

MISSION SUPPORT AND TEST SERVICES, LLC
FIRM, FIXED PRICE SUBCONTRACT

ASG APPROVED
EXHIBIT B
STATEMENT OF WORK

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B-1 SCOPE/BACKGROUND

1. Scope: This Statement of Work (SOW) defines the requirements to procure components and equipment, and delivery of a 480V, 150 KVA Uninterruptible Power Supply labelled with tag # 480-UPS-805 and batteries required in the U1a underground complex in drift 102C.
 - 1.1. SUBCONTRACTOR shall provide no hand-on (activity level) work at CONTRACTOR site. This requirement supersedes the requirements of any document referenced in this Statement of Work.
2. Project Background: The UPS4 is used to provide backup power to the Injector Skids and the Injector Skid Cryogenic Compressor.
3. General Site Information:
 - 3.1. The Nevada National Security Site (NNSS) is a U.S. Department of Energy, National Nuclear Security Administration (NNSA) installation, operated by Mission Support and Test Services, LLC (CONTRACTOR), comprising approximately 3,561 square kilometers (1,375 square miles) of federally owned land located in southeastern Nye County, Nevada. Located approximately 105 kilometers (65 miles) northwest of Las Vegas, Nevada, the NNSS is accessed from U.S. Highway 95, which roughly forms the southern boundary of the site.
 - 3.2. The CONTRACTOR also operates the North Las Vegas Facility (NLV); the Remote Sensing Lab at Nellis AFB, North Las Vegas, NV (RSLN); the Remote Sensing Lab at Andrews AFB, Maryland (RSLA); Special Technologies Lab at Santa Barbara, CA (STL); Livermore Operations at Livermore, CA (LO); and Los Alamos Operations at Los Alamos, NM (LAO).

B-2 REQUIREMENTS

1. General: The work required by this subcontract shall be performed in accordance with all requirements stated in this SOW and CONTRACTOR approved QA program. The SUBCONTRACTOR shall procure components and equipment and verify components meet the requirements described in the referenced specification (17-0-106) and Data Sheet (DS-480-UPS-805). SUBCONTRACTOR shall provide contact-free on-site services to provide technical assistance in system set-up as requested by the CONTRACTOR.
2. Detailed Requirements:
 - 2.1. The SUBCONTRACTOR shall procure the UPS equipment listed in the chart below to allow the components to be assembled into a functioning system. See Specification 17-0-106 for all requirements.

Item #	Tag number	Equip type	Equipment description	Location	QTY
1	480-UPS-805 (UPS4)	UPS	480V 3-phase input/480V 3-phase output Uninterruptible Power Supply (UPS). 150kVA N+1 configuration.	Underground (Below surface), drift 102	1
2	486-BAT-805	Battery Cabinet	486 VDC* Valve-regulated Lead Acid (VRLA) batteries per load profile shown on DS-480-UPS-805 <i>*Actual voltage may vary by manufacturer; to be approved during proposal review process</i>	Underground (Below surface), drift 102C Battery Room	1
3	NA	Power Quality Module	Power Quality Module suitable for the application, <i>to be approved during proposal review process</i>	Underground (Below surface), drift 102C Battery Room	1
4	NA	Bypass Input Circuit Breaker	Bypass Input Circuit Breaker, <i>to be approved during proposal review process</i>	Underground (Below surface), drift	1

Item #	Tag number	Equip type	Equipment description	Location	QTY
				102C Battery Room	
5	NA	Battery Disconnect	Battery Disconnect, <i>to be approved during proposal review process</i>	Underground (Below surface), drift 102C Battery Room	1

2.1.1 SUBCONTRACTOR shall propose for CONTRACTOR's approval a battery string segmentation methodology to allow separating battery string segments into <50 VDC sections while maintaining required performance.

2.2. Components shall be free of manufacturing defects,

2.3. Components shall be free of visible physical damage,

2.4. Components shall be in new condition,

2.5. Components shall legibly show component part number on either the part or the packaging

2.6. SUBCONTRACTOR shall ensure the anchor bolts and configuration for all listed components shall meet the seismic requirements of DS-480-UPS-805 and support installation in 5000 PSI concrete.

2.6.1. NOTE: CONTRACTOR shall provide all anchor material.

2.7. SUBCONTRACTOR shall provide design criteria for anchors, to ensure the seismic requirements above.

2.8. SUBCONTRACTOR shall submit for approval and perform a Factory Acceptance Test (FAT) prior to shipment, as described in Specification 17-0-106 Section 2.11.5.

2.9. SUBCONTRACTOR shall provide a detailed description of the system's operating software configuration as tested.

2.10. SUBCONTRACTOR shall meet and submit all documents and submittals, per the attached Submittal Register, Section B-9.

2.11. SUBCONTRACTOR shall be responsible for providing onsite and remote technical advisory support during the CONTRACTOR assembly, installation, startup, and commissioning phases of the project; SUBCONTRACTOR shall not perform any contact physical work.

B-3 TECHNICAL SPECIFICATIONS

SPEC NUMBER	TITLE	REV	PAGES
17-0-106	Uninterruptible Power Supply and Batteries Specification	1	43
21-0-001	Site Conditions Specifications	0	10

B-4 DRAWINGS

DRAWING NUMBER	TITLE	REV	PAGES
01889-E-6234	U/G Standby Power Drift U1a.102 480-UPS-805 (UPS4) Single Line Diagram	1	1

DRAWING NUMBER	TITLE	REV	PAGES
DS-480-UPS-805	480-UPS-805 Uninterruptible Power Supply (UPS4)	1	5

B-5 DELIVERY & WORK LOCATION

Delivery Location:

Other: Initial shipment to SUBCONTRACTOR LOCATION

Final delivery: Nevada National Security Site Receiving Warehouse 160 Mercury, NV 89023

Work Location:

Offsite Work

Additional Delivery/Work Locations: N/A

B-6 QUALITY ASSURANCE

GENERAL SERVICES AND/OR COMMODITIES

This PO is for items or services that support the mission(s) of the Nevada National Security Site, therefore:

SUSPECT/COUNTERFEIT ITEMS REQUIREMENTS:

The SUBCONTRACTOR will take positive measures to ensure that only new, unused equipment/material from acceptable sources is provided under this subcontract. Notwithstanding, any other provisions of this subcontract, should any suspect/counterfeit items or components be found within or on this equipment during contractor receipt inspection, subcontractor shall, at its expense, promptly replace such items or components.

These requirements shall be flowed down to all levels of subcontractors as it pertains to this procurement activity.

B-7 CLEARANCE REQUIREMENTS

1. Check all that apply:

- ☒ No security clearance; unclassified work
- ☐ DOE L
- ☐ DOE Q
- ☐ HSPD-12 PIV Credential

2. If applicable, add any or all parts of the following statement security qualifications:

- ☐ The SUBCONTRACTOR shall have the ability to obtain a U.S. Department of Energy (DOE) facility security clearance and have personnel capable of obtaining a Q-type or L-type security clearance.
- ☐ Q- or L-type security clearance is required for all SUBCONTRACTOR personnel having access to classified information or special nuclear material when performing such work.
- ☐ A corresponding level of security clearance from another federal agency may be applicable if approved by the CONTRACTOR and DOE.
- ☒ N/A

3. Security Misc.:

3.1. N/A

B-8 SPECIALIZED EXPERIENCE/SPECIFIC TRAINING/SPECIFIC CERTIFICATIONS

1. Licenses – SUBCONTRACTOR shall have the following job-specific license:

- 1.1. N/A
2. Training – SUBCONTRACTOR shall have the following job-specific training:
 - 2.1. N/A
3. Certifications – SUBCONTRACTOR shall have the following job-specific certifications:
 - 3.1. N/A

B-9 ENVIRONMENTALLY PREFERABLE PRODUCTS

NOTE TO SUBCONTRACTORS: Federal Contractors such as MSTs are required by the U.S. Department of Energy to purchase Environmentally Preferable Products (EPP) (also known as green or sustainable purchasing) and are also required to flow those procurement requirements to their Subcontractors. When designing materials and/or supplying materials to be used onsite as part of a subcontract scope-of-work, those materials must meet these same requirements.

The following is a list of EPP types that must be used if they are available:

- **Products with Recycled Content.** U.S. Environmental Protection Agency (EPA) list
- **Water Efficient Plumbing Products.** EPA WaterSense® list
- **Non-Toxic or Less Toxic Alternatives**
- **Green Certified Products.** (e.g., Design for Environment, Green Seal)
- **Bio-Based Products.** U.S. Department of Agriculture list
- **Energy Efficient Products.** EPA Energy Star® or Federal Energy Management Program designated products
- **Energy Efficient Electronics.** EPEAT®-silver-rated or higher rated desktop computers, laptops and monitors, televisions, multifunction devices and printers
- **Non-Ozone Depleting Alternative Products**

B-10 ATTACHMENTS

Attachment Number	TITLE	REV	PAGES
Submittal Register	Per Submittal Register	0	1

B-11 SUBMITTALS

(ADM = Subcontract Administrator; STR = Subcontract Technical Representative; NLT = No Later Than; NTP = Notice to Proceed; TLO = Transmittal Letter Only)

Description	Reference	Copies	Received By	Due Date	Comments
PROCUREMENT RELATED SUBMITTALS					
Subcontract Release Statement – FRM-2206	Exhibit C Exhibit D	1	ADM	Following completion of work prior to final payment for each Task Order	SUBCONTRACTOR shall submit a Subcontract Release Statement FRM-2206. The Subcontract Release Statement shall include a certification that states the following: "All GOVERNMENT and CONTRACTOR-furnished property has been returned, consumed, delivered or otherwise disposed of as instructed by CONTRACTOR."
SUBCONTRACTOR's Authorized Representative	Exhibit C	1	ADM	Prior to the start of work	Also, when changes occur

PROJECT SPECIFIC AND TECHNICAL SUBMITTALS/DELIVERABLES (documentation only)

Description	Reference	Copies	Received By	Due Date	Comments
Submittal Register	Submittal Register	2	STR	See Submittal Register	