

**STATEMENT OF WORK**

**FOR**

**High Voltage Breaker Control DC Power Supply  
August 18, 2023**

**PREPARED BY:**

**21st CIVIL ENGINEER SQUADRON  
1 NORAD RD  
CHEYENNE MOUNTAIN SPACE FORCE STATION, CO 80914**

## **1. SCOPE OF WORK**

### **1.1. GENERAL**

- 1.1.1. Industrial area high voltage breaker control panels need a new battery charging system in the event of an outage.
- 1.1.2. The work to be performed shall consist of furnishing necessary labor, tools, transportation, supplies, equipment, materials, and incidentals necessary to complete all work stated in this Statement of Work (SOW). The Contractor shall follow all current, applicable codes, regulations, standards, and criteria. In addition, all work procedures and materials shall be approved by the 21<sup>st</sup> Civil Engineering Squadron (21 CES) prior to the start of work. The work in this SOW shall be executed by qualified and efficient mechanics/tradesmen, skilled in their respective trades. The contractor shall coordinate and perform all operations in a manner that will result in a professionally and expeditiously completed project.

### **1.2. PROJECT DESCRIPTION**

- 1.2.1. Remove the existing DC power supply system.
- 1.2.2. Install new DC power supply system in the electric bays inside the complex with the following requirements:
  - 1.2.2.1. Continually monitor and provide conditioning of the incoming electrical power removing surges, spikes, sags, over-voltages, and other irregularities inherent in commercial utility power;
  - 1.2.2.2. Provide clean, consistent power at rated DC voltage with low ripple to sensitive electronic equipment;
  - 1.2.2.3. Installed systems must perform as a standalone system, or in parallel with each other for redundancy or capacity;
  - 1.2.2.4. 25kW system operating on 3 phase, 3-wire + ground input from 208VAC at 45-65Hz;
  - 1.2.2.5. Provide 120VDC, 200ADC output to the current system batteries for control panels;
  - 1.2.2.6. Ability to operate in given environmental conditions with minimal derating;
  - 1.2.2.7. Provide display showing system status. Including, but not limited to:
    - 1.2.2.7.1. Date and Time.
    - 1.2.2.7.2. Current DC voltage, load, rectifier data, and temperature.
    - 1.2.2.7.3. DC output voltage exceeding specification.
    - 1.2.2.7.4. AC supply to rectifier outside operating parameters.
    - 1.2.2.7.5. Internal temperature outside operating parameters.
    - 1.2.2.7.6. Ground fault.
    - 1.2.2.7.7. Load level indication for 50% and/or above.
    - 1.2.2.7.8. Fault Log Memory display.
  - 1.2.2.8. Provide means for operational security.
  - 1.2.2.9. Provide means for serial communications, if necessary.

### **1.3. LICENSES AND PERMITS**

- 1.3.1. The Contractor shall obtain all necessary licenses and permits, complying

with all federal, state, and municipal laws, codes and regulations applicable to the performance of the work if needed. The Contractor shall provide proof of such applicable licenses and permits upon Government request. Cheyenne Mountain Space Force Station (CMSFS) Fire Department (719-474-3030) shall provide and issue hot works permit.

#### **1.4. Site Investigation and Conditions Affecting the Work.**

- 1.4.1. The Contractor acknowledges necessary reasonable steps have been taken to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to:
  - 1.4.1.1. Conditions bearing upon transportation, disposal, handling, and storage of materials;
  - 1.4.1.2. The availability of labor, water, electric power, and roads;
  - 1.4.1.3. Uncertainties of weather, river stages, tides, or similar physical conditions at the site;
  - 1.4.1.4. The conformation and conditions of the ground; and
  - 1.4.1.5. The character of equipment and facilities needed preliminary to and during work performance.
  
- 1.4.2. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract.
  
- 1.4.3. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.
  
- 1.4.4. The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding, or representation is expressly stated in this contract.

## **2. ENVIRONMENTAL AND HAZARDOUS MATERIAL HANDLING**

- 2.1. The Contractor shall provide and maintain Safety Data Sheets on all materials used in the performance of this contract. If any materials used in the performance of this contract are considered hazardous; the Contractor shall follow all local, state, and federal laws for proper management or transport of said hazardous waste. All

potentially hazardous materials/toxics found or identified at CMSFS while executing this work will immediately be reported to Requirements and Optimizations (R&O) at 719-474-2778 and The Environmental Section at 719-556-1478.

- 2.2. Ensure employees handle any hazardous materials according to federal, state, or local laws and emergency response requirements. If required, a license for employees handling of hazardous materials shall be the Contractor's responsibility and at their expense. Report any instances of spills, leaks, and/or inadvertent release of hazardous materials to Cheyenne Mountain Control Center (CMCC) at 719-474-3575/3558, The Environmental Section at 719-556-1478, and to Requirements and Optimizations (R&O) at 719-474-2778 as soon as the event occurs.
- 2.3. The Government will provide the Contractor an AF Form 3952, Chemical/Hazardous Material Request Authorization, for all materials used on CMSFS. The Contractor shall have the form submitted back to 21 CES at least 15 business days prior to the start of work.
- 2.4. The Contractor shall contact 21 CES prior to generating any waste that is determined to be hazardous per the SDS. The Contractor is encouraged to contact R&O at 719-474-2778 if assistance is needed in making a waste determination.
- 2.5. The Contractor shall submit copies of any records showing quantities of disposed hazardous materials and/or recycled materials to 21 CES within 5 business days of disposal.
- 2.6. The area of work may contain lead and asbestos. Before any work begins, the contractor shall test for lead and asbestos. The contractor shall properly abate and or dispose of all lead and asbestos in the work area. The contractor shall retest the area after abatement is completed. All test results shall be provided by the contractor to the Government. These reports are the properties of the US Government and shall not be shared with third parties without written permission from the 21 CES.

### **3. WORK SCHEDULE**

- 3.1. Working hours for the Contractor will normally be between the hours of 7:00 a.m. and 4:00 p.m. excluding Saturdays, Sundays, and Federal Holidays. On rare occasion, circumstances may require work to be completed in other than the aforementioned time frames and must be approved by R&O or the contracting officer in writing prior to the deviance.

### **4. WORK AREA ACCESS**

- 4.1. This worksite is located inside a restricted area at CMSFS and all contractors must have proper authorization. The contractor's company shall ensure contractors have been authorized to enter the restricted area and must provide their own escorts, if necessary. 21 CES can provide recommendations for approved escorts. Escorts

may only supervise 10 visitors at any one time and visitors must remain within sight of the escort at all times. Upon acceptance of this contract, the contractor shall complete and submit a CMSFS Visitor Request to 21 CES. A Visitor Request template will be provided after award, upon request. All Visitor Requests shall be submitted no later than 15 business days prior to the first day of work. The Contractor shall coordinate Visitor Request processing with R&O at 719-474-2778. Any contractor who fails to pass a background check will not be permitted to work on the installation.

- 4.2. The contractor shall inform CMCC at the start and end of every shift at 719-474-3575/3558.
- 4.3. If contractor requires a vehicle to be driven into the restricted area additional information will be required, Vehicle Authorization Request (VAR) will be provided after award, upon request. All VAR requests shall be submitted no later than 15 business days prior to the first day of work. The Contractor shall coordinate VAR processing with the R&O at 719-474-2778.
- 4.4. If contractor requires a camera or computer in the restricted area additional information will be required, Laptop/Computer/Electronic request, which will be required after reward, upon request. All requests shall be submitted no later than 15 business days prior to the first day of work. The Contractor shall coordinate processing with R&O at 719-474-2778.

## **5. SAFETY**

- 5.1. All Contractor operations shall be conducted and performed in accordance with Department of Labor, OSHA requirements found in 29 CFR 1910 (1910.146 and 1910.147) and 29 CFR 1926, and Air Force Occupational Safety & Health (AFOSH) AFOSH standards including 91-205. The Contractor shall also ensure that all work is performed in accordance with project identified national standards, military manuals, instructions, pamphlets, standards, and handbooks.

## **6. PROTECTION OF GOVERNMENT PROPERTY**

- 6.1. The Contractor shall use reasonable care to avoid damaging existing buildings, equipment, and vegetation on the government installation. If the Contractor fails to use reasonable care and causes damage to any of this property, the Contractor shall replace or repair the damage at no expense to the Government. If the Contractor fails or refuses to make such repair or replacement, the Contractor shall be liable for the cost, which may be deducted from the contract price.

## **7. SITE MAINTENANCE AND CLEANUP**

- 7.1. The Contractor shall protect the work area, and if necessary adjacent areas, from dust, dirt or other materials. Work areas shall be maintained in a neat, clean, and safe condition and shall, at a minimum, be cleaned at the end of each shift. All

passageways in/or adjacent to the site shall always remain free of project generated trash and debris.

- 7.2. For project to be accepted, the contractor shall collect any and all trash, debris, refuse, garbage, etc., that is generated from this project and place it in appropriate containers with lids or approved covers on a periodic basis, or as directed. The aforementioned materials shall be hauled from the site by appropriate means on a daily basis, unless otherwise approved. Disposal shall be outside the limits of government property. Disposal shall be by approved methods and shall conform to all local, state, and federal guidelines, criteria, and regulations. Upon completion of the work, the Contractor shall leave the work site and storage area(s) in a clean, neat, and workmanlike condition satisfactory to 21 CES.

## **8. DELIVERABLES**

- 8.1. At the completion of the contract, the Contractor shall provide all applicable documents for operations and maintenance of the new system. Additionally, the Contractor shall provide a separate detailed report for condition and maintenance actions required. This report becomes property of the US Government and shall not be shared with third parties except with written permission from the 21 CES.
- 8.2. At the completion of the contract, the Contractor shall provide all reports/results for any tests performed related to this project. This report becomes property of the US Government and shall not be shared with third parties without written permission from the 21 CES.
- 8.3. At the completion of contract, the Contractor shall provide current AutoCAD drawings meeting current USACE CAD standards, if created. These drawings become property of the US Government and shall not be shared with third parties without written permission from the 21 CES.

**END OF STATEMENT OF WORK**