		3. SOLICITATION NUMBER DE-SOL-0010181	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	5. DATE ISSUED 08/05/2016	6. REQUISITION/PURCHASE NUMBER
7. ISSUED BY Idaho Operations U.S. Department of Energy Idaho Operations 1955 Fremont Avenue Idaho Falls ID 83415		CODE 00701	8. ADDRESS OFFER TO (If other than Item 7)		

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

SOLICITATION

9. Sealed offers in original and 1 copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if hand carried, in the depository located in _____ until 1700 ED local time 10/21/2016
(Hour) (Date)

CAUTION: LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL:	A. NAME Mark B. Payne	B. TELEPHONE (NO COLLECT CALLS)			C. E-MAIL ADDRESS paynemb@id.doe.gov
		AREA CODE 208	NUMBER 526-3127	EXT.	

11. TABLE OF CONTENTS

(X)	SEC.	DESCRIPTION	PAGE(S)	(X)	SEC.	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES			
<input checked="" type="checkbox"/>	A	SOLICITATION/CONTRACT FORM	2	<input checked="" type="checkbox"/>	I	CONTRACT CLAUSES	30
<input checked="" type="checkbox"/>	B	SUPPLIES OR SERVICES AND PRICES/COSTS	4	PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.			
<input checked="" type="checkbox"/>	C	DESCRIPTION/SPECS./WORK STATEMENT	24	<input checked="" type="checkbox"/>	J	LIST OF ATTACHMENTS	4
<input checked="" type="checkbox"/>	D	PACKAGING AND MARKING	1	PART IV - REPRESENTATIONS AND INSTRUCTIONS			
<input checked="" type="checkbox"/>	E	INSPECTION AND ACCEPTANCE	2	<input checked="" type="checkbox"/>	K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	8
<input checked="" type="checkbox"/>	F	DELIVERIES OR PERFORMANCE	3	<input checked="" type="checkbox"/>	L	INSTRS., CONDS., AND NOTICES TO OFFERORS	31
<input checked="" type="checkbox"/>	G	CONTRACT ADMINISTRATION DATA	4	<input checked="" type="checkbox"/>	M	EVALUATION FACTORS FOR AWARD	9
<input checked="" type="checkbox"/>	H	SPECIAL CONTRACT REQUIREMENTS	7				

OFFER (Must be fully completed by offeror)

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within _____ calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232.8)	10 CALENDAR DAYS (%)	20 CALENDAR DAYS (%)	30 CALENDAR DAYS (%)	CALENDAR DAYS (%)
---	----------------------	----------------------	----------------------	-------------------

14. ACKNOWLEDGEMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated):	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)		
----------------------------------	------	----------	--	--	--

15B. TELEPHONE NUMBER	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE.	17. SIGNATURE	18. OFFER DATE
AREA CODE NUMBER EXT.	<input type="checkbox"/>		

AWARD (To be completed by government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION	
-----------------------------------	------------	----------------------------------	--

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304 (c) () <input type="checkbox"/> 41 U.S.C. 253 (c) ()		23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	ITEM
---	--	--	------

24. ADMINISTERED BY (If other than Item 7)	CODE	25. PAYMENT WILL BE MADE BY	CODE
--	------	-----------------------------	------

26. NAME OF CONTRACTING OFFICER (Type or print) Suzette M. Olson	27. UNITED STATES OF AMERICA Signature on File (Signature of Contracting Officer)	28. AWARD DATE
---	---	----------------

NAME OF OFFEROR OR CONTRACTOR

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>This is a Request for Proposal for a contractor to perform a hybrid contract consisting of cost-plus-fixed-fee CLINs and time-and-material CLINS for the Deep Borehole Field Test Delivery Location Code: 00701 Idaho Operations U.S. Department of Energy Idaho Operations 1955 Fremont Avenue Idaho Falls ID 83415 US</p> <p>FOB: Destination Period of Performance: 01/16/2017 to 01/15/2022</p>				
00001	<p>Phase 1 - Commencement of Public Outreach; Team Kickoff Meeting; Securing Site</p> <p>This item includes: (a) commencement of public outreach; (b) planning and conducting a project kickoff meeting that will be used to further refine project approaches, schedules and budgeting; and (c) completing all activities necessary to secure the site from the land owner.</p>				
00002	<p>Phase 2- Completion of All Regulatory Approvals</p> <p>This item involves: (a) preparing a Preliminary Drilling and Test Plan ; (b) completing all activities necessary to secure federal, tribal, state and local regulatory approval for the project; (c) holding a readiness meeting with DOE to present an overview of all work completed and (d) continuing public outreach.</p>				
00003	<p>Phase 3- Final Drilling and Test Plan</p> <p>Phase 3 involves: (a) preparing and completing a Final Drilling and Test Plan (including a Plan review meeting with DOE); and (b) continuing public outreach.</p>				
00004	<p>Phase 4 - Drilling and Testing</p> <p>Phase 4 involves: (a) performance of actual drilling and testing in accordance with the DOE-approved Final Drilling and Test Plan Continued ...</p>				

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
DE-SOL-0010181

PAGE 3 OF 123

NAME OF OFFEROR OR CONTRACTOR

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
00005	<p>(drilling a Characterization Borehole and conducting borehole testing activities); (b) continued public outreach; and (c) post drilling contract closeout and remediation.</p> <p>Phase 5 - Site Management and Maintenance</p> <p>Phase 5 involves Post drilling/testing on-going site maintenance. Phase 5 involves post drilling/testing on-going site maintenance activities described in Section C during a full-scale DBFT performed by a separate contractor. This CLIN consists of three separate one-year option periods.</p>				

PART I – THE SCHEDULE

SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 TYPE OF CONTRACT

This is a hybrid contract with cost plus fixed fee (CPFF) and time and materials (T&M) contract line items (CLINs). The contract for the Deep Borehole Field Test contains multiple phases; see CLINs below and Section C, Statement of Work (SOW) for details of phases.

The Contractor must receive written authorization from the Contracting Officer before it begins to perform Phases 2 through 5. DOE intends to use a down select process for Phases 3 and 4 to the Contractor(s) best performing/achieving the project objectives. Performance of any phase does not guarantee the Contractor will be authorized to perform successive phases and all phases are subject to the availability of funds. The overall period of performance will not exceed 60 months. It is possible some phases may overlap.

The Contractor must furnish all personnel, facilities, equipment, material, supplies, and services (except as may be expressly set forth in this contract as furnished by the Government) and otherwise do all things necessary to successfully accomplish the SOW (see Section C).

Note: The cost/funding items identified below will be completed at the time of contract award.

B.2 CONTRACT FUNDING

Subject to the availability of funds, the contract will be funded in accordance with this Section B and the schedule provided in Section C. These funds will be used to pay for all allowable and allocable costs incurred, plus fee, and T&M support, for the indicated deliverable or contract period. The Contractor exceeds price ceilings identified below at its own risk.

It is anticipated that annual contract funding will be provided quarterly.

B.3 CONTRACT LINE ITEMS

This contract consists of the following Contract Line Items (CLINs) with work to be accomplished in accordance with the Statement of Work (Section C):

CLIN	SERVICES
0001	<p>Phase 1 – Commencement of Public Outreach; Team Kickoff Meeting; Securing Site.</p> <p>This item includes: (a) commencement of public outreach; (b) planning and conducting a project kickoff meeting that will be used to further refine project approaches, schedules and budgeting; and (c) completing all activities necessary to secure the site from the land owner.</p>

The period of performance covered by this CLIN is anticipated to not exceed three (3) months.

Work will be for direct labor hours at the fixed hourly T&M rates specified in the Rate Table at Section J, Attachment L-J. Additional labor categories may be added only as authorized by the Contracting Officer.

Direct materials and travel will be reimbursed at “cost” in accordance with FAR 31 cost principles.

This item is a T&M line item.

Ceiling Price for T&M (0001) : \$_____

CLIN	SERVICES
0002	<p>Phase 2 – Completion of All Regulatory Approvals.</p> <p>This item involves: (a) preparing a Preliminary Drilling and Test Plan; (b) completing all activities necessary to secure federal, tribal, state and local regulatory approval for the project; (c) holding a readiness meeting with DOE to present an overview of all work completed; and (d) continuing public outreach.</p>

The period of performance covered by this CLIN is anticipated to not exceed five (5) months.

This item is a CPFF line item.

Estimated Cost: \$_____

Fixed Fee: \$_____

Total CPFF (0002): \$_____

CLIN	SERVICES
0003	<p data-bbox="378 237 899 268">Phase 3 – Final Drilling and Test Plan</p> <p data-bbox="378 373 1419 447">Phase 3 involves: (a) preparing and completing a Final Drilling and Test Plan (including a Plan review meeting with DOE); and (b) continuing public outreach.</p>

The period of performance covered by this CLIN is anticipated to not exceed four (4) months. This is an Option CLIN; the Contractor is only authorized to perform once a formal contract modification is issued to exercise the Option.
This item is a CPFF line item.

Estimated Cost: \$ _____

Fixed Fee: \$ _____

Total CPFF (0003): \$ _____

CLIN	SERVICES
0004	<p data-bbox="378 1031 794 1062">Phase 4 – Drilling and Testing</p> <p data-bbox="378 1167 1406 1325">Phase 4 involves: (a) performance of actual drilling and testing in accordance with the DOE-approved Final Drilling and Test Plan (drilling a Characterization Borehole and conducting borehole testing activities); (b) continued public outreach; and (c) post drilling contract closeout and remediation.</p>

The period of performance covered by this CLIN is anticipated to not exceed 20 months.

This is an Option CLIN; the Contractor is only authorized to perform once a formal contract modification is issued to exercise the Option.

This item is a CPFF line item.

Estimated Cost: \$ _____

Fixed Fee: \$ _____

Total CPFF (0004): \$ _____

CLIN	SERVICES
0005	<p data-bbox="380 306 976 338">Phase 5 – Site Management & Maintenance</p> <p data-bbox="380 443 1430 583">Phase 5 involves Post drilling/testing on-going site maintenance, integration and support. Phase 5 involves post drilling/testing on-going site maintenance activities described in Section C during a full-scale DBFT performed by a separate Contractor.</p>
0005AA	The first Phase 5 option year
0005AB	The second Phase 5 option year
0005AC	The third Phase 5 option year

The period of performance covered by this CLIN is anticipated to not exceed 36 months.

This is an Option CLIN; the Contractor is only authorized to perform once a formal contract modification is issued to exercise the Option.

This item is a T&M line item.

Ceiling Price for T&M (AA): \$ _____

Ceiling Price for T&M (AB): \$ _____

Ceiling Price for T&M (AC): \$ _____

PART I – THE SCHEDULE

SECTION C

STATEMENT OF WORK

This Statement of Work (SOW) involves research and development (R&D) to assess the viability of deep borehole disposal (DBD) as one alternative for the disposal of smaller Department of Energy (DOE)-managed waste forms. DOE's *Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste* (DOE 2013) specifically recommended developing a research and development plan for DBD as a key strategy objective. Conclusions of DOE's *Assessment of Disposal Options for DOE-Managed High-Level Radioactive Waste and Spent Nuclear Fuel* (DOE 2014a) included that "...effective implementation of a strategy for management and disposal of all HLW and SNF..." would include focused research on deep boreholes, especially to retain flexible options for disposal of smaller DOE-managed waste forms.

Based on the above strategy, DOE intends to conduct a Deep Borehole Field Test (DBFT) to further evaluate the geoscience of the approach and technical feasibility capabilities for implementation. DOE has identified Sandia National Laboratories (SNL), operated by the Sandia Corporation, a Subsidiary of Lockheed Martin Corporation, as the *Technical Lead for the DBFT Project*, with the role of supporting DOE in: (i) developing the overall DBFT Project Plan; (ii) management and integration of all DBFT activities; and (iii) providing Project technical guidance to DOE, other DOE National Laboratories, and university partners.

The DBFT includes two drilling activities: 1) a Characterization Borehole; and 2) an optional Field Test Borehole. Each borehole will be drilled to a depth of about 5,000 m (16,400 feet) into crystalline basement rock in a geologically stable continental location. The initial smaller-diameter Characterization Borehole is the subject of this SOW and will be drilled and completed to facilitate downhole scientific testing and analysis. If site conditions are found to be suitable, DOE intends to drill a larger-diameter Field Test Borehole to facilitate proof-of-concept of emplacement activities using surrogate canisters. If the larger-diameter Field Test Borehole is performed, it will be accomplished under a separate contract.

The purpose of this SOW is to define phases and deliverables necessary to drill the Characterization Borehole and to begin the DBFT research to evaluate the DBD concept.

C.1 Project Title:

Deep Borehole Field Test.

C.2 Background:

Multiple factors have indicated that the DBD concept may provide an alternative for safe disposal of smaller DOE-managed radioactive waste forms in many possible U.S. locations with favorable geologic and hydrological characteristics. Using a simple reference design that is

expected to be achievable in crystalline rocks with currently available commercial drilling technology, the implementation of the DBD concept may be technically feasible, cost effective, and have sufficient capacity for some waste forms. The DBD concept consists of drilling a 0.43-m (17-inch) diameter disposal borehole or array of boreholes into crystalline basement rock to a total depth of 5,000 m (16,400 feet). In the DBD reference design, waste canisters are emplaced in the lower 2,000 m of the borehole, with the upper 3,000 m of the borehole appropriately sealed with a combination of bentonite, cement plugs, and cement/crushed rock backfill. Additional information can be found in “Reference Design and Operations for Deep Borehole Disposal of High-Level Radioactive Waste” SAND2011-6749, October 2011, <http://prod.sandia.gov/techlib/access-control.cgi/2011/116749.pdf>. A Deep Borehole Field Test is the next logical step to evaluate the feasibility for implementation of this waste disposal option. This SOW for a site and the drilling and implementation of the Characterization Borehole supports the overall DBFT and will be used to gather scientific data relevant to implementation of the DBD concept.

DOE has prepared a DBFT Project Plan (DOE 2014b <http://prod.sandia.gov/techlib/access-control.cgi/2014/1418559r.pdf>) that includes the possibility of drilling two deep boreholes (a smaller-diameter Characterization Borehole and a larger-diameter, Field Test Borehole) into crystalline basement rock in a geologically stable continental location. Local public acceptance/participation is a necessary prerequisite to the project and must be obtained before any drilling commences. Public involvement and engagement must continue through the duration of the project.

This SOW only involves the Characterization Borehole construction and testing activities with associated site management and research/science support activities; and possibly site management, integration and support during all or part of a follow-on larger diameter DBFT construction and testing activities. The preliminary design of the Characterization Borehole described in this SOW has a bottom-hole diameter of 0.22 m (8.5 inches) at 5000-m (16,400-ft) total depth. The purpose of the Characterization Borehole is to facilitate scientific testing and provide data on the downhole environment (e.g., examination of hydrogeological, geochemical, and geomechanical characteristics of the near-borehole host rock). No radioactive waste will be used in conjunction with the Characterization Borehole or any other activity performed under this contract.

If the Characterization Borehole test results and other site investigations indicate that the site is suitable, DOE intends to proceed to the next stage of the DBFT Project experiment by drilling a larger 0.43-m (17-inch) diameter Field Test Borehole for demonstration testing at the Contractor’s site. These specific activities will not take place under this contract, but will occur under a separate contract; although associated site management, integration and support activities might be continued under this contract or within the DBFT Overall Project. The Field Test Borehole will use surrogate containers to evaluate surface handling and emplacement operations and also will not involve any radioactive waste.

The Contractor is responsible for public outreach, as well as access, safety, and security of the site; these requirements are further described in this SOW.

The work under this contract will be performed in Phases (see Figure C.1 - Phased Approach). DOE anticipates that multiple Contractors may be involved in Phase 1, with most if not all of those Contractors also being authorized to proceed into Phase 2. A down-selection process will be used to reduce the number of Contractors performing Phases 3 and 4. Performance of Phase 2-5 must not begin until the Contractor receives written authorization from the DOE Contracting Officer (CO).

The nature of each contract phase is summarized in this paragraph and is further described later within this SOW. The process for DOE down-selection of Contractors/sites is also described in later sections of this SOW.

Phase 1 focuses on public outreach (this outreach will continue across all contract phases), including discussions on addressing community impacts and completion of any activities necessary to secure the site. Phase 1 also includes a project kickoff meeting near the Contractor's proposed drill site to outline the Contractor's detailed approach for all Phase 1 activities, including schedule and budget and securing the DBFT site.

Phase 2 involves continuation of public outreach; preparation of a Preliminary Drilling and Test Plan; completion of all activities necessary to secure federal, tribal (as applicable), state and local regulatory approval/permits; and holding a readiness meeting with DOE to present an overview of all work completed.

Phase 3 involves continuation of public outreach and completion of the Final Drilling and Test Plan for review and approval by DOE.

Phase 4 may involve a re-baseline of cost, schedule and performance of contract activities to be performed for Phase 4, as well as performance in accordance with the Final Drilling and Test Plan. Specifically, Phase 4 includes drilling the Characterization Borehole and conducting testing activities, borehole closeout and remediation. DOE may elect to complete closeout and remediation during Phase 5.

Phase 5 is at DOE's discretion and involves on-going site management, integration and maintenance in support of larger diameter DBFT activities.

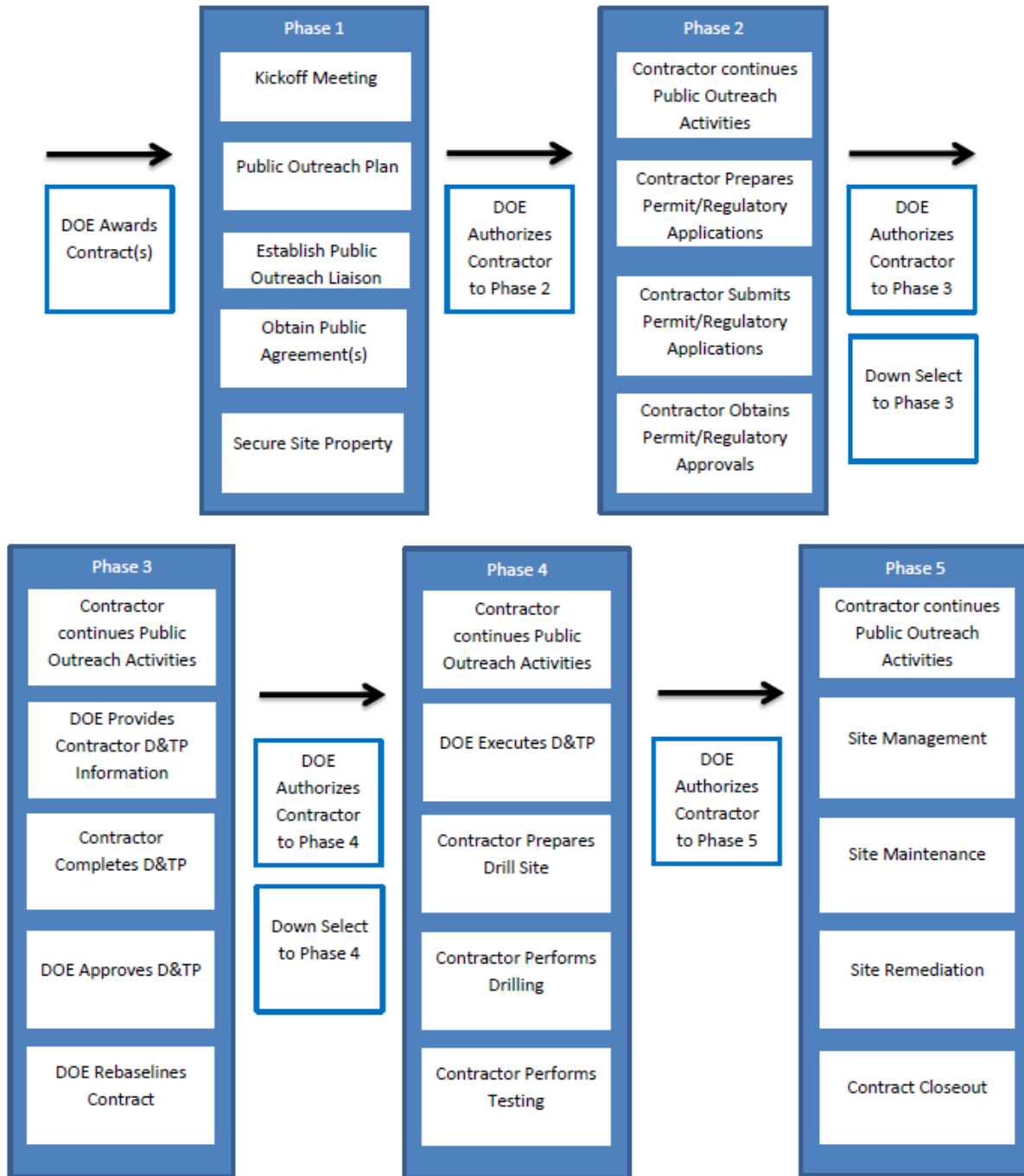


Figure C.1 - Phased Approach

C.3 Technical Objectives

Radioactive waste will not be used at any time during contract performance. Geological, hydrogeological, geochemical, and geomechanical information will be collected from the Characterization Borehole, across both the crystalline basement and overlying rock intervals. The scientific testing and data collection process in the Characterization Borehole will be used

to: (i) identify the critical downhole experiments and measurements that must be made at a future DBD site to determine the feasibility of long term isolation of high-activity waste forms; and (ii) provide information on site-specific subsurface conditions to be used in planning and executing the drilling and emplacement demonstration activities for the larger diameter DBFT.

Unlike most resource exploration drilling operations, the value in the Characterization Borehole (and the DBFT research effort) will be the data collected. Therefore, it is imperative that testing, data quality, and configuration controls are implemented throughout the contract to ensure data quality is not compromised and no information is lost. Data acquisition will focus on those characteristics of the subsurface that are most relevant to the viability and safety of the DBD concept.

C.4 Performance Parameters

A. Background. Performance parameters are identified both in this SOW and in the approved Final Drilling and Test Plan for the Characterization Borehole. The Final Drilling and Test Plan must be consistent with borehole design and scientific testing guidance prepared by the Technical Lead of the DBFT Project. The Final Drilling and Test Plan must be delivered to DOE for approval before drilling can commence.

B. Specification of Parameters. The Contractor's work must comply with the following parameters:

1. The Contractor must provide a suitable drilling site to perform this scope of work. Use and access to this site must be available to DOE and the Contractor for the duration of this contract, as well as the anticipated duration of a separate contract to drill and test a larger diameter (17-in diameter) Field Test Borehole. The location of the site must be specifically identified and contained within a practical area.
2. The geologic and hydrological characteristics of the site must meet (to the maximum extent possible) each of the following parameters:
 - **Depth**--The depth to the crystalline basement is 2 km (1.2 miles) or less (note that all depths shallower than 2 km are considered equivalent, although the uncertainty of the data is considered).
 - **Site Size**--The site area is sufficient to accommodate two drilling operations with boreholes nominally separated by at least 200 m; surface facilities to support the drilling operations; surface facilities for sample management and on-site data collection; surface handling facilities for evaluation of handling operations for surrogate (mock-up) containers; and surface facilities for site operation needs. The site must have ample access for heavy equipment.
 - **Proximity to Wetlands/Flood Plains**--The site area is outside of wetland areas and 100-year flood zones.

- **Ground Water Flow at Depth--** Geologic information and data provide evidence of the **absence** of fresh ground water recharge at depth. This evidence might include, for example, lack of significant topographic relief that would drive deep recharge, evidence of ancient groundwater at depth, and/or data suggesting high-salinity groundwater at depth.
- **Geothermal Heat Flux--** Geologic information and data provide evidence of the geothermal gradient and/or geothermal heat flux at the proposed site. A heat flux of less than 75 mW/m^2 is preferred.
- **Seismic/Tectonics/Volcanism--** The site has low seismic/tectonic and volcanic activity. Specifically, preferred conditions are:
 - Less than 2% probability within 50 years of peak ground acceleration greater than 0.16 g (generally indicative of area of tectonic stability).
 - Distances to Quaternary age volcanism and faulting greater than 10 km.
- **Nature of Crystalline Basement Fabric and Stress State—**To the extent available, geologic information and data provide evidence of: (a) existence and orientation of any foliation in the crystalline basement rocks; and (b) the horizontal stress state at depth in the crystalline basement rocks. Lack of steeply dipping foliation or layering is preferred. Low differential horizontal stress is preferred. For example, strong evidence of a low differential horizontal stress at depth in the crystalline basement would include lack of breakouts in existing boreholes in the crystalline basement.
- **Major Regional Structures, Basement Shear Zones and Other Tectonic Features--** Geologic information and data identify any major regional structures, basement shear zones, or other tectonic features within 50 km of the proposed site. The **absence** within this distance of known major regional structures, major crystalline basement shear zones, or major tectonic features is preferred.
- **Surface/Subsurface Interferences for Testing--** There are no previous or current uses of the surface or subsurface that could interfere with the drilling test investigations or the reliability of data generated during testing. Such uses might include, for example, wastewater disposal by deep well injection, CO₂ injection, oil and gas production, mining, underground drinking water extraction, and strategic petroleum reserve sites. Absence of potential resources in the crystalline basement and sedimentary overburden is preferable. The information and bases provided for the site must also identify existing drinking water aquifers and any previous or current uses of the surface and/or subsurface (such as listed above) within 30 km of the proposed site.
- **Surface/Subsurface Anthropogenic Radioactive/Chemical Contamination--** Geologic information or other technically reliable data identifies any previous or current anthropogenic radioactive or chemical contamination within 10 km of the

proposed site.

3. The Contractor must drill one Characterization Borehole to a nominal depth of 5 km as determined by the DOE CO. DOE estimates drilling and testing activities involving the drilling rig will take seven months to complete.
 - The Characterization Borehole must be cased across the overlying geologic units and portions of the crystalline basement rock that require casing for stability or water inflow reasons. The casing schedule must allow a minimum bottom-hole diameter of 8.5 inches in the crystalline basement rock. The crystalline basement portion of the borehole (assumed to extend from approximately 2 km to 5 km in depth) will not be cased, if conditions allow. A casing head must be installed that allows the characterization borehole to be sealed.
 - Drilling must be conducted in such a way to minimize contamination of deep fluids with drilling mud. Drilling fluids and makeup water must be marked with a conservative tracer (e.g., iodide, deuterated water and/or fluorescein dye) to quantify potential contamination of groundwater samples from drilling fluids.
 - Borehole deviation must be minimized by continuous or frequent monitoring, with a maximum allowable deviation from vertical of 100 m at the bottom of the borehole.
 - Monitoring during drilling should include (as determined with the DBFT Project Technical Lead - see below):
 - Deviation and caliper surveys for monitoring straightness and borehole stability.
 - Drilling parameter logging (e.g., penetration rate, bit weight, hook load, rotary speed, rotary torque, mud circulation rate).
 - Drilling mud/cuttings logging (e.g., temperature, salinity, chemistry, dissolved gas concentrations, cuttings lithology, and rock flour mineralogy).
4. The Contractor must provide support for specialized testing (via work-over rig) to be defined by the DBFT Project Technical Lead (see additional details for DBFT Project activities in report on Characterization Objectives). Specialized testing is expected to follow completion of the Characterization Borehole drilling and will likely continue for 7 months following this completion.

C.5. Scope of Work

The Contractor must function as the manager and integrator for all work performed by teaming members and subcontractors in coordination with the DBFT Project lead. The Contractor will provide all necessary management, public outreach, technical expertise, labor, facilities, drill site, materials, and equipment to drill one Characterization Borehole and provide logging data,

scientific testing support, and core samples as described in this SOW. Performance of teaming members and subcontractors is the responsibility of the Contractor.

The capabilities, knowledge, experience, and expertise required must be sufficient to perform all aspects of this SOW, including:

- Conducting on-site day-to-day site operations and management, that includes:
 - Responsibility for ensuring site access control and site security, including access to the subsurface.
 - Ensuring sufficient quantities of water and electricity for day-to-day operations and borehole drilling.
 - Preparing the site for project operations, including clearing the drill pad, road construction, site drainage, and installation of required utilities.
 - Ensuring all work is performed safely, consistent with all environment, safety and health (ES&H) requirements.
- Providing all expertise and experience necessary to support dispositioning of the site at completion of the contract, including any remediation that may be necessary.
- Providing the capabilities necessary to obtain all required permits and regulatory approvals, with appropriate regulatory and legal expertise necessary for handling all land use and other issues required to complete the scope of work.
- Providing project management expertise necessary to ensure timely and cost effective integration and completion of all tasks and deliverables including project planning compatible with Primavera P6.
- Providing for day-to-day public outreach on all planning, design, and operations activities related to the project.
- Developing and maintaining contingency management approaches to ensure availability of site operations.
- Providing drilling integration services necessary to plan and complete deep scientific drilling and testing activities in the Characterization Borehole. Responsibilities include:
 - Drilling safety expertise necessary to plan and oversee all field work.
 - Drilling engineering, expertise, and experience necessary for drilling, casing and completing an 8.5-inch diameter Characterization Borehole to a depth of at least 5 km.

- Collecting, securing and managing core samples, mud samples, drilling records, and logging data in accordance with an approved Drilling and Test Plan.
- Providing technical expertise and support in areas of geological sciences and geological engineering.
- Providing temporary on-site laboratory expertise and facilities for the management and preservation of materials for evaluation including cores, samples, cuttings, and drilling fluids during the drilling and scientific testing process.
- Providing technical reports and information in accordance with the approved Final Drilling and Test Plan.
- Providing configuration management expertise to ensure records management, data qualities, and sample management, are developed/operated under a compatible/consistent Quality Assurance (QA) Program. For example, provide available DBFT Project and site data (existing, and collected during the project) to DOE through a Data Management System.
- The Contractor may also be required to assist the Government in meeting its responsibilities under the National Environmental Policy Act (NEPA). If this work is necessary, the contract will be modified by specific contract direction from the DOE CO.

In the event the Contractor is not directed to proceed into Phase 2, 3, or 4, the Contractor must:

- Remain ready (on stand-by) to proceed into those phases should it become necessary. This will preserve the Contractor's capability to perform the work in the event one or more of the Contractors continuing into those phases cannot complete their performance obligations. At a minimum, it is anticipated that readiness will require the Contractor to maintain contract commitments necessary to keep the Site available for project activities (a mandatory requirement), as well as maintain all performance capabilities (e.g., team member, subcontractor, and key personnel commitments to the project) necessary to perform those phases. DOE recognizes that, with the exception of keeping the Site available, certain capabilities of the Contractor will change during this period. If the Contractor is directed to proceed with Phase 3 or Phase 4, the contract will be modified to address funding and cost reimbursement requirements, as well as any changes to Contractor capabilities and project technical requirements.
Note: This “stand by” requirement expires not later than six (6) months from the date the Contractor is notified it has not been selected to proceed into either Phase 3 or Phase 4, unless notified in writing by the CO that it has expired earlier than six months.

The Contractor must be responsible to perform the following tasks and provide the described deliverables.

C.5.1 Phase 1 - Commencement of Public Outreach; Team Kickoff Meeting; Securing Site

The Contractor is responsible for commencing public outreach in Phase 1, with the goal of obtaining sufficient public support to allow the Contractor to successfully complete all work under the contract. Public outreach efforts will continue through all contract phases. The term "public" includes federal, state and local governments; affected tribes; citizens; tribal members; citizen groups; tribal groups; and other interested stakeholders. Public outreach involves providing information and education about the project necessary to obtain public support for the project. The process must be open and transparent. Because public support is necessary for successful project completion, public outreach is a critical aspect of contract performance.

The Contractor's Public Outreach Liaison (see Section H, "Key Personnel") must reside near the proposed drill site for the purpose of providing information to the public on a day-to-day basis. Informational material on the background and goals of the project must be developed and made available to the public as requested. This background material must be delivered to the COR for approval before release. The Public Outreach Liaison must also provide the COR real time feedback on any concerns or unanswered questions from the public. All meetings open to the general public must be coordinated with DOE.

The Contractor must prepare a Public Outreach Plan and submit the plan for DOE approval not later than 4 weeks after contract award. This plan must describe how the Contractor will conduct its public outreach for all phases of contract performance. Particular emphasis must be placed on:

- The steps the Contractor will take to inform the public and secure public support for the project. The plan must identify all potential outreach risks and risk avoidance/ mitigation strategies.
- Describing how the Contractor will use tribal, state and local media to educate and inform the public about project goals and plans and obtain public approval for the project.

The Contractor must work with the tribal (as applicable) and local community to define any impacts that may arise from this project and negotiate ways to mitigate these impacts. Impacts might include, for example, road damage from heavy equipment, increased need for law enforcement and/or emergency medical services, or upgrades needed for added utilities capacity or other services. The types and amounts of work in this category must be justified by the Contractor and found to be reasonable and allowable costs before finalizing any local agreements. The agreements must be completed before the Contractor is permitted to begin Phase 2 and must specify that expenditures will be made only if the Contractor receives approval to execute the Final Drilling and Test Plan (Phase 4).

In addition to mitigating impacts, the Contractor must also work with the local community/tribal government (as applicable) to identify constructive benefits that are compatible with the goals and mission of DOE and the DBFT project. For example, one potential area of interest to DOE is in education for science, technology, engineering, and mathematics (STEM). As approved by the CO, the Contractor may negotiate with the local community ways to increase STEM education using Contractor or other resources. As a research project, the Deep Borehole Field Test will be a good example to students on the various science and engineering disciplines needed. While STEM is one example, the Contractor may explore other avenues for potential positive impacts to the local community. The types and amounts of the benefits must be justified by the Contractor and found to be reasonable and allowable costs before finalizing any local agreements. The agreements must be completed before the Contractor is permitted to begin Phase 2 and must specify that expenditures will be made only if the Contractor receives approval to execute the Final Drilling and Test Plan (Phase 4).

The Contractor is encouraged to explore complementary research opportunities at the site (particularly research that might further DBFT goals) with tribal and state agencies, institutions of higher learning, and other research entities. This research must not interfere with DBFT activities, is not a contract deliverable nor paid for by DOE, and must receive advance approval from the CO.

The Contractor must complete all remaining steps necessary for securing the site, including completing negotiation and signing a land use agreement with land owners and other necessary parties as described. The land use agreement must allow for longer term use of the site, including performance of anticipated down-stream project activities (e.g., a large diameter DBFT).

The land use agreement must provide for a fixed monthly payment and must meet the contract term requirements of Section H; however, it must also permit the Contractor to terminate the agreement at any time. This will allow the Contractor to terminate the agreement should it not be selected to continue into Phases 3, 4, or 5 (once any stand-by period described in C.5 above has expired).

The Contractor must also hold a project kickoff meeting near the Contractor's proposed drill site to outline the Contractor's detailed approach, schedule, and budget and for either party to answer any contractual, technical, or regulatory questions. Representatives of all major subcontractors or partners must attend, including any appropriate local community representatives. Any potential risks and mitigation strategies must also be presented by the Contractor. This meeting must be scheduled on or about two weeks after the contract is awarded, or as otherwise agreed to by the DOE Contracting Officer's Representative (COR). The meeting location and logistics must be provided by the Contractor and communicated to the COR. Contract deliverables resulting from this meeting include briefing material which depicts the Contractor's approach to implementing this contract and detailed meeting minutes.

The Contractor must not proceed to Phase 2 until written CO approval is received.

C.5.2 Phase 2 - Completion of All Regulatory Approvals; Readiness Status Meeting

The Contractor must continue its public outreach efforts and complete all work necessary to, (1) obtain support for the project from all federal, tribal, state or local governmental entities (as applicable); and (2) secure drilling permit(s) and other regulatory approvals needed to begin drilling. The land use permits and regulatory approvals must allow for longer term use of the site, including performance of anticipated down-stream project activities (e.g., a large diameter DBFT).

The Contractor must prepare a preliminary Drilling and Test Plan with sufficient technical detail to secure all necessary support, permits and approvals, including a rough order of magnitude cost for completion of the project. Copies of all regulatory approvals and the preliminary Drilling and Test Plan must be delivered to the COR.

After delivery of the regulatory approvals and the preliminary Drilling and Test Plan, the Contractor must meet to present an overview of all work completed to DOE. The meeting location must be near the drill site and logistics must be provided by the Contractor and communicated to the COR at least 3 weeks in advance. The purpose of the meeting is for DOE to determine if there has been suitable progress to merit continuation of the project. At this meeting the Contractor must provide its rationale for continuation to Phase 3, including a proposed Phase 3 schedule broken down by task. Contract deliverables resulting from this meeting include a package that provides all material presented by the Contractor at the meeting and detailed meeting minutes.

Down Select Criteria. DOE will decide if the Contractor will continue to Phase 3 based on the following criteria:

1. The degree of public acceptance of the project.
2. How well the Site meets the geological/hydrological characteristics and other conditions described in the SOW.
3. All permitting and other regulatory requirements have been met.
4. The adequacy of the preliminary Drilling and Test Plan and the Contractor's rationale for continuing to Phase 3.
5. Proposed costs appear to be reasonable and allocable and sufficient funds are available.

The Contractor should also recognize that some good contracts might not receive the go-ahead to proceed to the next phase because of program priorities and available funding.

The Contractor must not proceed to Phase 3 until written CO approval is received.

C.5.3 Phase 3 - Contract Option to Draft, Finalize the Final Drilling and Test Plan

The Contractor must continue its public outreach efforts and provide a detailed draft of a final Drilling and Test Plan to DOE for approval as a contract deliverable. Drilling and borehole design information, scientific testing guidance, and input for the Technical Advisory Committee (TAC) charter (see the third bullet below) will be furnished by DOE for use by the Contractor in developing the Final Drilling and Test Plan. The Final Drilling and Test Plan must be approved by the CO before drilling can begin. Comments or additions to the draft Final Drilling and Test Plan must be negotiated with the DOE CO.

The Final Drilling and Test Plan must contain all information necessary to describe how the remaining work will be completed. At a minimum the Plan must contain the information listed below:

- A detailed drilling design that describes the engineering work and technical activities necessary to complete the Characterization Borehole, taking into account input provided by DOE.
- A site characterization summary describing known geological and hydrological characteristics located below the drilling site.
- A charter that includes the process and procedures for the establishment and operation of a Technical Advisory Committee (TAC). The purpose of this committee is to monitor activities, especially during drilling and testing, and ensure the necessary data and information are collected. Also, the TAC must ensure activities at the site do not preclude future tests through contamination of the borehole or other irreversible processes. The TAC must have the ability to report, on very short term issues, directly to the CO and the COR. The membership of the TAC must include members of the Contractor team, DOE, the DBFT Project Technical Lead, technical experts from DOE National Laboratories, and/or other experts as necessary. The TAC must be chaired by DBFT Project Lead. In no event do TAC activities shift performance responsibility away from the Contractor.
- Sections that describe:
 - How and what logging data will be collected, how its quality will be ensured, how it will be stored/managed, and how it will be delivered to DOE.
 - How cores and other samples are collected during drilling.
 - How the scientific testing that will be performed.

Note that detailed conceptual and technical input for testing needs will be provided by DOE (as developed by the DBFT Project Technical Lead-see additional details for DBFT Project activities in report on Characterization Objectives). This input will include DBFT testing needs for (but may not be limited to):

- All logging data and support for sampling and customized downhole testing. Geophysical

logging will be conducted sequentially for each portion of the borehole prior to casing, if borehole conditions permit. Sampling, logging, and testing may include:

- Drill-stem shut-in testing and drill-stem pumping/sampling from intervals which would be cased or cemented as part of the borehole completion (e.g., an interval near the bottom of the sedimentary overburden, or problematic intervals in the bedrock portion of the borehole which cannot be left open hole).
- Hydrofracture/extended leak-off tests in bedrock portion of borehole.
- Intermittent advance cores will be collected (50 m for every 1 km of bedrock borehole) with possibility for additional cores at areas of interest.
- Borehole televiewer/formation micro-imager log.
- Resistivity log.
- Self-potential log.
- Spectral natural gamma log.
- Neutron porosity log.
- Nuclear magnetic resonance log.
- Mud resistivity log.
- High-resolution temperature log.
- Anisotropic shear wave velocity log.
- Provisions stating how core samples, cuttings, and fluid samples must be packaged when removed from the borehole to reduce risk of contamination and must be given a unique tracking identification to ensure configuration control.
- Provisions stating how samples, geophysical logs, mud logging data, and drilling parameters must be made available to the DOE and DBFT Project Lead as soon as practical.
- Provisions stating how, after completion of drilling the characterization borehole, the Contractor will complete and support specialized testing. This specialized testing (via work-over rig) will be defined by the DBFT Technical Project Lead and is expected to include:
 - A flowing (pumping) temperature-pulse or salinity-dilution log across the entire crystalline basement portion of the borehole to identify all permeable zones.

- Packer-based shut-in tests to determine the static formation pressure profile across the crystalline basement.
- Packer-based pulse/pumping tests and geochemical sample collection conducted in higher-permeability regions of the crystalline basement portion of the borehole.
- Packer-based tracer tests in the crystalline basement portion of the borehole.
- A regulatory plan that describes the permits and other regulatory approvals necessary to complete this SOW. This plan must describe the work necessary to comply with all tribal (if applicable), federal, state and local requirements.
- A description of potential environmental impacts from drilling and testing and how these impacts, if any, will be remediated by the Contractor before contract close-out (if necessary, a contract adjustment will be negotiated with the DOE Contracting Officer to address remediation).
- A safety and security plan that describes safety and security requirements for all activities at the drill site. This safety plan must describe how the Contractor and any team members, subcontractors and visitors will comply with Contractor and other applicable safety and security requirements.
- A Quality Assurance Surveillance Plan (QASP) that describes how the Contractor will monitor performance to ensure services performed are in compliance with contract requirements. The QASP must describe how samples and data will be collected, tracked, managed, distributed, and protected from loss. This includes processes and data management systems for sample handling and curation for any physical samples including, but not limited to, core and cuttings (e.g., perform sample management, chain of custody, storage, distribution). The QASP must also define any consensus or industry standards used in the performance of this SOW.
- A discussion of the status of public outreach activities, including: (a) efforts to mitigate community/tribal impacts and provide constructive benefits; (b) the status of public support for the project; and (c) details on how public acceptance will be maintained during drilling and testing.
- A detailed schedule (compatible to Primavera P6) that shows all major activities and an associated costs for each activity. At a minimum the schedule must include site and land use issues, permitting and licensing, design activities, any long lead procurement activities, mobilization activities, detail of drilling and testing activities needed, delivery times of data and samples, and activities necessary to close out the contract. The Contractor's schedule must also reflect the overall DBFT schedule maintained by the DBFT Project Technical Lead.

If DOE or the DBFT Project Technical Lead believes it is necessary, the Contactor may be directed to conduct a status meeting as the Final Drilling and Test Plan nears completion. Specifics regarding the meeting date and location, as well as advance and post-meeting deliverables will be identified in the contract direction.

C.5.3.1 Final Drilling and Test Plan Review Meeting

Once all comments have been resolved and action items completed the Contractor must deliver a Final Drilling and Test Plan and schedule a Final Drilling and Test Plan meeting to take place at or near the drilling site. The Contractor must provide a detailed cost estimate and schedule for all remaining work through the end of the contract. The Final Drilling and Test Plan, cost estimate, and schedule must be delivered to the COR at least two weeks prior to the meeting. The purpose of the meeting is for DOE to determine if there has been suitable progress to merit continuation of the project. The Contractor must provide its rationale for continuation to Phase 4. Contract deliverables resulting from this meeting include the Contractor's meeting presentation material and detailed meeting minutes.

Down select Criteria. DOE will decide if the Contractor will continue to Phase 4 based on the following criteria:

1. The technical adequacy of the Final Drilling and Test Plan, including schedule, and the Contractor's rationale for continuing into Phase 4.
2. The Contractor remains in compliance with all permits and other regulatory requirements and has necessary public support.
3. Proposed costs appear to be reasonable and allocable and sufficient funds are available.
4. The Contractor has a realistic, credible plan for maintaining public support for the project during drilling and testing activities.

The Contractor should recognize that some good contracts might not receive the go-ahead to proceed to the next phase because of program priorities and available funding.

The Contractor must proceed to Phase 4 only after the Final Drilling and Test Plan has been approved by the CO and it has received specific direction to begin drilling and testing activities.

It is anticipated that the incorporation of the Final Drilling and Test Plan into the contract may require a re-baseline of the contract and result in changes to the contract in terms of cost, schedule, and performance. Any decision to re-baseline is within the complete discretion of the CO. Changes, if any, will be documented by a formal contract modification agreed to by the parties.

C.5.4 Phase 4 - Contract Option to Perform the Final Drilling and Test Plan

The Contractor must perform Phase 4 consistent with the approved Final Drilling and Test Plan. DOE reserves the right to witness activities at the drill site at any time on a non-interference basis.

C.5.4.1 Interim Status Meeting

The Contractor must provide for an interim status meeting for DOE just before drilling commences. This must occur at a location provided by the Contractor at or near the drill site and must include a site tour. All progress and status of work must be presented along with any potential risks and issues. The meeting location and logistics must be communicated to the COR at least three (3) weeks in advance of the meeting. The contract deliverables resulting from this meeting include the Contractor's meeting presentation material, a list of any action items, and detailed meeting minutes.

C.5.4.2 Notifications

During execution of the Final Drilling and Test Plan, the Contractor must notify the COR as soon as practicable, but in no event greater than 2 calendar days after any of the following occur:

- Logging data and/or core samples indicate that the subsurface formations and geology are significantly different than the characterization summary described in the Final Drilling and Test Plan.
- Logging data and/or core samples indicate that there are significant faults, shear zones, or major fracturing in the crystalline basement that would prevent any future data collection relevant to the goals of the test.
- Any severe loss of drilling mud circulation that may indicate this site may not be suitable for further testing.
- Any regulatory violation that may result in fines or penalties.
- Any work stoppage that could have an impact on schedule.
- Any potential loss or compromise of data quality, data integrity, or samples.
- Any borehole deviation from vertical beyond design specifications.
- Indications of significant borehole breakouts or instability that could compromise completion of the borehole research as planned.
- Any public support or political events or issues that could impact the project.

C.5.4.3 Reports During Drilling

The Contractor must produce a signed daily drilling report that details activities and progress, rig functions, depths, pipe tallies, casing and other materials used, core samples taken, preliminary logging data, as well as any safety activities such as safety meetings or rig inspections. The daily drilling reports must be available for review on the drilling site. The Contractor must e-mail copies of the completed drilling reports once a week to the COR. The Contractor must also hold a teleconference every two weeks with the TAC, COR, and other program staff at DOE to discuss progress and potential issues.

C.5.4.4 Drilling Status Meeting

The Contractor must provide for a drilling status meeting with DOE when drilling reaches approximately half way through the crystalline basement. The Contractor must compile any data not already transmitted to DOE and deliver it to the COR. The purpose of this meeting is to help DOE make a preliminary decision on the suitability of the site for the larger field test borehole. The Contractor must make a recommendation based on the data collected to date. The meeting location must be near the drill site and logistics must be provided by the Contractor. At least 3 weeks advance notice must be provided to the COR. The contract deliverables from this meeting include the recommendation (together with the geologic properties of the characterization borehole and data collected to date), Contractor meeting presentation materials, and detailed meeting minutes.

C.5.4.5 Drilling Site Management; Characterization Borehole Closeout

The Contractor must provide and be responsible for all aspects of site management for the duration of Phase 4. This includes the safety, security, and environmental compliance of the site. The Contractor must work with outside entities doing work at the site, which may include DOE, DOE National Laboratories, or other Contractors.

C.5.4.6 Site Remediation

The Contractor must complete site remediation, as necessary, consistent with permit/regulatory requirements and the final Drilling and Test Plan. If DOE elects to enter into Phase 5 the CO will provide written direction to the Contractor; in which case site remediation and closeout will be completed in Phase 5.

C.5.5 Phase 5 - Contract Option for Site Management, Integration and Maintenance

If geologic and hydrological conditions are favorable for the larger-diameter Field Test Borehole and DOE decides to implement these DBFT activities, the Contractor will be responsible to make the Site available to, and integrate the site investigation activities of, a separate drilling Contractor. To the extent the proposed schedule for Field Test Borehole activities is within the overall contract term of this contract, the Contractor may also perform site management, integration and maintenance responsibilities during this large diameter Field Test Borehole phase. Those activities would be largely the same as those for the Characterization Borehole, but

might also include additional integration of surface handling and testing activities, as well as emplacement testing activities for surrogate canisters. This work will be performed by the exercise of contract options lasting one year at a time; the last option is tied to the contract completion date and will last less than one year. The contract term shall be in accordance with section F.1.

C.6 Work Location(s), Travel, and Deliverable Schedule

Work location(s) are at the discretion of the Contractor, but work will principally occur at the selected DBFT site. Required meetings are defined in this SOW. Two additional trips may be required each year for interim status discussions at DOE Program meetings to be defined by the COR. Deliverables are defined in this SOW and the Final Drilling and Test Plan on the schedule described below:

Project Phase	Milestone	Deliverables	Delivery Date (weeks after award)*
Begin Phase 1	Team Kickoff Meeting	Briefing material and detailed meeting minutes.	2
	Provide Public Outreach Plan	Informational material to be made available to the public and Public Outreach Plan	4
	Cost impacts that will be used in the local community/tribe	Draft of the formal agreement(s) with the local community including costs and justifications.	8
	Complete formal agreements with the local community/tribe and secure land from the land owner	Copies of the signed agreements.	10
	Receive formal approval to continue to Phase2	N/A	12
	Begin Phase 2	Completion of all regulatory approvals and permits	Preliminary Drilling and Test Plan, including ROM cost estimate. Copies of all regulatory approvals.
	Readiness status meeting	Rationale for continuation to Phase 3, presentation material, and detailed meeting minutes.	30
	Receive formal approval to continue to Phase 3	N/A	32

Project Phase	Milestone	Deliverables	Delivery Date (weeks after award)*
Begin Phase 3	Complete the draft Drilling and Test Plan and detailed cost estimate	Draft Drilling and Test Plan.	40
	Draft Drilling and Test Plan design review	Presentation material, detailed meeting minutes, complete list of review comments, action items needed to complete the Drilling and Test Plan.	42
	Deliver final Drilling and Test Plan and final detailed cost estimate	Completed Final Drilling and Test Plan and detailed cost estimate.	44
	Final Drilling and Test Plan review meeting	Rationale for continuation to phase 4 and detailed meeting minutes.	46
	Receive formal approval to continue to Phase 4	N/A	48
Begin Phase 4	Incorporate final Drilling and Test Plan into contract and negotiate contract modification for final cost, schedule, and scope	N/A	50
	Interim status meeting	A site tour, detailed meeting minutes, and presentation material.	54
	Notifications (if required)	Official notification to the COR for events listed in Section C.5.5.2.	2 calendar days after the event.
	Daily Drilling Reports	Reports are collected and e-mailed to the COR weekly.	One week after drilling begins and each week thereafter.
	Drilling status meeting	Data not already provided to DOE, meeting minutes, presentation material, and recommendation to DOE on site suitability for larger borehole.	When drilling reaches approximately half way through the crystalline basement.
	Management of Drilling Site	N/A	Duration of the contract.

Project Phase	Milestone	Deliverables	Delivery Date (weeks after award)*
	Coordination of site visits/experiments by outside entities	As needed.	As needed.
	Provide project status at DOE Program Meetings	Briefing material - as required by the COR.	Twice a year.
Phase 5	On-Going Site Management and Maintenance; Borehole Closeout; Site Remediation		

***Or as otherwise agreed to by the COR.**

C.7 Quality and Acceptance of Deliverables

Any document reviews must be transmitted by the COR in writing or by electronic mail. Any deficiencies in reports or deliverables will be specifically noted by the COR.

All deliverables must meet all the requirements and guidance furnished in this SOW. All deliverables must be free of spelling and grammatical errors. Reports and presentations must be provided in electronic format utilizing Microsoft Office files and submitted to the COR or his/her designated Technical Monitor. Data and samples delivered must comply with test plans and configuration management plans outlined in the DOE approved Final Drilling and Test Plan.

C.8 Anticipated Start Date/Period of Performance

Anticipated Start Date: January 16, 2017

Estimated Period of Performance: 5 years

PART I –THE SCHEDULE**SECTION D****PACKAGING AND MARKING****D.1 PACKAGING**

- (a) Packaging and packing for shipment or mailing of all work deliverables must be in accordance with good commercial practices and adequate to ensure both acceptance by common carrier and safe transportation at the most economical rates.
- (b) Deliverables under this contract must be mailed by electronic mail or first-class mail, unless the urgency of the deliverable sufficiently justifies the use of overnight delivery. The Contractor must not use certified or registered mail or private parcel delivery service for the distribution of reports under this contract without the advance approval of the Contracting Officer.

D.2 MARKING

- (a) Each package, report or other deliverable must be accompanied by a letter or other document which:
 - (1) Identifies the contract number under which the item is being delivered.
 - (2) Identifies the deliverable item number or report requirement which requires the delivered item(s).
 - (3) Indicates whether the Contractor considers the delivered item to be a partial or full satisfaction of the requirement.
- (b) For any package, report or other deliverable being delivered to a party other than the Contracting Officer, a copy of the document required in (a) above must be simultaneously provided to the Contracting Officer.

PART I - THE SCHEDULE

SECTION E

INSPECTION AND ACCEPTANCE

E.1 FAR CLAUSES INCORPORATED BY REFERENCE

52.246-6 INSPECTION-TIME AND MATERIAL AND LABOR-HOUR (MAY 2001)

E.2 FAR 52.246-5 INSPECTION OF SERVICES - COST-REIMBURSEMENT (APR 1984)

- (a) *Definition.* "Services," as used in this clause, includes services performed, workmanship, and material furnished or used in performing services.
- (b) The contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.
- (c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all places and times during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.
- (d) If any of the services performed do not conform with contract requirements, the Government may require the contractor to perform the services again in conformity with contract requirements, for no additional cost. When the defects in services cannot be corrected by re- performance, the Government may –
 - (1) Require the contractor to take necessary action to ensure that future performance conforms to contract requirements; and
 - (2) Reduce any cost payable under the contract to reflect the reduced value of the services performed.
- (e) If the contractor fails to promptly perform the services again or take the action necessary to ensure future performance in conformity with contract requirements, the Government may –
 - (1) By contract or otherwise, perform the services and reduce any cost payable by an amount that is equitable under the circumstances; or

- (2) Terminate the contract for default.

E.3 INSPECTION

Inspection of all items under this contract will be done by the DOE-ID Contracting Officer's Representative (COR) identified by the Contracting Officer (CO) as responsible for the product, report, or service being delivered, or any duly authorized DOE-ID representative as designated from time to time by the CO in writing in accordance with Section G of this contract.

Inspection will be conducted in accordance with the applicable FAR clause identified in E.1 above.

E.4 ACCEPTANCE

Only the CO or the Contracting Officer's Representative (COR) designated by the CO has the authority to accept work performed under this contract. (See also Clause H.2 for limits on the authority of the COR.)

PART I - THE SCHEDULE

SECTION F

DELIVERIES OR PERFORMANCE

F.1 TERM OF CONTRACT

The term of the contract, if all Phases are performed by the Contractor, ends five (5) years from the date the contract was issued (see item 5 of Standard Form 33).

F.2 DELIVERIES

All products, reports, and deliverables under this contract must be delivered to the addressees as required in Part III, Section J, Attachment J-A, Reporting Requirements Checklist.

F.3 PLACE OF PERFORMANCE

The work under this Contract is to be carried out in a variety of locations, but the principal place of performance will be at the Contractor's facilities located at: _____ (to be completed at the time of contract award).

F.4 FAR 52.242-15 STOP-WORK ORDER – ALTERNATE I (ARP 1989)

- (a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either --
- (1) Cancel the stop-work order; or
 - (2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government clause of this contract.
- (b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if—

- (1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and
 - (2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.
- (c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.
 - (d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

F.5 FAR 52.242-17 GOVERNMENT DELAY OF WORK (APR 1984)

- (a) If the performance of all or any part of the work of this contract is delayed or interrupted
 - (1) by an act of the Contracting Officer in the administration of this contract that is not expressly or impliedly authorized by this contract, or
 - (2) by a failure of the Contracting Officer to act within the time specified in this contract, or within a reasonable time if not specified, an adjustment (excluding profit) shall be made for any increase in the cost of performance of this contract caused by the delay or interruption and the contract shall be modified in writing accordingly. Adjustment shall also be made in the delivery or performance dates and any other contractual term or condition affected by the delay or interruption. However, no adjustment shall be made under this clause for any delay or interruption to the extent that performance would have been delayed or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an adjustment is provided or excluded under any other term or condition of this contract.
- (b) A claim under this clause shall not be allowed --
 - (1) For any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved; and
 - (2) Unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the delay or interruption, but not later than the day of final payment under the contract

PART I - THE SCHEDULE

SECTION G

CONTRACT ADMINISTRATION DATA

G.1 FAR CLAUSES INCORPORATED BY REFERENCE

52.232-1	PAYMENTS	APR 1984
52.232-7	PAYMENTS UNDER TIME-AND MATERIALS AND LABOR-HOUR CONTRACTS	AUG 2012
52.232-16	PROGRESS PAYMENTS	APR 2012

G.2 PATENTS, DATA AND COPYRIGHTS

Patent, data and copyright requirements are set out in Part 27 of the Federal Acquisition Regulation (FAR), 48 CFR Part 27 and Part 927 of the Department of Energy Acquisition Regulation (DEAR), 48 CFR Subpart 927. Specific requirements are set out in clauses included in this contract, and may be supplemented by additional written direction from the Contracting Officer.

G.3 CORRESPONDENCE PROCEDURES

To promote timely and effective administration, all correspondence, reports and other documents submitted under this contract are subject to the following procedures:

- (a) **Technical Correspondence.** Technical correspondence concerning performance of this contract must be addressed to the DOE-ID Contracting Officer's Representative (COR) with an information copy to the Contracting Officer (CO). The COR will be designated by separate letter and will be the primary point of contact on technical matters, subject to the restrictions of DEAR Clause 952.242-70, "Technical Direction" contained in Section I. The COR is not authorized to change any of the terms and conditions of this contract (contract scope, term, schedule or cost). Only the CO can make changes to the scope, term, schedule, and cost of the work.
- (b) **Patents/Technical Data Correspondence.** The Chicago Operations Office, acting through the Intellectual Property Law Division of the Office of Assistant Manager for Legal Support/Chief Counsel, DOE, 9800 South Cass Avenue, Argonne, Illinois, 60439, represents the CO in administering the Patent Clauses in this contract. Correspondence concerning patent and technical data issues must be addressed to the Chicago Operations Office with a copy to the Idaho Operations Office Chief Counsel's Office, the CO and the COR.

- (c) Non-technical Administrative Correspondence. All correspondence, other than technical correspondence, must be addressed to the Contract Specialist identified in G.4(b), with information copies of the correspondence to the COR.
- (d) Subject Line(s). All correspondence must contain a subject line commencing with the contract number as illustrated below:

“SUBJECT: Contract No. {to be filled in}” Deep Bore Hole Field Test

(Insert subject topic after contract number, e.g., “Request for Subcontract Consent”).

G.4 SUBMISSION OF VOUCHERS/INVOICES

The Financial Services Team of the Idaho Operations Office (DOE-ID) is the cognizant finance office for this contract. However, the DOE Oak Ridge Operations Office will make contract payments. Payments will be made through the Automated Clearing House (ACH) electronic payment system. In lieu of receiving payment by check, payments will be sent via ACH and automatically credited to the designated account at the financial institution.

Voucher Form

In requesting reimbursements, the Contractor must use Standard Form 1034, Public Voucher for Purchases and Services Other than Personal, accompanied by supporting statement of cost documentation. A computerized version of the 1034 may be used

See: <http://www.gsa.gov/portal/forms/download/115462>

An alternative to the voucher form is the Vendor Inquiry Payment Electronic Reporting System (VIPERS). This voluntary system enables the Contractor to submit invoices electronically, after being registered at <https://vipers.doe.gov/> and having received your personnel identification number (PIN). The Contractor must have its Data Universal Numbering System (DUNS) number available to complete the registration process. Further instructions are available at the URL address.

Timing

If the above referenced VIPERS system is not utilized, the Contractor is encouraged to use regular mail in lieu of express mail methods in order to promote cost effectiveness. Distribution of the original voucher/billing and copies must be made as described below. Failure to comply with these voucher mailing instructions will result in delayed payments and may affect performance ratings for administrative areas.

Submittal of Vouchers

- (a) The original of each voucher/billing must be submitted to:

U.S. Department of Energy
 Oak Ridge Financial Service Center
 P. O. Box 4368
 Oak Ridge, TN 37831

- (b) One copy of the voucher/billing, with supporting detail must be e-mailed or mailed to the cognizant contract specialist:

Mark Payne, Contract Specialist
 Contract Management Division
 U.S. Department of Energy
 Idaho Operations Office (DOE-ID)
 1955 Fremont Avenue, MS-1221
 Idaho Falls, ID 83415-1221
 E-mail: paynemb@id.doe.gov

- (c) One copy of the voucher/billing, with supporting detail, must be e-mailed or mailed to the cognizant Contracting Officer's Representative:

Gordon McClellan
 U. S. Department of Energy
 Idaho Operations Office (DOE-ID)
 Supervisor, Fuel Cycle Programs
 1955 Fremont Ave.,
 Idaho Falls, ID 83405
 Email: mccllegr@id.doe.gov
 Phone: (208) 526-5379

Voucher Information

The following information must be included in each voucher: Period being billed; specific line items of cost elements to include, yet not be limited to, all materials, number of labor hours for each individual, labor rates and overheads applied; logical rack-up of sub-totals to the bottom line total being billed; and cumulative amount billed with a historical listing of invoices paid including invoice number, period billed and amount; billing period.

Voucher Frequency

The Government will make progress payments to the Contractor when requested as work progresses, but not more frequently than monthly.

Actual costs for travel and meeting expenses will be reimbursed in accordance with the Federal Travel Regulations and receipts must be presented for costs associated with this procurement.

G.5 CONTRACT ADMINISTRATION

The contract will be administered by:

U.S. Department of Energy
Idaho Operations Office (DOE-ID)
Contract Management Division
1955 Fremont Avenue, MS-1221
Idaho Falls, Idaho 83415-1221

Any change to the contract administration information will be accomplished by written notification from the CO to the Contractor, without a formal contract modification.

**G.6 ACCESS TO PROPRIETARY DATA OR COMPANY CONFIDENTIAL,
FINANCIAL, OR COMMERCIAL INFORMATION**

The Government may fulfill any of its obligations, or take any action under this contract (including inspection of audit of books, records, accounts, documents, and other data) either directly or through contractors or consultants. Any proprietary data or company confidential financial or commercial information so accessed by Government contractors or consultants may not be used, reproduced, nor disclosed outside of the Government except as expressly provided in this contract.

PART I - THE SCHEDULE

SECTION H

SPECIAL CONTRACT REQUIREMENTS

H.1 FAR CLAUSES INCORPORATED BY REFERENCE

52.234-4 EARNED VALUE MANAGEMENT SYSTEM MAY 2014

H.2 MODIFICATION AUTHORITY

Notwithstanding any of the other clauses of this contract, the Contracting Officer (CO) is the only individual authorized to:

- (a) Accept nonconforming work,
- (b) Waive any requirement of this contract, including schedule, or
- (c) Modify any term or condition of this contract.

H.3 GOVERNMENT PROPERTY AND DATA

The Government is not obligated to provide any real or personal property or data under this contract in addition to that as may be expressly identified elsewhere in this contract.

H.4 KEY PERSONNEL

The Contractor's key personnel are as follows:

POSITION TITLE

- Program Manager/Director
- Assistant/Alternate Program Manager/Director
- Drilling Site Supervisor
- Assistant/Alternate Drilling Site Supervisor
- Drilling Site Testing Manager
- Assistant/Alternate Drilling Site Testing Manager
- Financial Officer
- Business/Contracts Officer
- Public Outreach Liaison
- Subject Matter Expert(s)

The clause DEAR 952.215-70 entitled "Key Positions" contains a requirement for notification to the CO reasonably in advance of diverting of, or substitution for, any of these required positions. That period of time must not be less than thirty (30) days.

H.5 SUBCONTRACTS

- (a) Prior to the placement of subcontracts, the Contractor must ensure that they contain:
 - (1) All of the clauses of this contract (altered when necessary for proper identification of the contracting parties) which contain a requirement for inclusion in applicable subcontracts; and
 - (2) Any applicable subcontractor Representations and Certifications (see Part V-- Section K).
- (b) Except as expressly set forth in the consent, any consent given by the CO to the Contractor permitting placement of a subcontract does not: (i) constitute approval of the subcontractor or of any subcontract terms or conditions; (ii) constitute an advance determination that subcontract costs paid by the Contractor are allowable under this contract; (iii) revise any term or condition of this contract or the respective rights of the parties under this contract; and (iv) does not create privity of contract between the subcontractor and the Government.

H.6 CONFIDENTIALITY OF INFORMATION

- (a) To the extent that work under this contract requires the Contractor be given access to confidential or proprietary business, technical, or financial information belonging to the Government or other companies, the Contractor must, after receipt of this information, treat the information as confidential. The Contractor further agrees it will not use this information for any purpose unrelated to this contract, or disclose it to third parties unless specifically authorized by the CO in writing. The foregoing obligations, however, do not apply to:
 - (1) Information, which, at the time of receipt by the Contractor, is in public domain;
 - (2) Information, which is published after receipt by the Contractor or otherwise becomes part of the public domain through no fault of the Contractor;
 - (3) Information which the Contractor can demonstrate was already in its possession at the time of receipt under this contract and was not acquired directly or indirectly from the Government or other government contractors; or
 - (4) Information which the Contractor can demonstrate was received by it from a third party who did not require the Contractor to hold it in confidence.

- (b) The Contractor must obtain the written agreement, in a form satisfactory to the CO, of each employee permitted access to confidential information, whereby the employee agrees that s/he will not discuss, divulge or disclose any the information or data to any person or entity except those persons or entities within the Contractor's organization directly concerned with the performance of the contract.
- (c) The Contractor agrees, if requested by the Government, to sign an agreement identical, in all material respects, to the provisions of this clause, with each company supplying information to the Contractor under this contract, and to supply a copy of such agreement to the CO. From time to time upon request of the CO, the Contractor must supply the Government with reports itemizing information received as confidential or proprietary and setting forth the company or companies from which the Contractor received such information.
- (d) The Contractor agrees that upon request by DOE-ID it will execute a DOE-approved agreement with any party whose facilities or proprietary data it is given access to or is furnished, restricting use and disclosure of the data or the information obtained from the facilities. Upon request by DOE-ID, this agreement must also be signed by Contractor personnel.
- (e) This clause shall flow down to all subcontracts.

H.7 SERVICES OF CONSULTANTS

- (a) The Contractor must obtain the CO's written consent prior to awarding any subcontract for consulting services, including advisory and assistance services, which will exceed ten (10) days in any calendar year or exceed a total value of \$2,500. The Contractor must obtain and furnish to the CO information concerning the need for and selection of any subcontracts for consultant services and the reasonableness of the fees to be paid, including, but not limited to, whether fees to be paid to any consultant exceed the lowest fee charged by the consultant to others for performing consulting services of a similar nature.
- (b) The Contractor must obtain and furnish to the CO either an Organizational Conflicts of Interest (OCI) Disclosure Statement or Representation form in accordance with DEAR 909.507-2 "Organizational Conflicts of Interest", and must insert the clause at 48 CFR 952.209-72 (Refer Section I), in any consulting agreement or subcontract for all consultants to be utilized under this contract prior to their performing any effort under this contract. The CO must determine the consultant does not have an impermissible OCI before it can begin work for the Contractor.
- (c) The following consultants have been cleared by the CO for OCI:
(To be completed at the time of award)

H.8 CONTINUING DUTY TO DISCLOSE MATTERS THAT CREATE POTENTIAL OCI

The Contractor has a continuing obligation to disclose any current or planned financial, contractual, organizational, or other interests that may create a potential OCI relating to its performance of this contract. This duty to disclose applies to the Contractor, its team members, key personnel and its subcontractors. The CO may require the Contractor to take steps to avoid, neutralize, and/or mitigate any potential OCI identified as a result of this disclosure.

H.9 SMALL BUSINESS SUBCONTRACTING PLAN

The Small Business Subcontracting Plan, submitted by the Contractor consistent with the provisions of the clause entitled, "FAR 52.219-9 Small Business Subcontracting Plan," in Section I, and approved by the Contracting Officer on **(To be completed at the time of Contract Award)**, is incorporated in and made a material part of this contract as Section J, Attachment .

In connection with and corresponding to each contract option period exercised, the Contractor shall also submit an update to the subcontracting plan which shall establish subcontracting goals as described in paragraph (d)(1) and (2) of Section I clause entitled "FAR 52.219-9 Small Business Subcontracting Plan," to remain in effect for each contract period exercised. The updated plan shall be reviewed for approval by the Contracting Officer and shall be incorporated by reference as a material part of this Contract.

H.10 DISPOSITION OF INTELLECTUAL PROPERTY – FAILURE TO COMPLETE

- (a) In the event of a termination, default, or failure to complete by the Contractor, the Government may take possession of and use all technical data used or developed under the Contract, including limited rights data, restricted computer software, and data and software obtained from subcontractors, licensors, and licensees, that is needed to complete the work in conformance with this Contract, including the right to use the data in any Government solicitations for the work contemplated under this Contract. Data delivered to the Government is subject to FAR 52.227-14 Rights in Data - General clause of this contract. Technical information includes, but is not limited to, designs, operation manuals, flowcharts, software, work progress reports, and any other information necessary for the work under this Contract.
- (b) Upon request, the Contractor agrees to grant to the Government an irrevocable, nonexclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice by the Contractor, and any other intellectual property, including technical data, which are owned or controlled by the Contractor, at any time through completion or termination of this Contract and which are necessary for the continuation and completion of the project: (1) to practice or to have practiced by or for the Government; and (2) to transfer such license to future contractors of the project. The acceptance or exercise by the Government of these rights and license does not prevent the Government at any time from contesting the enforceability, validity, or scope of, or title to, any rights or patents or other intellectual property licensed.

- (c) As requested, the Contractor must take all necessary steps to assign permits, authorizations, leases, and licenses in any third party intellectual property to the Government, or such other party as the Government may designate, that are necessary for the work contemplated under this Contract.
- (d) The obligations under this clause are not dependent upon any payments by the Government. The obligations arise immediately upon the request of the Contracting Officer.

H.11 PROPERTY USE-DEEP BOREHOLE

Any interest in real property acquired or improvements made thereto (the site) under this contract (*Deep Borehole Field Test*) must be held by the Contractor. This interest must allow for use during the period of performance covered by the contract and any time beyond the contract term (see Section C) for all of the purposes described in Section C. The Contractor is prohibited from disposing or encumbering its title or interest.

Unless advance written approval is received from the CO, Government property (other than foundations and similar improvements necessary for installing special tooling, special test equipment, or equipment) must not be installed or constructed on the site in such fashion as to become a fixture or otherwise become nonseverable from the land.

The terms of use for the drill site (e.g., lease, easement, license, or permit, etc.) must include a provision that allows the US Government, at its sole discretion, to continue to use the site for authorized purposes under the contract for the duration of the contract's maximum period of performance (five years), plus an option to be exercised at the sole discretion of the Government, to use the site for up to an additional period of five years after completion of the contract's period of performance. This option must: (1) give the Government and its contractors the right to further test, drill and/or improve the characterization deep borehole and to drill one or more additional deep borehole(s) of differing sizes and configurations on the site for additional research purposes; (2) include the monthly and the full cost/price to the Government for using the site for the additional five-year period; and 3) must be transferrable to a bona fide third party (i.e., another DOE contractor) that would use the site for the activities specified in (1) above. The inclusion of this option does not obligate the Government to exercise the option.

In no case will the Government place or otherwise have nuclear material, waste, or other waste disposal material on the property. The terms of use for the site must also include a provision that the Government may, at its sole discretion, agree to release the property from this ten-year period any time prior to the end of the ten-year period as evidenced by written authorization from the Contracting Officer, with a corresponding reduction in the cost/price. The use of the real property encumbered under this contract is solely for the purposes specifically set forth in Section C. No further obligations, monetary or otherwise, are incurred by the Government unless the Government, at its sole discretion, elects to enter into another legally binding contractual agreement for other/continued use and/or improvement of the property following the end of the period of performance under this contract.

If the Government no longer needs the site at any time during contract performance, the Contractor and the Government may, in appropriate circumstances, permit the Contractor or its assignee to continue to use the improvements made to the site for other research and development activities, without further obligation to, or obligation by, the Government. This permission must be obtained from the Government through a written disposition agreement signed by both parties. The disposition agreement must include a statement of release substantially as follows:

Contractor's Statement of Release

In consideration of Government's authorization to the Contractor to continue to use the improvements made to the site for continued research and development activities, the Government and the Contractor agree that the Government's authorization is a complete equitable adjustment for the site's improvements and the use of them. The Contractor assumes all future liability for the site and its improvements and hereby releases the Government from any and all liability for further equitable adjustments or monetary damages of any kind or amount attributable to such facts or circumstances giving rise to the site and any of its improvements. This includes releasing the Government of any and all liability, including any liability for site usage, clean up, restoration, etc., of the site and its improvements.

No other Government obligations or liabilities are to be implied or inferred as a result of the *Deep Borehole Field Test* contract, including this clause, except as otherwise expressly stated in this contract.

Refer to the Statement of Work in Section C regarding other site closeout requirements

H.12 CONTRACT PHASES

This contract breaks the work scope into 5 separate phases. The decision to assign work described in Phase 3, Phase 4 and Phase 5 will be made unilaterally by DOE, in its sole discretion. The Contractor understands that: (a) it is likely multiple contractors will perform Phases 1, 2 and 3; and (b) which of the multiple contractors will perform Phase 3 and Phase 4 will be made by DOE using down select criteria contained in Section C of the contract. The Contractor further agrees that DOE's decision to not assign it Phase 3, Phase 4 or Phase 5 is not a termination for convenience of the Government supporting the possible award of termination settlement costs.

PART II – CONTRACT CLAUSES

SECTION I

CONTRACT CLAUSES

I.1 FAR 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://energy.gov/management/downloads/searchable-electronic-department-energy-acquisition-regulation>
<http://farsite.hill.af.mil/reghtml/regs/far2afmcfars/fardfars/far/far1toc.htm>

NOTE: After selecting the appropriate regulation above, at the "Table of Contents" page, conduct a search for the desired regulation reference using your browser's **FIND** function. When located, click on the **regulation reference** (hyperlink).

NUMBER	TITLE FAR Clauses	DATE
52.202-1	DEFINITIONS	NOV 2013
52.203-3	GRATUITIES	APR 1984
52.203-5	COVENANT AGAINST CONTINGENT FEES	MAY 2014
52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	SEP 2006
52.203-7	ANTI-KICKBACK PROCEDURES	MAY 2014
52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	MAY 2014
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	MAY 2014
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	OCT 2010
52.203-13	CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT	OCT 2015
52.203-17	CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS	APR 2014
52.203-70	WHISTLEBLOWER PROTECTION FOR CONTRACTOR EMPLOYEES OF WHISTLEBLOWER RIGHTS	DEC 2000

NUMBER	TITLE	DATE
52.204-4	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER	MAY 2011
52.204-7	SYSTEM FOR AWARD MANAGEMENT	JUL 2013
52.204-10	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS	JUL 2013
52.204-18	COMMERCIAL AND GOVERNMENT ENTITY CODE MAINTENCE	JUL 2016
52.204-19	INCORPORATION BY REFERENCE OF REPRESENTATION AND CERTIFICATIONS	DEC 2014
52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	OCT 2015
52.209-9	UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS	JUL 2013
52.215-2	AUDIT AND RECORDS--NEGOTIATION	OCT 2010
52.215-8	ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT	OCT 1997
52.215-10	PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA	AUG 2011
52.215-21	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA- MODIFICATIONS	OCT 2010
52.215-23	LIMITATIONS ON PASS-THROUGH CHARGES	OCT 2009
52.216-7	ALLOWABLE COST AND PAYMENT AS MODIFIED BY DEAR 952.216-7	JUN 2013
52.216-8	FIXED FEE	JUN 2011
52.217-2	CANCELLATION UNDER MULTIYEAR CONTRACTS	OCT 1997
52.219-4	NOTICE OF PRICE EVALUATION FOR HUBZONE SMALL BUSINESS CONCERNS	OCT 2014
52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS	OCT 2014
52.219-9	SMALL BUSINESS SUBCONTRACTING PLAN ALTERNATE II	OCT 2014 OCT 2001
52.219-16	LIQUIDATED DAMAGES – SUBCONTRACTING PLAN	JAN 1999
52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES	FEB 1997
52.222-2	PAYMENT FOR OVERTIME PREMIUMS	JUL 1990
52.222-3	CONVICT LABOR	JUN 2003
52.222-4	CONTRACT WORK HOURS AND SAFETY STANDARDS - OVERTIME COMPENSATION	MAY 2014
52.222-17	NONDISPLACEMENT OF QUALIFIED WORKERS	MAY 2014
52.222-21	PROHIBITION OF SEGREGATED FACILITIES	APR 2015

NUMBER	TITLE	DATE
52.222-26	EQUAL OPPORTUNITY	APR 2015
52.222-35	EQUAL OPPORTUNITY FOR VETERANS	OCT 2015
52.222-36	EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES	JUL 2014
52.222-37	EMPLOYMENT REPORTS ON VETERANS	FEB 2016
52.222-40	NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT	DEC 2010
52.222-50	COMBATING TRAFFICKING IN PERSONS	MAR 2015
52.223-6	DRUG-FREE WORKPLACE	MAY 2001
52.223-15	ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS	DEC 2007
52.223-17	AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS	MAY 2008
52.223-18	ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING	AUG 2011
52.225-1	BUY AMERICAN-SUPPLIES	MAY 2014
52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	JUN 2008
52-227-1	AUTHORIZATION AND CONSENT	DEC 2007
52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	DEC 2007
52.227-14	RIGHTS IN DATA – GENERAL	MAY 2014
52.227-16	ADDITIONAL DATA REQUIREMENTS	JUN 1987
52.227-23	RIGHTS TO PROPOSAL DATA (TECHNICAL)	JUN 1987
52.228-7	INSURANCE – LIABILITY TO THIRD PERSONS	MAR 1996
52.230-2	COST ACCOUNTING STANDARDS	OCT 2015
52.230-3	DISCLOSURE AND CONSISTENCY OF COST ACCOUNTING PRACTICES	OCT 2015
52.230-6	ADMINISTRATION OF COST ACCOUNTING STANDARDS	JUN 2010
52.232-1	PAYMENTS	APR 1984
52.232-9	LIMITATION ON WITHHOLDING OF PAYMENTS	APR 1984
52.232-16	PROGRESS PAYMENTS INTEREST	APR 2012
52.232-17	INTREST	MAY 2014
52.232-18	AVAILABILITY OF FUNDS	APR 1984
52.232-20	LIMITATION OF COST	APR 1984
52.232-23	ASSIGNMENT OF CLAIMS	MAY 2014
52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER – SYSTEM FOR AWARD MANAGEMENT	JUL 2013
52.232-39	UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS	JUNE 2013

NUMBER	TITLE	DATE
51.232-40	PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS	DEC 2013
52.233-1	DISPUTES	MAY 2014
52.233-1	DISPUTES—ALTERNATE I	DEC 1991
52.233-3	PROTEST AFTER AWARD	AUG 1996
52.233-3	ALTERNATE I	JUN 1985
52.233-4	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM	OCT 2004
52.242-1	NOTICE OF INTENT TO DISALLOW COSTS	APR 1984
52.242-3	PENALTIES FOR UNALLOWABLE COSTS	MAY 2014
52.242-13	BANKRUPTCY	JUL 1995
52.243-2	CHANGES-COST REIMBURSEMENT	AUG 1987
52.243-2	ALTERNATE I	APR 1984
52.243-3	CHANGES—TIME-AND-MATERIALS OR LABOR-HOURS	SEP 2000
52.243-2	ALTERNATE IV	APR 1984
52.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS	JUN 2016
52.245-1	GOVERNMENT PROPERTY	APR 2012
52.245-9	USE AND CHARGES	APR 2012
52.246-25	LIMITATION OF LIABILITY—SERVICES	FEB 1997
52.248-1	VALUE ENGINEERING	OCT 2010
52.249-6	TERMINATION (COST-REIMBURSEMENT)	MAY 2004
52.249-6	TERMINATION (COST-REIMBURSEMENT) -- ALTERNATE IV	MAY 2004
52.249-14	EXCUSABLE DELAYS	APR 1984
52.253-1	COMPUTER GENERATED FORMS	JAN 1991
DEAR Clauses		
952.202-1	DEFINITIONS	FEB 2011
952.203-70	WHISTLEBLOWER PROTECTION FOR CONTRACTOR EMPLOEES	DEC 2000
952.204-75	PUBLIC AFFAIRS	DEC 2000
952.208-70	PRINTING	APR 1984
952.209-8	ORGANIZATIONAL CONFLICTS OF INTEREST DISCLOSURE – ADVISORY AND ASSISTANCE SERVICES	JUN 1997
952.209-72	ORGANIZATIONAL CONFLICTS OF INTEREST	AUG 2009
952.216-7	ALLOWABLE COST AND PAYMENT	JUNE 2013
952.217-70	ACQUISITION OF REAL PROPERTY	MAR 2011
952.219-70	DOE MENTOR-PROTÉGÉ PROGRAM	MAY 2000
952.223-75	PRESERVATION OF INDIVIDUAL OCCUPATIONAL RADIATION EXPOSURE RECORDS	ARP 1984

NUMBER	TITLE	DATE
952.226-72	ENERGY POLICY ACT SUBCONTRACTING GOALS AND REPORTING REQUIREMENTS	JUN 1996
952.226-74	DISPLACED EMPLOYEE HIRING PREFERENCE	JUN 1997
952.227-9	REFUND OF ROYALTIES	FEB 1995
952.227-11	PATENT RIGHTS-RETENTION BY THE CONTRACTOR (SHORT FORM)	FEB 1995
952.227-13	PATENT RIGHTS-ACQUISITION BY THE GOVERNMENT	SEP 1997
952.233-5	AGENCY PROTEST REVIEW	SEP 1996
952.235-71	RESEARCH MISCONDUCT	JUL 2005
952.242-70	TECHNICAL DIRECTION	DEC 2000
952.247-70	FOREIGN TRAVEL	JUN 2010
952.251-70	CONTRACTOR EMPLOYEE TRAVEL DISCOUNTS	AUG 2009
970.5227-4	AUTHORIZATION AND CONSENT	AUG 2002
970.5223-1	INTEGRATION OF ENVIROPNMENT, SAFETY, AND HEALTH INTO WORK PLANNING AND EXECUTION	DEC 2000

I.2 FAR 52.203-14 DISPLAY OF HOTLINE POSTER(S) (Oct 2015)

(a) Definition.

“United States,” as used in this clause, means the 50 States, the District of Columbia, and outlying areas.

(b) Display of fraud hotline poster(s). Except as provided in paragraph (c)—

- (1) During contract performance in the United States, the Contractor shall prominently display in common work areas within business segments performing work under this contract and at contract work sites—
 - (i) Any agency fraud hotline poster or Department of Homeland Security (DHS) fraud hotline poster identified in paragraph (b)(3) of this clause; and
 - (ii) Any DHS fraud hotline poster subsequently identified by the Contracting Officer.
- (2) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the poster(s) at the website.
- (3) Any required posters may be obtained as follows:

Poster(s)	Obtain from
Fraud Hotline	Fraud Hotline Posters DoD Inspector General, ATTN: Defense Hotline, 400 Army Navy Drive Washington, DC 22202-2884

- (c) If the Contractor has implemented a business ethics and conduct awareness program, including a reporting mechanism, such as a hotline poster, then the Contractor need not display any agency fraud hotline posters as required in paragraph (b) of this clause, other than any required DHS posters.
- (d) *Subcontracts.* The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts that exceed \$5.5 million, except when the subcontract—
- (1) Is for the acquisition of a commercial item; or
 - (2) Is performed entirely outside the United States.

I.3 FAR 52.204-1 APPROVAL OF CONTRACT (DEC 1989)

This contract is subject to the written approval of the Contracting Officer and shall not be binding until so approved.

I.4 FAR 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REPRESENTATION (Jul 2013)

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

Long-term contract means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

Small business concern means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (c) of this clause. Such a concern is “not dominant in its field of operation” when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

- (b) If the Contractor represented that it was a small business concern prior to award of this contract, the Contractor shall represent its size status according to paragraph (e) of this clause or, if applicable, paragraph (g) of this clause, upon the occurrence of any of the following:
- (1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.
 - (2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.
 - (3) For long-term contracts—
 - (i) Within 60 to 120 days prior to the end of the fifth year of the contract; and
 - (ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.
- (c) The Contractor shall represent its size status in accordance with the size standard in effect at the time of this representation that corresponds to the North American Industry Classification System (NAICS) code assigned to this contract. The small business size standard corresponding to this NAICS code can be found at <http://www.sba.gov/content/table-small-business-size-standards>.
- (d) The small business size standard for a contractor providing a product which it does not manufacture itself, for a contract other than a construction or service contract, is 500 employees.
- (e) Except as provided in paragraph (g) of this clause, the Contractor shall make the representation required by paragraph (b) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause that the data have been validated or updated, and provide the date of the validation or update.
- (f) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (e) or (g) of this clause.
- (g) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following representation and submit it to the

contracting office, along with the contract number and the date on which the representation was completed:

The Contractor represents that it [] is, [] is not a small business concern under NAICS Code 541712 assigned to contract number _____ [*Contractor to sign and date and insert authorized signer's name and title*].

I.5 FAR 52.222-2 – PAYMENT FOR OVERTIME PREMIUMS (JUL 1990)

- (a) The use of overtime is authorized under this contract if the overtime premium does not exceed \$_____ (to be completed at the time of award) or the overtime premium is paid for work --
- (1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;
 - (2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;
 - (3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or
 - (4) That will result in lower overall costs to the Government.
- (b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall --
- (1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;
 - (2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;
 - (3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and
 - (4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

**I.6 FAR 52.222-50 – COMBATING TRAFFICKING IN PERSONS (FEB 2009)
ALTERNATE I (Mar 2015)**

(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.

“Coercion” means—

- (1) Threats of serious harm to or physical restraint against any person;
- (2) Any scheme, plan, or pattern intended to cause a person to believe that failure to perform an act would result in serious harm to or physical restraint against any person; or
- (3) The abuse or threatened abuse of the legal process.

“Commercial sex act” means any sex act on account of which anything of value is given to or received by any person.

“Commercially available off-the-shelf (COTS) item” means—

- (1) Any item of supply (including construction material) that is—
 - (i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);
 - (ii) Sold in substantial quantities in the commercial marketplace; and
 - (iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and
- (2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

“Debt bondage” means the status or condition of a debtor arising from a pledge by the debtor of his or her personal services or of those of a person under his or her control as a security for debt, if the value of those services as reasonably assessed is not applied toward the liquidation of the debt or the length and nature of those services are not respectively limited and defined.

“Employee” means an employee of the Contractor directly engaged in the performance of work under the contract who has other than a minimal impact or involvement in contract performance.

“Forced labor” means knowingly providing or obtaining the labor or services of a person—

- (1) By threats of serious harm to, or physical restraint against, that person or another person;
- (2) By means of any scheme, plan, or pattern intended to cause the person to believe that, if the person did not perform such labor or services, that person or another person would suffer serious harm or physical restraint; or
- (3) By means of the abuse or threatened abuse of law or the legal process.

“Involuntary servitude” includes a condition of servitude induced by means of—

- (1) Any scheme, plan, or pattern intended to cause a person to believe that, if the person did not enter into or continue in such conditions, that person or another person would suffer serious harm or physical restraint; or
- (2) The abuse or threatened abuse of the legal process.

“Severe forms of trafficking in persons” means—

- (1) Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or
- (2) The recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

“Sex trafficking” means the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act.

“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 furnishes 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) *Policy.* The United States Government has adopted a policy prohibiting trafficking in persons including the trafficking-related activities of this clause. Contractors, contractor employees, and their agents shall not—

- (1) Engage in severe forms of trafficking in persons during the period of performance of the contract;

- (2) Procure commercial sex acts during the period of performance of the contract;
- (3) Use forced labor in the performance of the contract;
- (4) Destroy, conceal, confiscate, or otherwise deny access by an employee to the employee's identity or immigration documents, such as passports or drivers' licenses, regardless of issuing authority;
- (5) (i) Use misleading or fraudulent practices during the recruitment of employees or offering of employment, such as failing to disclose, in a format and language accessible to the worker, basic information or making material misrepresentations during the recruitment of employees regarding the key terms and conditions of employment, including wages and fringe benefits, the location of work, the living conditions, housing and associated costs (if employer or agent provided or arranged), any significant cost to be charged to the employee, and, if applicable, the hazardous nature of the work;
 - (ii) Use recruiters that do not comply with local labor laws of the country in which the recruiting takes place;
- (6) Charge employees recruitment fees;
- (7) (i) Fail to provide return transportation or pay for the cost of return transportation upon the end of employment—
 - (A) For an employee who is not a national of the country in which the work is taking place and who was brought into that country for the purpose of working on a U.S. Government contract or subcontract (for portions of contracts performed outside the United States); or
 - (B) For an employee who is not a United States national and who was brought into the United States for the purpose of working on a U.S. Government contract or subcontract, if the payment of such costs is required under existing temporary worker programs or pursuant to a written agreement with the employee (for portions of contracts performed inside the United States); except that—
 - (ii) The requirements of paragraphs (b)(7)(i) of this clause shall not apply to an employee who is—
 - (A) Legally permitted to remain in the country of employment and who chooses to do so; or
 - (B) Exempted by an authorized official of the contracting agency from the requirement to provide return transportation or pay for the cost of return transportation;

(iii) The requirements of paragraph (b)(7)(i) of this clause are modified for a victim of trafficking in persons who is seeking victim services or legal redress in the country of employment, or for a witness in an enforcement action related to trafficking in persons. The contractor shall provide the return transportation or pay the cost of return transportation in a way that does not obstruct the victim services, legal redress, or witness activity. For example, the contractor shall not only offer return transportation to a witness at a time when the witness is still needed to testify. This paragraph does not apply when the exemptions at paragraph (b)(7)(ii) of this clause apply.

- (8) Provide or arrange housing that fails to meet the host country housing and safety standards; or
- (9) If required by law or contract, fail to provide an employment contract, recruitment agreement, or other required work document in writing. Such written work document shall be in a language the employee understands. If the employee must relocate to perform the work, the work document shall be provided to the employee at least five days prior to the employee relocating. The employee's work document shall include, but is not limited to, details about work description, wages, prohibition on charging recruitment fees, work location(s), living accommodations and associated costs, time off, roundtrip transportation arrangements, grievance process, and the content of applicable laws and regulations that prohibit trafficking in persons.

(c) *Contractor requirements.* The Contractor shall—

- (1) Notify its employees and agents of—
 - (i) (A) The United States Government's policy prohibiting trafficking in persons described in paragraph (b) of this clause; and
 - (B) The following directive(s) or notice(s) applicable to employees performing work at the contract place(s) of performance as indicated below:

Document Title	Document may be obtained from:	Applies to Performance in/at:
TBD	to be completed at the time of award	

(ii) The actions that will be taken against employees or agents for violations of this policy. Such actions for employees may include, but are not limited to, removal from the contract, reduction in benefits, or termination of employment; and

- (2) Take appropriate action, up to and including termination, against employees, agents, or subcontractors that violate the policy in paragraph (b) of this clause.
- (d) *Notification.*
- (1) The Contractor shall inform the Contracting Officer and the agency Inspector General immediately of—
- (i) Any credible information it receives from any source (including host country law enforcement) that alleges a Contractor employee, subcontractor, subcontractor employee, or their agent has engaged in conduct that violates the policy in paragraph (b) of this clause (see also 18 U.S.C. 1351, Fraud in Foreign Labor Contracting, and 52.203-13(b)(3)(i)(A), if that clause is included in the solicitation or contract, which requires disclosure to the agency Office of the Inspector General when the Contractor has credible evidence of fraud); and
- (ii) Any actions taken against a Contractor employee, subcontractor, subcontractor employee, or their agent pursuant to this clause.
- (2) If the allegation may be associated with more than one contract, the Contractor shall inform the contracting officer for the contract with the highest dollar value.
- (e) *Remedies.* In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraphs (c), (d), (g), (h), or (i) of this clause may result in—
- (1) Requiring the Contractor to remove a Contractor employee or employees from the performance of the contract;
- (2) Requiring the Contractor to terminate a subcontract;
- (3) Suspension of contract payments until the Contractor has taken appropriate remedial action;
- (4) Loss of award fee, consistent with the award fee plan, for the performance period in which the Government determined Contractor non-compliance;
- (5) Declining to exercise available options under the contract;
- (6) Termination of the contract for default or cause, in accordance with the termination clause of this contract; or
- (7) Suspension or debarment.
- (f) *Mitigating and aggravating factors.* When determining remedies, the Contracting Officer may consider the following:

- (1) *Mitigating factors.* The Contractor had a Trafficking in Persons compliance plan or an awareness program at the time of the violation, was in compliance with the plan, and has taken appropriate remedial actions for the violation, that may include reparation to victims for such violations.
- (2) *Aggravating factors.* The Contractor failed to abate an alleged violation or enforce the requirements of a compliance plan, when directed by the Contracting Officer to *do so.*
- (g) *Full cooperation.*
- (1) The Contractor shall, at a minimum—
- (i) Disclose to the agency Inspector General information sufficient to identify the nature and extent of an offense and the individuals responsible for the conduct;
- (ii) Provide timely and complete responses to Government auditors' and investigators' requests for documents;
- (iii) Cooperate fully in providing reasonable access to its facilities and staff (both inside and outside the U.S.) to allow contracting agencies and other responsible Federal agencies to conduct audits, investigations, or other actions to ascertain compliance with the Trafficking Victims Protection Act of 2000 (22 U.S.C. chapter 78), E.O. 13627, or any other applicable law or regulation establishing restrictions on trafficking in persons, the procurement of commercial sex acts, or the use of forced labor; and
- (iv) Protect all employees suspected of being victims of or witnesses to prohibited activities, prior to returning to the country from which the employee was recruited, and shall not prevent or hinder the ability of these employees from cooperating fully with Government authorities.
- (2) The requirement for full cooperation does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not—
- (i) Require the Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine;
- (ii) Require any officer, director, owner, employee, or agent of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; or
- (iii) Restrict the Contractor from—
- (A) Conducting an internal investigation; or

(B) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

(h) *Compliance plan.*

- (1) This paragraph (h) applies to any portion of the contract that—
 - (i) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and
 - (ii) Has an estimated value that exceeds \$500,000.
- (2) The Contractor shall maintain a compliance plan during the performance of the contract that is appropriate—
 - (i) To the size and complexity of the contract; and
 - (ii) To the nature and scope of the activities to be performed for the Government, including the number of non-United States citizens expected to be employed and the risk that the contract or subcontract will involve services or supplies susceptible to trafficking in persons.
- (3) *Minimum requirements.* The compliance plan must include, at a minimum, the following:
 - (i) An awareness program to inform contractor employees about the Government's policy prohibiting trafficking-related activities described in paragraph (b) of this clause, the activities prohibited, and the actions that will be taken against the employee for violations. Additional information about Trafficking in Persons and examples of awareness programs can be found at the Web site for the Department of State's Office to Monitor and Combat Trafficking in Persons at <http://www.state.gov/j/tip/>.
 - (ii) A process for employees to report, without fear of retaliation, activity inconsistent with the policy prohibiting trafficking in persons, including a means to make available to all employees the hotline phone number of the Global Human Trafficking Hotline at 1-844-888-FREE and its email address at help@befree.org.
 - (iii) A recruitment and wage plan that only permits the use of recruitment companies with trained employees, prohibits charging recruitment fees to the employee, and ensures that wages meet applicable host-country legal requirements or explains any variance.

(iv) A housing plan, if the Contractor or subcontractor intends to provide or arrange housing, that ensures that the housing meets host-country housing and safety standards.

(v) Procedures to prevent agents and subcontractors at any tier and at any dollar value from engaging in trafficking in persons (including activities in paragraph (b) of this clause) and to monitor, detect, and terminate any agents, subcontracts, or subcontractor employees that have engaged in such activities.

(4) *Posting.*

(i) The Contractor shall post the relevant contents of the compliance plan, no later than the initiation of contract performance, at the workplace (unless the work is to be performed in the field or not in a fixed location) and on the Contractor's Web site (if one is maintained). If posting at the workplace or on the Web site is impracticable, the Contractor shall provide the relevant contents of the compliance plan to each worker in writing.

(ii) The Contractor shall provide the compliance plan to the Contracting Officer upon request.

(5) *Certification.* Annually after receiving an award, the Contractor shall submit a certification to the Contracting Officer that—

(i) It has implemented a compliance plan to prevent any prohibited activities identified at paragraph (b) of this clause and to monitor, detect, and terminate any agent, subcontract or subcontractor employee engaging in prohibited activities; and

(ii) After having conducted due diligence, either—

(A) To the best of the Contractor's knowledge and belief, neither it nor any of its agents, subcontractors, or their agents is engaged in any such activities; or

(B) If abuses relating to any of the prohibited activities identified in paragraph (b) of this clause have been found, the Contractor or subcontractor has taken the appropriate remedial and referral actions.

(i) *Subcontracts.*

(1) The Contractor shall include the substance of this clause, including this paragraph (i), in all subcontracts and in all contracts with agents. The requirements in paragraph (h) of this clause apply only to any portion of the subcontract that—

(A) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and

(B) Has an estimated value that exceeds \$500,000.

- (2) If any subcontractor is required by this clause to submit a certification, the Contractor shall require submission prior to the award of the subcontract and annually thereafter. The certification shall cover the items in paragraph (h)(5) of this clause.

I.7 FAR 52.232-25 – PROMPT PAYMENT (JUL 2013) ALTERNATE I (FEB 2002)

Notwithstanding any other payment clause in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer (EFT). Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(4) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) *Invoice payments --*

(1) *Due date.*

(i) Except as indicated in paragraphs (a)(2) and (c) of this clause, the due date for making invoice payments by the designated payment office shall be the later of the following two events:

(A) The 30th day after the designated billing office receives a proper invoice from the Contractor (except as provided in paragraph (a)(1)(ii) of this clause).

(B) The 30th day after Government acceptance of supplies delivered or services performed. For a final invoice, when the payment amount is subject to contract settlement actions, acceptance is deemed to occur on the effective date of the contract settlement.

(ii) If the designated billing office fails to annotate the invoice with the actual date of receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice; provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) *Certain food products and other payments.*

(i) Due dates on Contractor invoices for meat, meat food products, or fish; perishable agricultural commodities; and dairy products, edible fats or oils, and food products prepared from edible fats or oils are --

(A) For meat or meat food products, as defined in section 2(a)(3) of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)), and as further defined in Pub. L. 98- 181, including any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, and any perishable egg product, as close as possible to, but not later than, the 7th day after product delivery.

(B) For fresh or frozen fish, as defined in section 204(3) of the Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)), as close as possible to, but not later than, the 7th day after product delivery.

(C) For perishable agricultural commodities, as defined in section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(4)), as close as possible to, but not later than, the 10th day after product delivery, unless another date is specified in the contract.

(D) For dairy products, as defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (7 U.S.C. 4502(e)), edible fats or oils, and food products prepared from edible fats or oils, as close as possible to, but not later than, the 10th day after the date on which a proper invoice has been received. Liquid milk, cheese, certain processed cheese products, butter, yogurt, ice cream, mayonnaise, salad dressings, and other similar products, fall within this classification. Nothing in the Act limits this classification to refrigerated products. When questions arise regarding the proper classification of a specific product, prevailing industry practices will be followed in specifying a contract payment due date. The burden of proof that a classification of a specific product is, in fact, prevailing industry practice is upon the Contractor making the representation.

(ii) If the contract does not require submission of an invoice for payment (e.g., periodic lease payments), the due date will be as specified in the contract.

- (3) *Contractor's invoice.* The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(3)(i) through (a)(3)(x) of this clause. If the invoice does not comply with these requirements, the designated billing office will return it within 7 days after receipt (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, dairy products, edible fats or oils, and food products prepared from edible fats or oils), with the reasons why it is not a proper invoice. The Government will take into account untimely notification when computing any interest penalty owed the Contractor.

(i) Name and address of the Contractor.

(ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of the mailing or transmission.)

- (iii) Contract number or other authorization for supplies delivered or services performed (including order number and contract line item number).
- (iv) Description, quantity, unit of measure, unit price, and extended price of supplies delivered or services performed.
- (v) Shipping and payment terms (e.g., shipment number and date of shipment, discount for prompt payment terms). Bill of lading number and weight of shipment will be shown for shipments on Government bills of lading.
- (vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).
- (vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.
- (viii) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
- (ix) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic funds Transfer— System for Award Management, or 52.232-34, Payment by Electronic Funds Transfer-- Other Than System for Award Management), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

- (x) Any other information or documentation required by the contract (e.g., evidence of shipment.)
- (4) *Interest penalty.* The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(4)(i) through (a)(4)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.

- (i) The designated billing office received a proper invoice.
 - (ii) The Government processed a receiving report or other Government documentation authorizing payment, and there was no disagreement over quantity, quality, or Contractor compliance with any contract term or condition.
 - (iii) In the case of a final invoice for any balance of funds due the Contractor for supplies delivered or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.
- (5) *Computing penalty amount.* The Government will compute the interest penalty in accordance with Office of Management and Budget prompt payment regulations at 5 CFR part 1315.
- (i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance is deemed to occur constructively on the 7th day (unless otherwise specified in this contract) after the Contractor delivers the supplies or performs the services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. If actual acceptance occurs within the constructive acceptance period, the Government will base the determination of an interest penalty on the actual date of acceptance. The constructive acceptance requirement does not, however, compel Government officials to accept supplies or services, perform contract administration functions, or make payment prior to fulfilling their responsibilities.
 - (ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.
- (6) *Discounts for prompt payment.* The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.
- (7) *Additional interest penalty.*
- (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--

- (A) The Government owes an interest penalty of \$1 or more;
 - (B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and
 - (C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(7)(ii) of this clause, postmarked not later than 40 days after the invoice amount is paid.
- (ii) (A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall --
- (1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;
 - (2) Attach a copy of the invoice on which the unpaid late payment interest was due; and
 - (3) State that payment of the principal has been received, including the date of receipt.
- (B) If there is no postmark or the postmark is illegible--
- (1) The designated payment office that receives the demand will annotate it with the date of receipt, provided the demand is received on or before the 40th day after payment was made; or
 - (2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.
- (iii) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).
- (b) *Contract financing payments.* If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.
 - (c) *Fast payment procedure due dates.* If this contract contains the clause at 52.213-1, Fast Payment Procedure, payments will be made within 15 days after the date of receipt of the invoice.

- (d) *Overpayments.* If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall—
- (1) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the—
 - (i) Circumstances of the overpayment (e.g., duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);
 - (ii) Affected contract number and delivery order number if applicable;
 - (iii) Affected contract line item or subline item, if applicable; and
 - (iv) Contractor point of contact.
 - (2) Provide a copy of the remittance and supporting documentation to the Contracting Officer.
- (e) *Invoices for interim payments.* For interim payments under this cost-reimbursement contract for services--
- (1) Paragraphs (a)(2.), (a)(3), (a)(4(ii), (a)(4(iii), and (a)(5)(i) do not apply;
 - (2) For purposes of computing late payment interest penalties that may apply, the due date for payment is the 30th day after the designated billing office receives a proper invoice; and
 - (3) The Contractor shall submit invoices for interim payments in accordance with paragraph of FAR 52.216-7, Allowable Cost and Payment. If the invoice does not comply with contract requirements, it will be returned within 7 days after the date the designated billing office received the invoice.

I.8 FAR 52.242-4 – CERTIFICATION OF FINAL INDIRECT COSTS (JAN 1997)

- (a) The Contractor shall --
- (1) Certify any proposal to establish or modify final indirect cost rates;
 - (2) Use the format in paragraph (c) of this clause to certify; and
 - (3) Have the certificate signed by an individual of the Contractor's organization at a level no lower than a vice president or chief financial officer of the business segment of the Contractor that submits the proposal.

- (b) Failure by the Contractor to submit a signed certificate, as described in this clause, may result in final indirect costs at rates unilaterally established by the Contracting Officer.
- (c) The certificate of final indirect costs shall read as follows:

Certificate of Final Indirect Costs

This is to certify that I have reviewed this proposal to establish final indirect cost rates and to the best of my knowledge and belief:

1. All costs included in this proposal (identify proposal and date) to establish final indirect cost rates for (identify period covered by rate) are allowable in accordance with the cost principles of the Federal Acquisition Regulation (FAR) and its supplements applicable to the contracts to which the final indirect cost rates will apply; and
2. This proposal does not include any costs which are expressly unallowable under applicable cost principles of the FAR or its supplements.

Firm: _____

Signature: _____

Name of Certifying Official: _____

Title: _____

Date of Execution: _____

I.9 FAR 52.243-7 – NOTIFICATION OF CHANGES (APR 1984)

- (a) *Definitions.* “Contracting Officer,” as used in this clause, does not include any representative of the Contracting Officer.

“Specifically Authorized Representative (SAR),” as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this subparagraph and shall be issued to the designated representative before the SAR exercises such authority.

- (b) *Notice.* The *primary* purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing promptly, within 20 calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oral communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the Contractor, the notice shall state --

- (1) The date, nature, and circumstances of the conduct regarded as a change;
 - (2) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such conduct;
 - (3) The identification of any documents and the substance of any oral communication involved in such conduct;
 - (4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
 - (5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause, including --
 - (i) What contract line items have been or may be affected by the alleged change;
 - (ii) What labor or materials or both have been or may be added, deleted, or wasted by the alleged change;
 - (iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change;
 - (iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are estimated; and
 - (6) The Contractor's estimate of the time by which the Government must respond to the Contractor's notice to minimize cost, delay or disruption of performance.
- (c) *Continued performance.* Following submission of the notice required by paragraph (b) of this clause, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in paragraph (b) of this clause, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing promptly and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall promptly countermand any action which exceeds the authority of the SAR.
- (d) *Government response.* The Contracting Officer shall promptly, within 30 calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either --

- (1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;
 - (2) Countermand any communication regarded as a change;
 - (3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or
 - (4) In the event the Contractor's notice information is inadequate to make a decision under subparagraphs (d)(1), (2), or (3) of this clause, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.
- (e) *Equitable adjustments.*
- (1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor, and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made --
 - (i) In the contract price or delivery schedule or both; and
 - (ii) In such other provisions of the contract as may be affected.
 - (2) The contract shall be modified in writing accordingly. In the case of drawings, designs or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change confirmed by the Contracting Officer under this clause is included in the equitable adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of the property. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in paragraphs (b) and (c) of this clause.

NOTE: The phrases "contract price" and "cost" wherever they appear in the clause, may be appropriately modified to apply to cost-reimbursement or incentive contracts, or to combinations thereof.

I.10 FAR 52.244-2 -- SUBCONTRACTS (OCT 2010)

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

“Approved purchasing system” means a Contractor’s purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR)

“Consent to subcontract” means the Contracting Officer’s written consent for the Contractor to enter into a particular subcontract.

“Subcontract” means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

- (b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.
- (c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that-
 - (1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or
 - (2) Is fixed-price and exceeds—
 - (i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or
 - (ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.
- (d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer’s written consent before placing the following subcontracts:

(To be filled in at contract award)
- (e)
 - (1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:
 - (i) A description of the supplies or services to be subcontracted.

- (ii) Identification of the type of subcontract to be used.
 - (iii) Identification of the proposed subcontractor.
 - (iv) The proposed subcontract price.
 - (v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.
 - (vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.
 - (vii) A negotiation memorandum reflecting -
 - (A) The principal elements of the subcontract price negotiations;
 - (B) The most significant considerations controlling establishment of initial or revised prices;
 - (C) The reason certified cost or pricing data were or were not required;
 - (D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining the price objective and in negotiating the final price;
 - (E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;
 - (F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and
 - (G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.
- (2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (b), (c), or (d) of this clause.

- (f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination -
 - (1) Of the acceptability of any subcontract terms or conditions;
 - (2) Of the allowability of any cost under this contract; or
 - (3) To relieve the Contractor of any responsibility for performing this contract.
- (g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).
- (h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.
- (i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.
- (j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

I.11 DEAR 952.215-70 KEY PERSONNEL (DEC 2000)

- (a) The personnel listed below or elsewhere in this contract (see H.4) are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel, the Contractor must:

(to be filled in at contract award)

 - (1) Notify the Contracting Officer reasonably in advance;
 - (2) Submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract; and
 - (3) Obtain the Contracting Officer's written approval. Notwithstanding the foregoing, if the Contractor deems immediate removal or suspension of any member of its management team is necessary to fulfill its obligation to maintain satisfactory standards of employee competency, conduct, and integrity under the clause at 48 CFR 970.5203-3, Contractor's Organization, the Contractor may remove or suspend

such person at once, although the Contractor must notify Contracting Officer prior to or concurrently with such action.

- (b) The list of personnel may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel.

I.12 DEAR 952.227-82 RIGHTS TO PROPOASL DATA (APR 1984)

Except for technical data contained on pages _____ (filled in at contract award) of the contractor's proposal dated _____ (filled in at contract award) which are asserted by the contractor as being proprietary data, it is agreed that, as a condition of the award of this contract, and notwithstanding the provisions of any notice appearing on the proposal, the Government shall have the right to use, duplicate, disclose and have others do so for any purpose whatsoever, the technical data contained in the proposal upon which this contract is based.

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS**SECTION J****LIST OF ATTACHMENTS****ATTACHMENT J-A****REPORTING REQUIREMENTS CHECKLIST**

REPORT	FREQUENCY	# OF COPIES	ADDRESSEES
Subcontracting Plan	As required by Section H	1, 1 Electronic Mail	A, B
Environmental Checklist Evaluations	As requested	1, 1 Electronic Mail	A, C
NEPA reporting as required by the COR	As requested	1, 1 Electronic Mail	A, C
Organizational Conflict of Interest Risk Analysis and Mitigation Plan	Once After Award, Update As Needed	1, 1 Electronic Mail	A, B
Public Outreach Plan	As required by Section C	1, 1 Electronic Mail	A, B
Formal Agreements with public and landowner	As required by Section C	1, 1 Electronic Mail	A, B
Final Drilling and Test Plan with Final Detailed Cost Estimate	As required by Section C	1, 1 Electronic Mail	A, B
Notifications	As required by Section C	1 Electronic Mail	B
Drilling Reports	As required by Section C	1 Electronic Mail	B
Technical Progress Reporting as described by the COR	Semi-Annually	1, 1 Electronic Mail	A, B
Single Dollar Figure Representing Estimated Spending to Date	1 st Friday of Each Month	1 Electronic Mail	B

Note: When two or more copies are required, include one original. All reports required under this

contract must be sent to the following:

- A. Mark Payne, Contract Specialist
Contract Management Division
U.S. Department of Energy Idaho Operations Office
1955 Fremont Avenue Idaho Falls, ID 83401-1221
Email: paynemb@id.doe.gov

- B. Gordon McClellan
U. S. Department of Energy Idaho Operations Office
Supervisor, Fuel Cycle Programs
1955 Fremont Avenue, Idaho Falls, ID 83415
Email: mcclelgr@id.doe.gov
Phone: (208) 526-5379

- C. Jack Depperschmidt, NEPA Compliance Officer*
U.S. Department of Energy Idaho Operations Office
1955 Fremont Avenue Idaho Falls, ID 83415-1216
* NEPA Environmental Checklist Evaluations only

The Contractor is responsible for following established DOE Idaho procedures for clearances on all oral, written and audio/visual informational material prepared for public use.

REPORTS CHECKLIST DEFINITIONS

TECHNICAL REPORTS--GENERAL

Each report of a scientific, technical, and engineering information nature must begin with a statement of the original objective of the effort and a concise summary of the progress achieved during the reporting period. The body of the report must contain a full account of progress, problems encountered, plans for the next reporting period, and an assessment of the prospects for future progress. The author(s) of the report must clearly identify technical factors with affect, either positively or negatively, plans for achieving the objectives on schedule and within the funds available.

The report must include sufficient detail to allow the work to be replicated by others. Each report must include a thorough account of activities directed toward application of the results, such as investigation of user needs, work or collaboration with potential users, and activities to disseminate the results. It must also include a discussion of how these activities have affected the course of the project.

TECHNICAL PROGRESS REPORT

"Technical Progress Reports" summarize the work performed during a specific reporting period and include the technical results (both positive and negative) of that period. If a draft Technical Progress Report is required, DOE-ID will review the draft report and provide comments within approximately 20 days after receipt from the Contractor. The Contractor must submit the report in final form within 20 days after receipt of DOE-ID's comments.

CLARITY OF REPORTS

Technical reports will be assessed for their quality with respect to the Contractor's quality assurance surveillance plan, as well as technical merit. Other factors which will be considered in evaluating presentation aspects of the documents submitted include: format, spelling and grammar, void of any corporate tags (e.g. headers, footers, stationary, etc.).

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS**ATTACHMENT J-B****ACRONYMS**

ACH Automated Clearing House
CCR Central Contractor Registration
CD compact disk
CFR Code of Federal Regulations
CO Contracting Officer
COI Conflict of Interest
COR Contracting Officer's Representative
DEAR Department of Energy Acquisition Regulation
DOE Department of Energy
DOE-HQ Department of Energy -Headquarters
DOE-ID Idaho Operations Office
DPAS Defense Priorities and Allocation System
DUNS Data Universal Numbering System
EPAct Energy Policy Act
FAR Federal Acquisition Regulation
FOIA Freedom of Information Act
GAO Government Accountability Office
GFP Government-Furnished Property
GSA General Services Administration
ID-OPMO ID Organizational Property Management Officer
NAICS North American Industrial Classification System
NE DOE Office of Nuclear Energy, Science and Technology
NEPA National Environmental Policy Act
OCI Organizational Conflict of Interest **OIG** DOE Office of Inspector General
RFP Request for Proposal
SEB Source Evaluation Board
SOW Statement of Work
USC United States Code
VIPERS Vendor Inquiry Payment Electronic Reporting System

PART IV – REPRESENTATIONS AND INSTRUCTIONS

SECTION K

REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS

K.1 FAR CLAUSES INCORPORATED BY REFERENCE

52.204-19	INCORPORATION BY REFERENCE AND CERTIFICATIONS	DEC 2014
52.225-25	PROHIBITION ON CONTRACTING WITH ENTITIES ENGAGING IN CERTAIN ACTIVITIES OR TRANSACTIONS RELATING TO IRAN-REPRESENTATION AND CERTIFICATION	OCT 2015

K.2 FAR 52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (APR 2016)

- (a) (1) The North American Industry classification System (NAICS) code for this acquisition is 541712.
- (2) The small business size standard is 500 employees.
- (3) The small business size standard for a concern which submits an offer in its own name is 500 employees.
- (b) (1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.
- (2) If the provision at 52.204-7 is not included in this solicitation, and the offeror is currently registered in the System for Award Management (SAM), and has completed the Representations and Certifications section of SAM electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certification in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:
- (i) Paragraph (d) applies.
- (ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.
- (c) (1) The following representations or certifications in SAM are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.

(iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.

(iv) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(v) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations—Representation.

(vi) 52.209-5; Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(vii) 52.209-11, Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law. This provision applies to all solicitations.

(viii) 52.214-14, Place of Performance--Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(ix) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(x) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(xi) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(xii) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xiii) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xiv) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xv) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xvi) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA- designated items.

(xvii) 52.225-2, Buy American Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xviii) 52.225-4, Buy American--Free Trade Agreements--Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at 52.225- 3.

(A) If the acquisition value is less than \$25,000, the basic provision applies.

(B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.

(C) If the acquisition value is \$50,000 or more but is less than \$77,533, the provision with its Alternate II applies.

(D) If the acquisition value is \$79,507 or more but is less than \$100,000, the provision with its Alternate III applies.

(xix) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xx) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan--Certification. This provision applies to all solicitations.

(xxi) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran—Representation and Certification. This provision applies to all solicitations.

(xxii) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions.

(2) The following representations or certifications are applicable as indicated by the Contracting Officer:

___ (i) 52.204-17, Ownership or Control of Offeror.

___ (ii) 52.204-20, Predecessor of Offeror.

___ (iii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

___ (iv) 52.222-48, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Certification.

X (v) 52.222-52 Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services--Certification.

___ (vi) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Alternate I only).

___ (vii) 52.227-6, Royalty Information.

___ (A) Basic.

___ (B) Alternate I.

___ (viii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

- (d) The offeror has completed the annual representations and certifications electronically via the SAM Web site accessed through <https://www.acquisition.gov>. After reviewing the SAM database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

K.3 FAR 52.204-17 OWNERSHIP OF CONTROL OF OFFEROR (Jul 2016)

- (a) *Definitions.* As used in this provision—

“Commercial and Government Entity (CAGE) code” means—

- (1) An identifier assigned to entities located in the United States or its outlying areas by the Defense Logistics Agency (DLA) Commercial and Government Entity (CAGE) Branch to identify a commercial or government entity, or
- (2) An identifier assigned by a member of the North Atlantic Treaty Organization (NATO) or by the NATO Support and Procurement Agency (NSPA) to entities located outside the United States and its outlying areas that the DLA Commercial and Government Entity (CAGE) Branch records and maintains the CAGE master file. This type of code is known as a NATO CAGE (NCAGE) code.

“Highest-level owner” means the entity that owns or controls an immediate owner of the offeror, or that owns or controls one or more entities that control an immediate owner of the offeror. No entity owns or exercises control of the highest level owner.

“Immediate owner” means an entity, other than the offeror, that has direct control of the offeror. Indicators of control include, but are not limited to one or more of the following: Ownership or interlocking management, identity of interests among family members, shared facilities and equipment, and the common use of employees.

- (b) The Offeror represents that it has or does not have an immediate owner. If the Offeror has more than one immediate owner (such as a joint venture), then the Offeror shall respond to paragraph (c) and if applicable, paragraph (d) of this provision for each participant in the joint venture.
- (c) If the Offeror indicates “has” in paragraph (b) of this provision, enter the following information:

Immediate owner CAGE code: _____

Immediate owner legal name: _____ (Do not use a “doing business as” name)

Is the immediate owner owned or controlled by another entity?:

Yes or No.

- (d) If the Offeror indicates “yes” in paragraph (c) of this provision, indicating that the immediate owner is owned or controlled by another entity, then enter the following information:

Highest level owner CAGE code: _____

Highest level owner legal name: _____
(Do not use a “doing business as” name)

K.4 FAR 52.209-7 INFORMATION REGARDING RESPONSIBILITY MATTERS (JUL 2013)

- (a) *Definitions.* As used in this provision—

“Administrative proceeding” means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (*e.g.*, Securities and Exchange Commission Administrative Proceedings, Civilian Board of Contract Appeals Proceedings, and Armed Services Board of Contract Appeals Proceedings). This includes administrative proceeding at the Federal and State level but only in connection with performance of a Federal contract or

grant. It does not include agency actions such as contract audits, site visits, corrective plans, or inspection of deliverables.

“Federal contracts and grants with total value greater than \$10,000,000” means—

- (1) The total value of all current, active contracts and grants, including all priced options; and
- (2) The total value of all current, active orders including all priced options under indefinite- delivery, indefinite-quantity, 8(a), or requirements contracts (including task and delivery and multiple-award Schedules).

“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).

- (b) The offeror [] has [] does not have current active Federal contracts and grants with total value greater than \$10,000,000.
- (c) If the offeror checked “has” in paragraph (b) of this provision, the offeror represents, by submission of this offer, that the information it has entered in the Federal Awardee Performance and Integrity Information System (FAPIS) is current, accurate, and complete as of the date of submission of this offer with regard to the following information:
 - (1) Whether the offeror, and/or any of its principals, has or has not, within the last five years, in connection with the award to or performance by the offeror of a Federal contract or grant, been the subject of a proceeding, at the Federal or State level that resulted in any of the following dispositions:
 - (i) In a criminal proceeding, a conviction.
 - (ii) In a civil proceeding, a finding of fault and liability that results in the payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more.
 - (iii) In an administrative proceeding, a finding of fault and liability that results in—
 - (A) The payment of a monetary fine or penalty of \$5,000 or more; or
 - (B) The payment of a reimbursement, restitution, or damages in excess of \$100,000.
 - (iv) In a criminal, civil, or administrative proceeding, a disposition of the matter by consent or compromise with an acknowledgment of fault by the Contractor if the

proceeding could have led to any of the outcomes specified in paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this provision.

- (2) If the offeror has been involved in the last five years in any of the occurrences listed in (c)(1) of this provision, whether the offeror has provided the requested information with regard to each occurrence.
- (d) The offeror shall post the information in paragraphs (c)(1)(i) through (c)(1)(iv) of this provision in FAPIIS as required through maintaining an active registration in the System for Award Management database via <https://www.acquisition.gov> (see 52.204-7).

SECTION L

INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

L.1 FAR 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The Offeror is cautioned that the listed provisions may include blocks that must be completed by the Offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the Offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://farsite.hill.af.mil>
<https://www.acquisition.gov>

L.2 FAR & DEAR PROVISIONS INCORPORATED BY REFERENCE

52.215-16	FACILITIES CAPITAL COST OF MONEY	JUN 2003
52.215-20	REQUIREMENTS FOR CERTIFIED OR PRICING DATA AND DATA OTHER THAN CERTIFIED COST OR PRICING DATA	OCT 2010
52.215-22	LIMITATION ON PASS-THROUGH CHARGES- IDENTIFICATION OF SUBCONTRACT EFFORT	OCT 2009
52.222-24	PREAWARD ON-SITE EQUAL OPPORTUNITY COMPLIANCE EVALUATION	FEB 1999
52.222-46	EVALUATION OF COMPENSATION FOR PROFESSIONAL EMPLOYEES	FEB 1993
952.227-84	RIGHT TO REQUEST PATENT WAIVER	FEB 1998

L.3 FAR 52.215-1 INSTRUCTIONS TO OFFERORS- COMPETITIVE ACQUISITION (JAN 2004)

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

“Discussions” are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer’s discretion, result in the Offeror being allowed to revise its proposal.”

“In writing,” “writing,” or “written” means any worded or numbered expression which can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

“Proposal modification” is a change made to a proposal before the solicitation’s closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

“Proposal revision” is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

“Time,” if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday, or legal holiday, then the period shall include the next working day.

(b) *Amendments to solicitations.* If this solicitation is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this solicitation by the date and time specified in the amendment(s).

(c) *Submission, modification, revision, and withdrawal of proposals.*

(1) Unless other methods (*e.g.*, electronic commerce or facsimile) are permitted in the solicitation, proposals and modifications to proposals shall be submitted in paper media in sealed envelopes or packages

(i) addressed to the office specified in the solicitation, and

(ii) showing the time and date specified for receipt, the solicitation number, and the name and address of the Offeror. Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i) and (c)(1)(ii) of this provision.

(2) The first page of the proposal must show –

(i) The solicitation number;

(ii) The name, address, and telephone and facsimile numbers of the Offeror (and electronic address if available);

(iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;

(iv) Names, titles, and telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the Offeror’s behalf with the Government in connection with this solicitation; and

(v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.

(3) Submission, modification, revision, and withdrawal of proposals.

(i) Offerors are responsible for submitting proposals, and any modification, or revisions, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that proposal or revision is due.

(ii) (A) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and --

(1) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or

(2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(3) It is the only proposal received.

(B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.

(iii) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(iv) If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

- (v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision at 52.215-5, Facsimile Proposals. Proposals may be withdrawn in person by an Offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.
- (4) Unless otherwise specified in the solicitation, the Offeror may propose to provide any item or combination of items.
- (5) Offerors shall submit proposals in response to this solicitation in English, unless otherwise permitted by the solicitation, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the solicitation.
- (6) Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.
- (7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.
- (8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.
- (d) *Offer expiration date.* Proposals in response to this solicitation will be valid for the number of days specified on the solicitation cover sheet (unless a different period is proposed by the Offeror).
- (e) *Restriction on disclosure and use of data.* Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall --
- (1) Mark the title page with the following legend:

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed -- in whole or in part -- for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this Offeror as a result of -- or in connection with -- the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data

if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [*insert numbers or other identification of sheets*]; and

(2) Mark each sheet of data it wishes to restrict with the following legend:

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

(f) *Contract award.*

- (1) The Government intends to award a contract or contracts resulting from this solicitation to the responsible Offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and subfactors in the solicitation.
- (2) The Government may reject any or all proposals if such action is in the Government's interest.
- (3) The Government may waive informalities and minor irregularities in proposals received.
- (4) The Government intends to evaluate proposals and award a contract without discussions with Offerors (except clarifications as described in FAR 15.306(a)). Therefore, the Offeror's initial proposal should contain the Offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.
- (5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the Offeror specifies otherwise in the proposal.
- (6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.
- (7) Exchanges with Offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.
- (8) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be

rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

- (9) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.
- (10) A written award or acceptance of proposal mailed or otherwise furnished to the successful Offeror within the time specified in the proposal shall result in a binding contract without further action by either party.
- (11) If a post-award debriefing is given to requesting Offerors, the Government shall disclose the following information, if applicable:
 - (i) The agency's evaluation of the significant weak or deficient factors in the debriefed Offeror's offer.
 - (ii) The overall evaluated cost or price and technical rating of the successful and the debriefed Offeror and past performance information on the debriefed Offeror.
 - (iii) The overall ranking of all Offerors, when any ranking was developed by the agency during source selection.
 - (iv) A summary of the rationale for award.
 - (v) For acquisitions of commercial items, the make and model of the item to be delivered by the successful Offeror.
 - (vi) Reasonable responses to relevant questions posed by the debriefed Offeror as to whether source-selection procedures set forth in the solicitation, applicable regulations, and other applicable authorities were followed by the agency.

L.4 FAR 52.216-1 -- TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a contract as a result of this solicitation that has Time and Materials (T&M) and Cost-Plus-Fixed-Price (CPFF) components.

L.5 FAR 52.233-2 SERVICE OF PROTEST (SEP 2006)

- (a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

Suzette M. Olson
 Contracting Officer
 Contract Management Division

U.S. Department of Energy
 Idaho Operations Office
 1955 Fremont Avenue
 Idaho Falls, ID 83415

- (b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.
- (c) Another copy of a protest filed with the GAO shall be furnished to the following address within the time periods described in paragraph (b) of this clause: U.S. Department of Energy, Assistant General Counsel for Procurement and Financial Assistance (GC-61), 1000 Independence Avenue, S.W., Washington, DC 20585, Fax: (202) 586-4546.

L.6 DEAR 952.233-4 NOTICE OF PROTEST FILE AVAILABILITY (AUG 2009)

- (a) If a protest of this procurement is filed with the Government Accountability Office (GAO) in accordance with 4 CFR Part 21, any actual or prospective Offeror may request the Department of Energy to provide it with reasonable access to the protest file pursuant to FAR 33.104(a)(3)(ii), implementing section 1065 of Public Law 103- 355. Such request must be in writing and addressed to the Contracting Officer for this procurement.
- (b) Any Offeror who submits information or documents to the Department for the purpose of competing in this procurement is hereby notified that information or documents it submits may be included in the protest file that will be available to actual or prospective Offerors in accordance with the requirements of FAR 33.104(a)(3)(ii). The Department will be required to make such documents available unless they are exempt from disclosure pursuant to the Freedom of Information Act. Therefore, Offerors should mark any documents as to which they would assert that an exemption applies. (See 10 CFR part 1004.)

L.7 DEAR 952.233-5 AGENCY PROTEST REVIEW (SEP 1996)

Protests to the Agency will be decided either at the level of the Head of the Contracting Activity or at the Headquarters level. The Department of Energy's agency protest procedures, set forth in DEAR 933.103, elaborate on these options and on the availability of a suspension of a procurement that is protested to the agency. The Department encourages potential protesters to discuss their concerns with the Contracting Officer prior to filing a protest.

L.8 OMBUDSMAN

An Ombudsman has been established for this procurement. The role of the Ombudsman is to provide contractors and other interested parties a conduit to address issues of impropriety on the part of Government officials and other concerns not suitable for a more open forum. Offerors may contact the Ombudsman directly at the telephone number and email address below:

Kelly Lemons

Phone: (208) 526-5453
E-mail: lemonskd@id.doe.gov

L.9 SPECIAL NOTICE TO OFFERORS

- (a) Failure to submit any of the information requested by this solicitation may be cause for unfavorable consideration or rejection of the proposal outright.
- (b) The exclusive responsibility for source selection will reside with the Government. Proprietary information submitted in response to this solicitation will be protected from unauthorized disclosure as required by Subsection 27 of the Office of Procurement Policy Act as amended (41 U.S.C. 423) (hereinafter referred to as "the Act") as implemented in the FAR.
- (c) The Government's obligation under this contract is contingent upon the availability of funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until the Contractor receives written notice of availability from the Contracting Officer. The resulting contract has contract phases described in Section C of this solicitation. The phases (other than Phase 2) are included as Options; if exercised, they will be funded based on the successful Offeror's Cost/Price Proposal submitted in accordance with this Section L.
- (d) The Government intends to use Government personnel in its evaluation of proposals. Non-Government personnel will be utilized during the evaluation process to provide subject matter expert advice to the Government personnel. Non-Government personnel will not vote or rank proposals as part of the evaluation process. These individuals are required to protect the confidentiality of any specifically identified information obtained as a result of their participation in the evaluation.
- (e) All types of Offerors are eligible to submit a proposal, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code that engaged in lobbying activities after December 31, 1995.
- (f) The Government understands the diverse nature of management, expertise, equipment, and site acquisition necessary to complete the Statement of Work (SOW) in Section C of the solicitation and that a team may be formed for this purpose. In addition to industry, tribes, state and local governments, state agencies, and/or institutions of higher learning are also encouraged to participate. If a contractor team is used, one member of the team must be responsible and function as the prime Contractor for this effort. However, the Government has no preference on which team member serves as the prime so long as the team has the capability to manage and coordinate the work.

- (g) State agencies, institutions of higher learning, and other research entities interested in conducting research as part of the SOW are encouraged to participate in the Deep Borehole Field Test (DBFT). These entities (if any) must be identified in the proposal.
- (h) As an informational attachment to Section L, Attachment L-A, *Deep Borehole Field Test: Characterization Borehole Science Objectives*, is provided to Offerors to assist in proposal preparation and to aid in the preparation of the Drilling and Test Plan, required for submittal after contract award. The Government may use the DBFT Technical Lead to perform the external core testing activities specified in solicitation Attachment L-A, Table 7; or the Offeror may propose to do these activities. However, Attachment L-A, Table 7 is for informational purposes only. The proposal must address all work activities, including testing, specified in the solicitation Section C.
- (i) Should the state, and/or local government request a direct agreement with DOE relating to DBFT, attachment L-K is included as an example of a possible DOE agreement that could be signed/authorized by the appropriate DOE official with the state, and/or local government, subject to further negotiations. Similar agreements could be negotiated with tribal governments. This reflects DOE's commitment to play an active role in public involvement and outreach.

L.10 PROPOSAL CONTENT/SUBMITTAL DATA

- (a) Offerors must submit their proposal via FedConnect at www.FedConnect.net. Information regarding how to submit offers via Fed Connect can be found at www.FedConnect.net in the guide entitled FedConnect "Ready, Set, Go." Further, it is the responsibility of the Offeror, prior to the offer due date and time, to verify successful transmission. The electronic documents must be submitted either in Portable Document Format (pdf) or be formatted using the Microsoft Office suite (compatible with version 2003). Proposals must be submitted not later than the time specified in L.20.

The proposal must be divided into four separate volumes individually titled as follows:

Volume I	Offer and Other Documents
Volume II	Technical Proposal (Other than Past Performance)
Volume III	Cost/Price Proposal
Volume IV	Technical Proposal (Past Performance)

- (b) Signed contract: The "Solicitation, Offer, and Award" (Standard Form 33) must be fully executed and used as the first page of each copy of Volume I, Offer and Other Documents.
- (c) Acceptance Period: The acceptance period entered in Block No. 12 on the Standard Form 33 by the Offeror must not be less than 240 days, which will apply if no longer period is offered.

- (d) Proposals must conform to all solicitation provisions and be prepared in accordance with the instructions and outline contained in Section L. Submitted proposal information will be reviewed to ensure compliance by the Offeror with all aspects of this solicitation. To aid in evaluation, proposals must be clearly and concisely written, neat, indexed (cross-indexed as appropriate), and assembled logically. Offerors are required to complete/submit Compliance Solicitation Matrix – see Section L Attachment L-B. This Matrix must be submitted with Volume I and will not count towards page limitations. Extraneous, repetitious, or wordy submissions are not desired.
- (e) Proposals will be evaluated in accordance with applicable FAR and DEAR provisions, using the evaluation criteria set forth in Section M.
- (f) These instructions are provided to aid Offerors in the preparation of their proposals. These instructions and information contained herein are not evaluation criteria for this solicitation but do identify the nature and type of information the Government will expect to see in proposals.

L.11 VOLUME I, OFFER AND OTHER DOCUMENTS INSTRUCTIONS

- (a) Volume I, “Offer and Other Documents,” consists of the actual offer to enter into a contract to perform the required work. It also includes required representations and certifications, other statements of the Offeror, and any other administrative information. (Information necessary for the Government to evaluate proposals belongs in Volume II, Volume III and Volume IV.) Failure to include any or all of the required information may result in the proposal being deemed unacceptable and eliminated from further consideration. Volume I, Offer and Other Documents, must include the following (in the order listed):
 - (1) Fully executed Standard Form 33.
 - (2) Cover Letter as described in L.10 (b) below.
 - (3) A completed form ID-EC98.1 “APPLICANT NEPA ENVIRONMENTAL CHECKLIST” (Refer Section L, Attachment L-C.)
 - (4) Solicitation Compliance Matrix (Section L, Attachment L-B).
 - (5) Executive Summary – Summarize the overall proposal. Identify any team members and subcontractors and discuss the role of each. Reiterate any specialized experience relevant to this solicitation. Summarize all proposed contract performance commitments made throughout the proposal. Include the activity to be performed, interim milestones (if any), final completion dates, delivery dates, and submittal dates as applicable. The Summary must not include any information not provided in Volume II. Any or all of the proposed contract performance commitments may be incorporated into the resulting contract. This Summary is limited to 5 pages, using the same page size and font limitations as required for

Volume II. The Executive Summary will not be evaluated for the purpose of contract selection.

- (6) Proposed total contract cost/fee for all five contract phases.
 - (7) A statement acknowledging receipt of each amendment to this solicitation.
 - (8) A statement confirming the Offeror's acceptance of all terms and conditions of the solicitation and the uniform contract included with the solicitation. Taking exception to a solicitation/contract term and condition may make a proposal unacceptable and ineligible for contract award.
 - (9) Small Business Subcontracting Plan. A completed and acceptable Small Business Plan is required to be submitted in accordance with the Section I Clause, " FAR 52.219-9, Small Business Subcontracting Plan," and these proposal instructions. This plan will become part of the contract as Section J, Attachment J-D titled, Small Business Subcontracting Plan.
 - (10) A statement which addresses current Organizational Conflict(s) of Interest (OCI), if any. Prior to an award, the Contracting Officer (CO) will make a finding whether any possible OCI exists with respect to the apparent successful Offeror or whether there is little or no likelihood that such conflict(s) exists. In making this determination, the Government will consider the representation required by Section K of this solicitation. Additionally, pursuant to FAR 9.504, the CO may take further steps to identify, discover, and/or evaluate whether any OCI disclosed can be avoided, neutralized, or mitigated with any one or more Offerors, prior to award, as deemed appropriate by the CO. An award will only be made where there is a finding by the CO of no OCI, or where any OCI is found by the CO to exist, each such OCI can be appropriately avoided, neutralized, and/or mitigated to the complete satisfaction of the CO, as provided in FAR 9.5, as well as any other pertinent portions of the FAR/DEAR.
 - (11) As part of the proposal, fill in/complete:
 - I.13, DEAR 952.227-82
 - F.3, Place of Performance
 - H.4, Key Personnel
 - Section K, Representations, Certifications
- (b) The cover letter must include the following:
- (1) The solicitation number.
 - (2) The name, address, telephone and facsimile numbers, and electronic addresses of the Offeror.

- (3) Names, titles, telephone and facsimile numbers, and electronic addresses of persons authorized to negotiate with the Government on the Offeror's behalf in connection with this solicitation.
- (4) Name, title, and signature of person authorized to sign the offer. Proposals signed by an agent must be accompanied by evidence of that agent's authority.
- (5) The names, addresses, telephone and facsimile numbers, and electronic addresses of the individuals in the Offeror's organization to be contacted, if necessary, during evaluation of the proposal.
- (6) The complete formal name and address of the Offeror's organization and/or other participants to be used in any resulting contract. Provide Data Universal Numbering System (DUNS) number for each organization.
- (7) A statement that the Offeror grants to the Government or its authorized representatives, the right to examine, for purposes of verifying the information submitted, those books, records, documents, and other supporting data that will permit adequate evaluation and that are directly pertinent to the information submitted/requested. This right may be exercised in connection with any such reviews deemed necessary by the Government.

L.12 VOLUME II – TECHNICAL PROPOSAL (OTHER THAN PAST PERFORMANCE) INSTRUCTIONS

- (a) General. Volume II is the Offeror's written response to the technical evaluation criteria 1 through 3 in solicitation Section M. It presents the Offeror's understanding, capabilities, experience, and approach in satisfying the requirements of the Statement of Work (SOW). Cost/price information, past performance on similar projects and other required contract documents are described elsewhere and must not be included in Volume II. It must present sufficient information to reflect a thorough understanding of the requirements and a detailed description of the techniques, procedures, methods, and approaches for accomplishing the SOW. Proposals that merely paraphrase the requirements or use such phrases as "will comply" or "standard techniques will be employed" are unacceptable, render the proposal ineligible for contract award and the proposal will receive no further consideration.
- (b) Content. Volume II, consists of:
 - Go/No-Go Criteria: Geologic/Hydrological Characteristics of the Proposed DBFT Site
 - Criterion 1 - Public Support and Outreach; DBFT Site Location and Availability
 - Criterion 2 - Organization and Qualifications

Criterion 3 - Proposed Approach to Drilling/Testing and Site Operations

(c) Page Limitations.

- (1) There is a 75-page limit for Volume II.
- (2) Except foldouts, pages must not exceed 8.5 x 11 inches. Foldouts or pages larger than 8.5 x 11 count as 2 pages. Maximum size for all pages is 11 x 17 inches. Each page shall have top, bottom, left, and right margins of at least one inch. Page numbers, any restrictions on offer disclosure, Offeror name/logo, proposal volume/section number, date of offer, and solicitation number are the only text that may be displayed in the margins. When both sides of a sheet contain printed material, they count as two pages. Offerors may not incorporate material by reference to circumvent the page limits. Tables of content, lists of figures, divider tabs, and similar inserts are not be counted as a page UNLESS they include other text.
- (3) Maps, charts, graphs, diagrams, figures, tables, and spreadsheets necessary to describe the potential drill site do not count against the 75-page limit; these must be legible and must not be smaller than 8 point.
- (4) All other text must have a font size of at least 11 point, must be single-spaced, and must use Arial font type. Colors may be used for headings, graphs, tables, and to set out areas of text Offerors want to emphasize. Offerors are cautioned to avoid colors that may make the text hard to read. Offerors may choose any font and font size they like for text that may be displayed in the margins.
- (5) Resumes or other qualification statements of key personnel are excluded from the 75-page limit. However, each resume/qualification statement is limited to a maximum of 2 pages.

(d) Instructions for Submitting the Technical Proposal

Volume II must clearly and completely provide information necessary for the Government to conduct the Go/No-Go Assessment and to evaluate the proposal against Criterion 1, Criterion 2 and Criterion 3 contained in Section M of this solicitation. Offerors may not propose more than one site in their proposal.

Instructions for the Go/No-Go Assessment.

Identify a proposed DBFT site. The following information about the site must be included:

Specifically describe how the site meets the geologic/hydrological characteristics described in Subparagraph B.2 of Section C.4 of the solicitation. Identify any parameters the proposed site fails to meet. For each parameter identified, describe nature and the extent of the

shortcoming and why the Offeror believes the Government's DBFT project goals will be met despite the shortcoming.

Note: Because this information will be used to determine whether a proposal is technically acceptable and receives a full proposal evaluation, Offerors are cautioned to: (i) carefully consider the Government's geologic/hydrological requirements when choosing their proposed site; and (ii) be very clear, detailed, and specific when explaining site characteristics.

Instructions for Criterion 1 – Public Support and Outreach; DBFT Site Location and Availability

Two aspects critical to project success are evaluated under Criterion 1. Both are within the control of Offerors and both must receive careful consideration during proposal planning and preparation.

The first aspect is the probability the DBFT will receive enough public support that the Offeror can successfully complete its work in support of the project.

The second aspect involves the DBFT site chosen by the Offeror. While the geologic and hydrological characteristics of the site are evaluated separately as part of the Go/No-Go decision discussed above; other aspects of site location and availability are evaluated under this Criterion 1.

Public* Support and Outreach.

* For the purpose of this criterion, the term "public" includes federal, state and local governments; affected tribes (if appropriate); citizens (including owners of land contiguous to and nearby the proposed DBFT site); tribal members; citizen groups; tribal groups; and other interested stakeholders.

- A. A chosen location that has both initial public support for the DBFT and likely strong future public support through DBFT completion has an advantage over locations where public support is not as great. Provide a detailed assessment of both current and likely future public support for the project. Provide metrics (e.g., population and political demographics, polling results, letters of support, etc.) used to make the assessment and reach conclusions on public support. Proposals with a credible assessment of public support that include detailed, reliable metrics for as many of the groups that make up the term "public" as possible will receive a more favorable evaluation than those proposals with a less credible assessment or fewer details/reliable metrics.
- B. Support shown for the project by government and tribal (if appropriate) stakeholders is also a critical element to DBFT success. Provide a list of governmental/tribal stakeholders that have been contacted and support the project. To the maximum extent practicable, include copies of signed letters of support from these stakeholders. To the extent possible, DOE would like the local community to feel as though they are 'part of the team' at the inception of this project and not an afterthought following the contract

award. Demonstrating community engagement during proposal development, with documented support from a broad spectrum of governmental/tribal stakeholders will result in a more favorable evaluation.

- C. The Offeror's plan for educating and convincing demonstrating to the public that the project will be safe and meet all regulatory requirements is essential. Provide a draft of the public outreach plan required by Section C.5.2 of the Solicitation. Include discussions on how the Offeror will:
1. Educate and inform the public about the project and regulatory requirements during all project phases on a real-time, transparent basis.
 2. Grow and maintain public support for the DBFT project.
 - a. Describe how the public relations liaison will be accessible to the public and used in public outreach and support.
 - b. Describe how regional and local news media (including tribal media, if appropriate) will be used during public outreach/support efforts.
 - c. Identify which members of the public (e.g., stakeholder groups) may require special attention during public outreach/support and the steps the Offeror will take to obtain their support.
 - d. Identify any members of the public who have agreed to assist the Offeror in conducting public outreach/support, including for each member the nature of the assistance they will provide. Assistance from a broad spectrum of the public is preferred and will result in a more favorable evaluation.
 - e. Identify risks associated with public outreach/support efforts, as well as proposed approaches to avoid or mitigate these risks.
- D. Describe all discussions with tribal leaders (if appropriate), local counties and communities regarding adverse impacts the project may cause, as well as steps that might be taken to mitigate these impacts. Include an estimate of the cost of implementing these steps as part of the Offeror's cost proposal (Volume III). This information will not be evaluated as part of the technical proposal, but will be considered in determining a most probable cost (see Cost/Fee Proposal evaluation in Sections L and M of this solicitation).

DBFT Site Location and Availability.

- A. Provide the following information about site availability:
1. Identify the state, county, county seat, and city (if applicable), where the site is located. If the site is on tribal lands, identify the affected tribe(s). Identify the

closest Metropolitan Statistical Area (MSA) to the site using the latest Office of Management and Budget (OMB) guidelines and approximately how many miles the site boundary is from the MSA boundary. Provide a geographic location of the site using the latest version of the World Geodetic System (WGS). Also include the approximate size (in acres) of the site.

2. The names and addresses of the site owners, as well as any third parties (e.g., lien holders) that must give consent to making the site available to the DBFT project.
3. Specifics on how the Offeror and the Government will physically access the site (e.g., through a public road or easement).
4. A copy of signed agreement(s)** between the owner(s) and any third parties that:
 - a. Authorizes the Offeror to use the site for its performance under the contract and further authorizes the Government and its contractors to use the site under replacement contracts (if any) and follow-on contracts. (The agreement must reference Section C of the solicitation, which identifies current and future project goals and time periods.) See Section H.11 of the solicitation for further requirements regarding agreement content.
 - b. Prevents any person or entity from using the site for activities that conflict with DBFT program activities.

** If it is not possible to provide signed agreement(s), provide letters from all owner(s) and necessary third parties indicating their support for the DBFT and their intent to sign agreements that include the provisions described in a and b above.

Instructions for Criterion 2 – Organization and Qualifications

Provide a complete, detailed description of the Offeror's organization and organizational structure that will be used during contract performance. Include a breakdown of work activities that will be performed by teaming members, subcontractors, and key personnel and how communication and coordination will occur among and across these organizational elements. Explain how the proposed organizational structure will ensure that performance meets all technical, public support and other contract objectives; is schedule compliant; and is cost efficient.

Provide the following information for the Offeror and all other entities (e.g., teaming members and subcontractors) that will perform work on the contract:

- (a) Name, address and telephone number;
- (b) What portion of the SOW, broken down by Work Breakdown Structure (WBS), the entity/person will perform; and

- (c) All relevant qualifications and experience.

The Offeror must provide a Resume' (using the Resume' format contained in Section L, Attachment L-E for each key person identified. For each key person, also provide:

- (a) What portion of the SOW, broken down by WBS, s/he will perform; and
- (b) All relevant qualifications and experience, to the extent that information is not already outlined in the Resume'.

For each portion of the SOW for which an entity or key person has not been identified, provide specifics on how this capability will be obtained, as well as the experience and qualifications the Offeror believes are necessary to perform that work.

Instructions for Criterion 3 – Proposed Approach to Drilling, Testing and Site Operations

Provide detailed, specific information on the Offeror's approach to accomplishing the technical objectives, performance parameters and all other requirements outlined in the solicitation for drilling, testing and site operations. Include an overall project schedule as well as a schedule breaking down the work by contract tasks and completion dates. The Offeror must make sure it addresses the following:

- (a) What federal, tribal (if appropriate), state and local permits and other regulatory approvals are necessary for drilling and testing operations and its approach for obtaining them. Include a detailed schedule for each approval, identifying all necessary interim tasks and a projected task completion date.
- (b) Its approach to preparing the Preliminary and Final Drilling and Test Plans and conducting drilling and testing activities, with a detailed schedule supporting the activities identified in its approach;
- (c) Its approach to planning and managing the project, including assuring timely and effective communications and integration among the Offeror and its teaming members, subcontractors and key persons, as well as maintaining project cost and schedule profiles.
- (d) Identify all technical and nontechnical risks that could: (i) adversely affect successful accomplishment of project technical objectives (ii) adversely affect project schedules; or (iii) significantly increase project costs. Describe the strategies the Offeror will employ to either prevent or mitigate each identified risk.
- (e) Its approach to end of contract activities, including closeout, transitioning to a large diameter DBFT contractor (if applicable) and remediation.

It is the policy of the Government to encourage and support the use of Small Businesses (SB's) and Small Disadvantaged Businesses (SDB's) in performing its contracts. In this contract, the

Government has placed special emphasis on the use of local SB's and SDB's, particularly using them to perform complex and meaningful contract activities when it is practical to do so. ("Local" means primary business operations of the SB or SDB occur within 100 miles of the proposed DBFT site border.)

The Offeror must identify SB's and SDB's and the location (principal place of business) of SB's/SDB's, it proposes to use at the commencement of contract operations. For each SD and SDB also identify:

- (a) What contract activities it will perform;
- (b) The contract value of the work; and
- (c) The term of the contract.

The Offeror must also provide its approach to ensuring SB's and SDB's are given the opportunity to perform complex, meaningful contract activities throughout contract performance. Identify what downstream contract activities the Offeror believes are suitable for performance by SB's and SDB's.

If the Offeror is other than a SB, the Offeror must submit a Small Business Subcontracting Plan in accordance with FAR 52.219-9. This plan will further identify the Offeror's commitment to the participation of small businesses in contract performance, whether as joint venture members, teaming members, or subcontractors. If the Offeror is required, but fails to submit a Small Business Subcontracting Plan, its proposal is unacceptable and ineligible for contract award. The Small Business Subcontracting Plan does not count towards any identified page limits.

L.13 VOLUME III, COST/PRICE PROPOSAL INSTRUCTIONS

- (a) General - All cost and fee information must be included in Volume III of the proposal. For purposes of preparing a Cost/Price proposal, the Cost/Price estimate must follow the statement of work and the contract line item structure established in Section B and be developed using a work breakdown structure that tracks to the statement of work and the contract line items structure through transitioning to a possible large diameter DBFT contractor (if applicable), contract closeout and remediation. Offerors must provide a basis of estimate which describes the basis for the costs included in its proposal as well as a description of the estimating methodology of the proposed cost distribution and its relation to accomplishing the SOW requirements. Cost-by-cost elements must be directly traceable to the technical proposal and in an auditable condition. Offerors must provide all assumptions related to the estimate. For the cost data to be complete, the Offeror, or its teaming members or subcontractors, must provide all data necessary to support the data. The amount of data needed may vary depending on the requirements.
- (b) The Government recognizes the difficulty in estimating some costs because of the uncertain nature of research and some unknowns relating to the subsurface site conditions. The Government anticipates it will re-baseline the remaining contract

activities (including a cost adjustment if necessary) at the time the Contracting Officer approves the Final Drilling and Test Plan, as described in the SOW.

The following assumptions must be used in the Cost/Price proposal:

- (1) Drilling and the testing required during drilling will take not longer than 7 months (note: the Offeror may propose a shorter length than the 7 months, but must explain the rationale for doing so).
- (2) Research and testing involving the drill rig will continue for not more than an additional 7 months after drilling is complete (note: the Offeror may propose a shorter length than the 7 months, but must explain the rationale for doing so).
- (3) The bottom of the characterization borehole (2 km to 5 km) will not be cased.
- (4) Monitoring during drilling will include:
 - (a) Deviation and caliper surveys for monitoring straightness and borehole stability
 - (b) Drilling parameter logging (penetration rate, bit weight, hook load, rotary speed, rotary torque, mud circulation rate)
 - (c) Drilling mud/cuttings logging (temperature, salinity, chemistry, dissolved gas concentrations, cuttings lithology, and rock flour mineralogy)
- (5) Coordination and access to the site will be required for drilling a second larger borehole and testing activities in that second borehole under a separate contract. However, those activities need not be priced and will not be evaluated for making contract selection.
- (6) A second site will not be required (i.e. assume the first drilling of the characterization borehole finds the geologic conditions suitable for testing).
- (7) Geophysical logging will be conducted prior to casing.
- (8) Sampling, logging, and testing will include:
 - (a) Drill-stem shut-in testing and drill-stem pumping/sampling from intervals which would be cased or cemented as part of the borehole completion (e.g., an interval near the bottom of the sedimentary overburden, or problematic intervals in the crystalline basement portion of the borehole which cannot be left open hole)
 - (b) Hydrofracture/extended leak-off tests in crystalline basement portion of borehole

- (c) Intermittent advance core will be collected (50 m for every 1 km of crystalline basement borehole), with two additional cores at areas of interest
 - (d) Borehole televiewer/formation micro-imager log
 - (e) Resistivity log
 - (f) Self-potential log
 - (g) Spectral natural gamma log
 - (h) Neutron porosity log
 - (i) Nuclear magnetic resonance log
 - (j) Mud resistivity log
 - (k) High-resolution temperature log
 - (l) Anisotropic shear wave velocity log
- (9) The Offeror will provide all labor and equipment necessary to support testing after drilling of the characterization borehole. This testing includes:
- (a) A flowing (pumping) temperature-pulse or salinity-dilution log across the entire crystalline basement portion of the borehole to identify all permeable zones.
 - (b) Packer-based shut-in tests to determine the static formation pressure profile across the crystalline basement.
 - (c) Packer-based pulse/pumping tests and geochemical sample collection conducted in higher-permeability regions of the crystalline basement portion of the borehole.
 - (d) Packer-based tracer tests in in the crystalline basement portion of the borehole.
- (c) Offerors must submit the information and use the format specified in FAR Table 15-2 of FAR 15.408 by year and in total including cost reimbursement rates. The guidelines and instructions in FAR 15.4 and the additional instructions given below must be used in preparation of the Cost/Price proposal. However, there is no requirement for certified cost and pricing data. To ease the Government's evaluation, a template has been prepared for use in preparing the Cost/Price proposal. An electronic version of the template can be requested from the DOE-ID POC, Mark Payne at paynemb@id.doe.gov and must be used

in preparing the proposal. An attachment showing the template format is contained in Section L, Attachment L-G, Cost/Price Proposal Template (FAR 15-2 Table) for Offerors and Subcontractors.

- (1) Labor. The labor categories are provided in Attachment L-H, Labor Rate Base, Adders, and Fee. For each labor category, provide one base labor rate, the associated labor adders, fee, and Time & Material (T&M) rate (base plus adders and fee). Using Attachment L-I, Labor Category Crosswalk, provide a crosswalk of the offeror's labor categories that fall within the labor categories identified in Attachment L-G. For each offeror labor category, provide the normal salary range. Complete Attachment J-L, Labor Rates (T&M). Labor estimates must include disclosure of labor by type, number of hours by labor type, labor rate by hour (T&M rate for CLINs 001 and 005; and CPPF rate for CLINs 002 – 004), and extended labor cost by year and in total for the project.
 - (2) Materials and Supplies. Material and supplies estimates must include a price Bill of Materials showing material by item, unit prices, number of units and extended cost by year, and basis of estimate.
 - (3) Equipment. Equipment estimates must include a list by item, unit prices, number of units, and extended cost by year, and basis of estimate.
 - (4) Travel. Travel requirements are described in the SOW. Travel estimates must be in sufficient detail to provide an assessment of reasonableness and realism including the number of travelers, cost of lodging, meals, and transportation, both in the air and on the ground. Federal Travel Regulations must be used in estimating travel.
 - (5) Other Direct Costs. All other cost elements must be supported with similar schedules and basis of estimate that are fully traceable and auditable.
 - (6) Economic Escalation. Economic escalation is its own, unique cost element and is reported separately on the FAR 15-2 Table. Escalation values must be calculated by year by cost element then summed by year by cost element and in total for the total project. Economic escalation factors utilized must be adequately disclosed and described.
 - (7) Fee. Provide a basis for proposed fee. For the cost-plus-fixed-fee portions of the SOW, a statutory fee limitation of not more than 15% as specified at FAR Subpart 15.404-4(c)(4)(i)(A) applies.
- (d) Final monetary extension must be expressed in whole dollars and all schedules providing rows and columns of cost information must sum to the exact whole dollar.
- (e) Offerors must submit Excel spreadsheets with their cost/price information in electronic formats. None of the cells in the electronic spreadsheets shall be locked or protected. Cells within the spreadsheet representing the result of calculations must contain formulas and/or

calculations to allow the Government to understand how values were derived. There must be no hard coded values in cells representing results of calculations.

- (f) Identification. All pages, including forms, must be page numbered, and all forms, tables, or exhibits must be clearly identified and listed in the table of contents or index. There are no page limitations related to the Cost/Price Volume.
- (g) Uniform Terminology. The use of uniform or standard terminology is essential to evaluate and compare Cost/Price proposals. FAR Part 31, Contract Cost Principles and Procedures, must be utilized in the definition of cost elements.
- (h) The Government reserves the right to request any additional clarifying information deemed necessary to properly evaluate the proposal without conducting discussions.
- (i) Provide information required by L.2, including other than cost or pricing data (see 52.215-20).
- (j) The Offeror must briefly describe the proposed accounting system and the adequacy of that system for reporting against Government cost type contracts and compliance with generally accepted accounting principles. In addition, the Offeror must identify the cognizant Government Administrative Contracting Officer (ACO) if any, of the Government agency that has formally approved the accounting system and estimating system. If the accounting system or estimating system has been approved by the Government, provide a copy of the signed and dated approval letter.
- (k) Indirect Cost Data. For any indirect rates, provide an audit report by an independent Government agency that identifies acceptable indirect rates applicable to the performance dates of this contract. A forward pricing rate agreement (FPRA) with any Federal agency may also be provided instead of an audit report. If neither an audit report nor a rate agreement is available, all base and pool expense data by line item and dollar amount, and how the proposed indirect cost rates were calculated should be provided. Data must be submitted for the two most recently completed fiscal years, and the fiscal year(s) covered by the proposal. Data for the completed years must reconcile with the financial statement information requested (in section (n) below). For the fiscal years covered by the proposal, provide projections of indirect cost pool data and then calculate expected indirect rates for future applicable years in accordance with offeror's established accounting and estimating systems, include a basis for projections. A description of how rates are applied shall be included.
- (l) If the Offeror is required to maintain a Cost Accounting Standards (CAS) Disclosure Statement, provide the most recently approved Disclosure Statement and approval letter with the proposal. If the Offeror is not CAS covered, a full description of the indirect rate application bases and pools must accompany the proposal.

- (m) The Offeror must provide audited financial statements for the current year and the 2 previous accounting years. If audited financial statements are not available, the Offeror must provide its unaudited financial statements for the requested time periods.
- (n) In accordance with FAR 52.222-46, Offerors must provide a total compensation plan setting forth salaries and fringe benefits proposed for the professional employees who will work under the contract.
- (o) The Offeror must clearly identify which activities are to be conducted by the Offeror and which are to be performed by teaming members or subcontractors. Costs for in-house work must be identified in the prime's proposed costs and costs for work performed by teaming members and subcontractors must be separately identified. For each team member or subcontractor expected to perform work, the following information is required:
 - (1) Nature and extent of selection process.
 - (2) A brief description of the work, and the rationale for using a teaming partner/subcontractor.
 - (3) Proposed teaming member/subcontractor affiliation with the prime Contractor, if any.
 - (4) A detailed description of what cost/price analysis was or will be performed on the teaming member/subcontract proposals.
- (p) Consultants. Where the use of consultants is proposed, the following information must be provided with the Offeror's Cost/Price proposal:
 - (1) Résumé.
 - (2) A signed statement from the consultant that the proposed rate is a "Most Favored Customer Rate," or the reason it was not offered.
 - (3) Rate justification.
- (q) Audit and Contract Administrative Cognizance. Provide the name, address, and phone number of the Federal audit office and contract administrative office point(s) of contact for the Offeror and any proposed team members and subcontractors.
- (r) The SOW requires the Contractor to maintain all contractual commitments necessary to perform Phases 3 and 4 for a period of six months in the event it is not selected to perform those phases. The Cost/Price Proposal must include an estimate of the total cost of maintaining those commitments. This information will be used for budget planning purposes only; it will not be evaluated for making contract selection.

L.14 INSTRUCTIONS FOR VOLUME IV TECHNICAL PROPOSAL (CRITERION 4) – PAST PERFORMANCE

The past performance evaluation assesses the degree of confidence the Government has in an Offeror's ability to successfully perform project based on a demonstrated record of performance (including public outreach, cost and schedule performance) on recent, relevant contracts.

A recent contract means a contract (a) between the Offeror, a key person, a teaming member, or a subcontractor and a Federal, State, or local government, a profit making entity, or a not-for-profit entity; (b) where performance is either on-going or performance was completed within five (5) years from the date proposals are due.

A relevant contract means a contract that involves work that is the same or similar to the work that will be performed under the contract that will be awarded under this solicitation. Past performance of a predecessor entity may be considered relevant where the Offeror is a new entity. Contracts involving key persons may be considered when their performance is relevant to the responsibilities they will have under the contract that will be awarded under this solicitation. The past performance of teaming members or subcontractors is relevant only where the teaming member or subcontractor will be performing a major or critical aspect of the contract to be awarded under this solicitation.

There is a three-page limit for each Past Performance Worksheet (Worksheet). The projects listed may include those entered into with Federal, state, and local governments, for-profit entities and not-for-profit entities. For the projects listed, indicate whether the Offeror, team member, subcontractor or key person served as the prime Contractor or as a subcontractor or team member. Offerors must ensure that accurate contract numbers, points of contact, and phone/facsimile number information for each reference are provided.

The Government reserves the right to contact one, some, or all of the references provided and to contact other sources in evaluating past performance of the Offeror.

For each recent, relevant past performance contract, the Offeror must:

- (a) Indicate whether the performer served as the prime Contractor or as a subcontractor or team member;
- (b) Describe the rationale for concluding the contract is relevant to work that will be performed under the contract awarded under this solicitation;
- (c) Complete a Past Performance Reference Worksheet (Worksheet) using the format contained in Attachment L-D. Offerors must ensure that contract numbers, points of contact, and phone/facsimile number information for each reference are accurate and complete. There is a three-page limit for each Worksheet. Completed Worksheets will be excluded from the page limit for Volume II. [Note: Offerors are encouraged to submit at least three (3), but not more than five (5) Worksheets for each entity (Offeror,

teaming member, subcontractor, or key person) submitting past performance information.];

- (d) Send a Past Performance Questionnaire (Questionnaire) using the format contained in Attachment L-F to each technical point of contact and Contracting Officer, asking them to complete the Questionnaire and forward the Questionnaire directly to DOE via email at paynemb@id.doe.gov. In order to ensure timely receipt of the Questionnaires by DOE, Offerors should send out the Questionnaires as soon as possible after receipt of this solicitation and encourage Questionnaire recipients to submit their replies to DOE as soon as possible, but not later than October 3, 2016;
- (e) Provide information on any problems encountered, the Offeror's corrective actions, and whether the corrective actions eliminated or mitigated the problems; and
- (f) Describe whether the Offeror met or did not meet any applicable small disadvantaged business (SDB) subcontracting goals (this requirement applies to large business entities only).

DOE reserves the right to contact one, some, or all of the references provided and to contact or consider other sources in evaluating past performance of the Offeror.

DOE retains the discretion to determine whether the Offeror has any recent, relevant past performance.

L.15 PRE-PROPOSAL MEETING

- (a) A pre-proposal meeting will be held as indicated below:

TIME/DATE: A pre-proposal meeting will be held in Las Vegas, NV on September 13, 2016, starting at 8:00 a.m. PST. The location of the meeting will be at the **Rio All Suite Hotel & Casino**, 3700 W. Flamingo Road, Las Vegas, Nevada 89103

Register for this meeting at: <https://www.eventbrite.com/e/pre-proposal-meeting-deep-borehole-field-test-registration-27168600014>

- (b) During this meeting the Government will review the contract requirements, the solicitation submission requirements and the evaluation process.
- (c) Any questions to be answered during the meeting must be submitted to DOE via FedConnect or to the point of contact listed in L.19, no later than September 02, 2016. Written questions will also be taken during the meeting. All questions and answers submitted will be provided via FedConnect.
- (d) Attendance at the meeting is not mandatory, but the meeting is open to only those prospective offerors who have pre-registered (see (a) above). The Government will not reimburse any attendee for expenses related to attendance of this meeting. To facilitate

the Government's planning; please provide the name, organizational affiliation, phone number, e-mail address and citizenship of each proposed attendee via FedConnect or the point of contact listed in L.19 no later than September 02, 2016. Note that additional information will be required for non-US citizens.

- (e) Pre proposal conference attendees are limited to a maximum of two attendees per company or organization.

L.16 SOLICITATION QUESTIONS

Prospective Offerors are requested to submit written questions concerning the solicitation via FedConnect (www.fedconnect.net). All proposal questions are due no later than 45 days from date of solicitation issuance. Answers will be posted through the FedConnect portal within a few days after submittal. Offerors are encouraged to periodically check FedConnect to ascertain the status of any answers to questions. Telephonic questions shall not be answered. Questions must clearly specify the solicitation areas (section, page, etc.) to which they refer.

The Government will furnish responses to all questions to all potential Offerors (via FedConnect). Any changes resulting from the questions will be incorporated into the solicitation via written addendum. No changes to the solicitation are to be assumed; they must be incorporated by written amendment to the solicitation to be applicable.

L.17 NOTICE OF LABOR PROVISIONS

The Offeror should note that this solicitation includes in the proposed contract, clauses requiring the listing of employment openings with the local office of the Federal-State employment service system where a contract award is for \$10,000 or more. (See clauses "Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans" (FAR 52.222-35) and "Affirmative Action for Workers with Disabilities" (FAR 52.222-36).

L.18 CONTENT OF RESULTING CONTRACT

Any contract awarded as a result of this solicitation will contain Part I -- The Schedule, Part II -- Contract Clauses, and Part III, Section J -- List of Documents, Exhibits and Other Attachments. Blank areas appearing in these sections, indicated by "(To Be Determined)" will be completed prior to contract signing.

L.19 DOE ISSUING OFFICE

U. S. Department of Energy
 Idaho Operations Office
 Procurement Services Division MS-1221
 1955 Fremont Avenue
 Idaho Falls, Idaho 83415-1221

Issuing Official: Suzette M. Olson, Contracting Officer

Point of Contact: Mark Payne, Contract Specialist
Telephone: 208-526-3127
Facsimile: 208-526-5548
Email: paynemb@id.doe.gov

L.20 TIME AND DATE PROPOSALS ARE DUE

All proposals are due NO LATER THAN 5:00 p.m. Eastern Time on October 21, 2016. (CAUTION: See provision at FAR 52.215-1 describing treatment of late submissions, modifications and withdrawals of proposals.) If the proposal is received at any time after the time specified it is late and cannot and will not be accepted or evaluated. Hard copies of proposals delivered via U.S. Mail, hand delivered or facsimile will not be accepted; proposals must be submitted via FedConnect in accordance with the instructions of this Section L.

In order to allow the Government as much time as possible to consider the geologic/hydrological characteristics of proposed sites, Offerors are encouraged to provide to the Government information on the location and characteristics of their chosen site as early as possible (before proposals are due). Providing this information does not mean the Offeror is locked in to that site, nor that it cannot amend or modify the information submitted. Please provide geologic/hydrological characteristics on or before October 3, 2016 to Mark Payne at paynemb@id.doe.gov. This information must be included in the proposal as well.

L.21 SMALL BUSINESS SIZE STANDARDS AND SET-ASIDE INFORMATION

This acquisition is a full and open competitive solicitation and is not set aside for small businesses. The applicable North American Industry Classification System (NAICS) code is 541712, Research and Development in the Physical, Engineering, and Life Sciences and the Small Business Standard is 500 employees.

L.22 FALSE STATEMENTS

Proposals must set forth full, accurate, and complete information as required by this solicitation (including attachments). The penalty for making false statements in proposals is prescribed in 18 U.S.C. 1001.

L.23 EXPENSES RELATED TO PROPOSAL OR BID SUBMISSIONS

This solicitation does not commit the Government to pay any costs incurred in the submission of any proposal or bid, or in making necessary studies or designs for the preparation thereof or to acquire or contract for any services.

L.24 RESPONSIBLE PROSPECTIVE CONTRACTORS

- (a) The general and additional minimum standards for responsible prospective contractors set forth at 48 CFR Part 9.1 and 48 CFR Part 909.104-70 applies.

- (b) The Government may conduct pre-award surveys in accordance with FAR 9.106 and may solicit from available sources, any relevant information concerning the Offeror's record of past performance, and may use such information in making determinations of prospective contractor responsibility.

L.25 INFORMATION ABOUT AWARD

Written notice to unsuccessful Offerors and contract award information will be promptly released in accordance with DOE regulations applicable to negotiated acquisitions.

L.26 DISPOSITION OF PROPOSALS

Proposals will not be returned (except for timely withdrawals, if requested by the Offeror). Proposals not required for official record retention will be destroyed.

L.27 DISPOSITION OF SOLICITATION DOCUMENTS

Drawings, specifications, and other documents supplied by the Government with the Solicitation may be retained by the Offeror.

L.28 AMENDMENT OF THE SOLICITATION

The only method by which any term of the solicitation may be modified is by an express, formal amendment to the solicitation generated by the Contracting Officer. No other communication made at any scheduled conference or subsequent discussions, whether oral or in writing will modify or supersede the terms of the solicitation.

L.29 COMMITMENT OF PUBLIC FUNDS

The Contracting Officer is the only individual who can legally commit the Government to the expenditure of public funds in connection with the proposed procurement. Any other commitment, either explicit or implied, is invalid.

L.30 OFFEROR INTENTION TO PROPOSE

Interested parties are requested to submit a letter of intent to propose and return via e-mail (as PDF) by September 02, 2016. Failure to submit will not disqualify an Offeror from submitting a proposal; submission of this letter of intent does not obligate any interested party to submit a full proposal. This information is requested to assist DOE in planning purposes only. E-Mail the intention to: paynemb@id.doe.gov

L.31 ATTACHMENTS TO SECTION L

Attachment Title

L-A	Deep Borehole Field Test: Characterization Borehole Science Objectives
L-B	Solicitation Compliance Matrix
L-C	Applicant Environmental Checklist
L-D	Past Performance Reference Worksheet
L-E	Resume Format
L-F	Past Performance Questionnaire
L-G	Cost/Price Proposal Template (FAR 15-2 Table)
L-H	Labor Rate Base, Adders, and Fee
L-I	Labor Category Crosswalk
L-J	Labor Rates (T&M)
L-K	Sample Memorandum of Agreement

SECTION M

EVALUATION AND SELECTION

M.1 SOURCE SELECTION

(a) Basis for Contract Award.

This is a best value source selection conducted in accordance with Federal Acquisition Regulation (FAR) 15.3, Source Selection, as supplemented by the Department of Energy Acquisition Regulation (DEAR). These regulations are available electronically at <http://farsite.hill.af.mil>.

The Government will award contract(s) to responsible Offeror(s) that (1) meet the requirements of the solicitation; and (2) submit proposal(s) (one proposal from each Offeror) determined to have best value to the Government, considering both the merits of the Offerors' technical proposal (including past performance, submitted in a separate proposal volume) and evaluated Cost/Price. The Government is more concerned with obtaining a superior technical proposal than making an award at the lowest evaluated Cost/Price. However, the Government will not make an award to an Offeror at a Cost/Price premium it considers disproportionate to either the evaluated positive aspects of the Offeror's technical proposal or the evaluated superiority of its technical proposal over other proposals. The Government will assess whether the strengths and weaknesses between or among competing technical proposals indicate superiority from the standpoint of: (1) what the difference means in terms of anticipated performance; and (2) the overall evaluated Cost/Price to the Government after evaluating the differences. This may result in award(s) to Offeror(s) having higher Cost/Price if the Source Selection Official (SSO) reasonably determines that the superiority of their technical proposal(s) outweighs any Cost/Price differences.

While the Government strives for maximum objectivity, the source selection process is, by its nature, subjective; professional judgment is implicit throughout the entire process.

(b) Number of Contracts to be Awarded/Use of Contract Phases.

The Government intends to award multiple [up to five (5)] contracts as a result of this solicitation. However, the Government reserves the right to award fewer, or even no awards, depending on the quality of the proposals, funding availability, and program needs. Any resultant contract(s) will be awarded with phases and built-in "down-selects" using factors described in Section C of this solicitation. Eventually it is anticipated that only several or even only one offeror will ultimately complete all phases.

(c) Rejection of Unrealistic Offers.

The Government may reject any offer that is evaluated to be unrealistic in terms of program commitments, contract terms and conditions, or unrealistically high or low Cost/Price when

compared to Government estimates, such that the proposal is deemed to reflect an inherent lack of competence or failure to comprehend the complexity and risks of the program.

M.2 EVALUATION CRITERIA AND RATING METHODOLOGY

(a) **Initial Review.** Prior to a comprehensive evaluation, the Government will perform an initial review to determine that: (a) the Offeror is eligible for award; (b) the information required by the solicitation has been submitted; (c) the proposal meets solicitation requirements; and (d) the Offeror has no actual or potential organizational conflict of interest that has not or cannot be acceptably mitigated. Proposals that fail to pass the initial review will not receive further evaluation and will be eliminated from further consideration. Also, a proposal may be eliminated from further consideration before completing a full evaluation if the proposal: (a) is determined to be so grossly and obviously deficient as to be totally unacceptable on its face; or (b) fails to meet a go/no-go requirement described in (b) below.

(b) Go/No-Go Assessment of Site Geologic/Hydrological Characteristics.

Concurrent with the Initial Review and before conducting a detailed evaluation of each proposal, the Government will first make an initial Go/No-Go assessment of the suitability of all proposed DBFT sites, based upon the geologic/hydrological characteristics specified in Subparagraph B.2 of Section C.4 of the solicitation.

It is recognized that, because of site variability and some uncertainties in the data, it is likely that a site will not completely meet all geological and hydrological characteristics. However, the site must be deemed technically “acceptable” for accomplishing the Deep Borehole Field Test (DBFT). This determination is in the sole discretion of the Government and will depend on such things as the number, degree and significance of any site shortcomings and their impact on DBFT program goals. Depending on the circumstances, a No-Go decision might be made where there is a single shortcoming if the nature (degree) of the shortcoming is so significant that one or more program goals are in jeopardy. In other circumstances, a Go decision might be made where there are multiple shortcomings if the Government determines those shortcomings will have minimal impact on program goals.

Any proposal receiving a “No-Go” assessment is technically unacceptable, rendering it ineligible for award of a contract and is eliminated from further award consideration. Only those proposals with a site receiving a “Go” assessment will receive further evaluation and award consideration.

(c) **Detailed Evaluation Criteria.** The evaluation will be based on the criteria described below and will include an assessment of how the Offeror's proposal (or the absence of necessary proposal content) affects technical, schedule and cost risk. Risks and risk avoidance/mitigation strategies will also be considered. Section L of the solicitation contains the information required in order for the Government to make its evaluation. Proposals will be evaluated on the following criteria:

Technical Criteria:

Criterion 1 – Public Support and Outreach; DBFT Site Location and Availability

Criterion 2 – Organization and Qualifications

Criterion 3 – Proposed Approach to Drilling/Testing and Site Operations

Criterion 4 – Past Performance

Criterion 5 – Cost/Price

(c) Rating Methodology for Evaluation Criteria 1-3. The Government will use the following table to assign an evaluation rating for Criteria 1-3:

Rating	Description
Exceptional	Exceeds performance, capability and/or regulatory requirements in a way beneficial to the Government. A proposal must have one or more strengths and no deficiencies to receive a blue.
Acceptable	Meets performance, capability and/or regulatory requirements. A proposal must have no deficiencies to receive a green, and may have one or more strengths.
Marginal	There is uncertainty regarding whether one or more aspects of the proposal meet performance, capability and/or regulatory requirements, but any such uncertainty is correctable.
Unacceptable	The proposal fails to meet one or more performance, capability and/or regulatory requirements. The proposal has one or more deficiencies.

(d) Rating Methodology for Evaluation Criteria 4 (Past Performance). The Government will assign a performance confidence rating using the methodology described in Criteria 4.

(e) Rating Methodology for Criterion 5, Cost/Price. The Government will evaluate Cost/Price using the methodology described under the heading "Evaluation of the Cost/Price Proposal."

(f) Relative Importance of Evaluation Criteria. The relative importance of the criteria is as follows: Criterion 1 is most important; followed by Criteria 2 and 3 which are of equal importance; followed by Criteria 4 and 5. Criteria 4 and 5 are of equal importance. All evaluation criteria other than Cost/Price, when combined, are significantly more important than Cost/Price.

Criterion 1 – Public Support and Outreach; DBFT Site Location and Availability

The Government will evaluate the public support and outreach for the project, as well as the location and availability of the proposed DBFT site. Specifically this evaluation will consider:

(a) Public Support and Outreach. The Government will evaluate:

(1) The Offeror's assessment of projected public support for the project at the DBFT location it has chosen. The reliability, detail and depth of the metrics used by the Offeror will be considered in evaluating the credibility of the assessment and the conclusions reached.

(2) The extent and breadth of documented support for the DBFT project by government and tribal (if appropriate) leaders. To the extent possible, DOE would like the local community to feel as though they are 'part of the team' at the inception of this project and not an afterthought following the contract award. Demonstrated community engagement during proposal development, with documented support from a broad spectrum of governmental/tribal stakeholders will result in a more favorable evaluation.

(3) The Offeror's draft public outreach plan, to assess the likelihood the Offeror will obtain and maintain sufficient public support to successfully complete its work in support of the DBFT project.

(b) Site Location and Availability. The Government will evaluate specifics provided by the Offeror regarding site location and availability, including geophysical location, physical access and the terms of the agreement between the Offeror, site owner(s) and other necessary signatories.

Criterion 2 – Organization and Qualifications

The Government will evaluate the extent to which the Offeror's proposed organization and organizational structure will: (a) advance technical, public support and other objectives (including schedule) outlined in Section C of the solicitation; and (b) ensure contract performance is cost-efficient.

The Government will also evaluate: (a) the depth and breadth of the qualifications and experience of the Offeror, its proposed team members, subcontractors and key personnel; and (b) the Offeror's approach for obtaining other necessary project resources.

Criterion 3 – Proposed Approach to Drilling, Testing and Site Operations

The Government will evaluate the Offeror's proposed approach to drilling/testing to determine the likelihood that its approach will accomplish the technical, regulatory and schedule objectives outlined in the solicitation. This evaluation will focus on the feasibility and suitability of the Offeror's approaches to:

- (a) Ensuring it will obtain all necessary permits and other regulatory approvals within schedule constraints.
- (b) Preparing the Preliminary and Final Drilling and Test Plan.
- (c) Conducting drilling, testing and site operations, including on-going post drilling/testing site maintenance activities.
- (d) Managing project activities, including resource allocation and communication/coordination among team members and subcontractors.
- (e) End of contract activities, including closeout, transition to a large diameter DBFT contractor and remediation.
- (f) Using Small Businesses and Small Disadvantaged Businesses (SBs/SDBs) for complex, meaningful work, with emphasis on the extent to which the Offeror will use local SBs and SDBs.

"Local" means primary business operations of the SB or SDB occur within 100 miles of the proposed DBFT site border.

If the Offeror is other than a SB, the offeror's Small Business Subcontracting Plan submitted in accordance with FAR 52.219-9, and Section L instructions will also be evaluated to determine the extent to which the Offeror identifies and commits to the participation of small businesses, whether as joint venture members, teaming members, or subcontractors. If the Offeror fails to submit a Small Business Subcontracting Plan, its proposal is unacceptable and ineligible for contract award.

Criterion 4 – Past Performance

The past performance evaluation assesses the degree of confidence the Government has in an Offeror's ability to successfully perform the project based on a demonstrated record of recent, relevant performance, including public outreach, cost and schedule performance.

A recent contract means a contract (a) between the Offeror, a key person, a teaming member, or a subcontractor and a Federal, State, or local government, a profit making entity, or a not-for-profit entity; (b) where performance is either on-going or performance was completed within five (5) years from the date proposals are due.

A relevant contract means a contract that involves work that is the same or similar to the work that will be performed under the contract that will be awarded under this solicitation. Past performance of a predecessor entity may be considered relevant where the Offeror is a new entity. Contracts involving key persons may be considered when their performance is relevant to the responsibilities they will have under the contract that will be awarded under this solicitation. The past performance of teaming members or subcontractors is relevant only where the teaming

member or subcontractor will be performing a major or critical aspect of the contract to be awarded under this solicitation.

In evaluating an Offeror's past performance, the Government will assign one of the following confidence assessment ratings (see table next page):

TABLE 3- PERFORMANCE CONFIDENCE ASSESSMENTS	
Rating	Description
SUBSTANTIAL CONFIDENCE	Based on the Offeror's performance record on recent, relevant contracts, the Government has substantial confidence that the Offeror will successfully perform the required effort.
SATISFACTORY CONFIDENCE	Based on the Offeror's performance record on recent, relevant contracts, the Government has satisfactory confidence the Offeror will successfully perform the required effort.
LIMITED CONFIDENCE	Based on the Offeror's performance record on recent, relevant contracts, the Government has limited confidence that the Offeror will successfully perform the required effort.
NO CONFIDENCE	Based on the Offeror's performance record on recent, relevant contracts, the Government has no confidence that the Offeror will successfully perform the required effort.
UNKNOWN CONFIDENCE	No recent, relevant performance is identifiable or the Offeror's recent, relevant performance record is not sufficient to reasonably assign a confidence assessment rating.

The confidence assessment rating is based on past performance of the Offeror on recent, relevant contracts.

The Government may consider past performance in the aggregate, in addition to on an individual contract basis. The Government may use past performance information provided in the Offeror's technical proposal, Past Performance Questionnaires it receives, as well as information obtained from other sources, such as the Past Performance Information Retrieval System (PPIRS) or similar systems, commercial sources, etc.

In making its confidence assessment, the Government may consider the currency and relevance of the information submitted, the source of the information, context of the data, problems encountered and the impact of corrective actions, and general trends in performance. More recent and relevant performance will have a greater impact on the Performance Confidence Assessment than less recent or relevant performance.

The assessment will also include compliance with any subcontracting goals for small disadvantaged business (SDB) concerns.

Past performance of predecessor entities, key persons, team members and subcontractors may be considered by the Government in making the confidence assessment.

An Offeror having a more relevant past performance record may be considered more favorably by the Government in making contract selection than a less relevant record of favorable performance. If the Government concludes the Offeror has no or an insufficient record of recent, relevant past performance, the Offeror will receive an "Unknown Confidence" rating, meaning the Offeror has neither favorable or unfavorable past performance when its past performance is evaluated on a stand-alone basis. In making contract selection, the Government may consider that an Offeror with a positive confidence assessment rating has better value than an Offeror having an "Unknown Confidence" rating.

Evaluation of Criterion 5, Cost/Price Proposal

The offeror's Cost/Price proposal will be evaluated for T&M contract line items and CPFF lines.

- (1) T&M line items will be evaluated using a DOE estimated number of hours per labor category per contract period multiplied by the proposed T&M rates submitted. The sum of these will be the evaluated price for the T&M labor portion of the total evaluated price.
- (2) CPFF line items will be evaluated by computing a Most Probable Cost (MPC) for all CLINs. The Offeror's proposed estimated costs are not controlling for source selection purposes. MPC means the Government's estimate of anticipated performance costs based on its assessment of the Offeror's technical proposal using an evaluation methodology described below, plus the Offeror's proposed fee.

Evaluation of contract phases does not obligate the Government to select the Offeror to perform those phases. See Section C of the solicitation for further information.

The Offeror's Cost/Price proposal will be evaluated, using one or more of the techniques defined in FAR 15.404, in order to determine if it is reasonable and realistic. Costs are reasonable if they represent costs to the Government that a prudent person would pay in the conduct of competitive business. Normally, reasonableness is established through cost and price analysis techniques as described in FAR 15.404. For additional information see FAR 31.201-3.

Completeness. Cost/Price proposals will be evaluated for completeness by assessing the responsiveness of the proposed cost by assessing the level of detail the Offeror provided data for all requirements in the SOW, and assessing the traceability of estimates.

Offeror total compensation plans will also be evaluated in accordance with the Section L provision entitled "FAR 52.222-46, Evaluation of Compensation for Professional Employees.

Fee. The Government will evaluate the reasonableness of the proposed fixed-fee utilizing weighted guidelines in accordance with FAR 15.4 and DEAR 915.4 weighted guidelines.

The Government will evaluate the realism of each offerors' proposed costs. This will include an evaluation of the extent to which proposed costs are sufficient for the work to be performed,

reflective of a clear understanding of the requirements, and consistent with the unique methods of performance and materials described in the offeror's technical proposal (FAR 15.404-1(d)(1) and 2.101). This Cost/Price Realism Assessment (CPRA) will consider technical/management risks (weaknesses) identified during the evaluation of the proposal. The CPRA will quantify (dollarize) the impact of any weakness identified that may disrupt schedule, increase cost, or degrade performance, and where applicable, adjust the cost/price (most probable cost). In addition, cost information supporting a cost judged to be unrealistically low will be quantified by the Government evaluators and included in the CPRA for each Offeror.

M.3 PRE-AWARD SURVEY

The Government may conduct a pre-award survey (PAS) as part of this source selection. Results of the PAS (if conducted) will be evaluated to determine each offeror's capability to meet the requirements of the solicitation.

M.4 REVIEWS and VISITS

The Government may conduct site visits during the evaluation phase to gather information for judging the offeror's potential for correcting proposal inadequacies, quality of development or manufacturing practices/processes, or other areas useful in evaluating the offer. If conducted, the results will be assessed under the applicable criteria and will be used to validate and confirm the offeror's written proposal.

M.5 SOLICITATION REQUIREMENTS, TERMS AND CONDITIONS

Offerors are required to meet all solicitation requirements, such as terms and conditions, representations and certifications, and technical requirements, in addition to those identified as proposal instructions and evaluation criteria. Failure to comply with the terms and conditions of the solicitation may result in the offeror being ineligible for award. Offerors must clearly identify any exception to the solicitation terms and conditions and must provide complete supporting rationale, recognizing that taking exception to a mandatory solicitation term may make its proposal unacceptable and ineligible for contract award.

In arriving at a best value decision, the Government may consider the purchase and use of capital assets (machines, tools, etc.) manufactured in the United States.

M.6 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE NOTICE:

Pursuant to FAR 52.252-1, "SOLICITATION PROVISIONS INCORPORATED BY REFERENCE," the following provisions are incorporated herein by reference:

FAR 52.217-5 Evaluations of Options (Jul 1990)

