US Department of Agriculture (USDA)

Statement of Work

Contents

Project 3
General Information 3
1.0 Scope of Work 3
2.0 Background 3
Contractor Requirements 3
3.0 Technical Requirements / Tasks 4
4.0 Government Furnished 6
5.0 Deliverables / Schedule 6
6.0 Travel 6
7.0 Contractor's Key Personnel 6
8.0 Security Requirements 6
9.0 Data Rights 6
10.0 Section 508 – Electronic and Information Technology Standards 7
Attachment 7

Project: UPS INSPECTION AND SERVICE

General Information

1.0 Scope of Work

The National Center for Animal Health (NCAH) at Ames Iowa has the need for inspection, repair, general maintenance and overhaul of various uninterruptible power supplies throughout the facility. There are 12 UPSs in 5 buildings, the inspections shall be performed on an annual basis. Inspections can be performed in one series of inspections within a short time or spaced throughout the year if each piece of equipment is inspected every twelve months. The Inspection Schedule will be coordinated with NCAH.

2.0 Background

The National Centers for Animal Health, hereinafter referred to as NCAH, is part of the United States Department of Agriculture (USDA). NCAH houses three separate USDA entities:
National Animal Disease Center (NADC): The NADC conducts basic and applied research on selected diseases of economic importance to the U.S. livestock and poultry industry.
National Veterinary Services Laboratories (NVSL): The NVSL is responsible for diagnosis for domestic and foreign animal diseases, diagnostic support for disease control and eradication programs, import and export testing of animals, training, and laboratory certification for selected diseases.

Center for Veterinary Biologics (CVB): The CVB is responsible for implementing the Virus-Serum-Toxin Act of 1913 as amended in 1985 to ensure that veterinary biologics (Vaccines, bacterins, antisera, diagnostic kits and other products of biological origin) available for the diagnosis, prevention, and treatment of animal diseases are pure, safe, potent, and effective.

The NCAH is comprised of one large facility including approximately 520 acres

National Centers for Animal Health
1920 Dayton Avenue,
Ames, IA 50010

The NCAH is specially designed and operated to research, perform tests and ultimately contain highly infectious diseases of livestock and wildlife species where they may be studied safely, posing no threat to the nation's food industry or people. Observance of proper personnel procedures, usage of personnel safety equipment and correct design and operation of facilities all contribute to the biosecurity and biosafety of the laboratory. The hours of operation are 7:00 am to 5:00 pm.

The successful bidder will be required to provide documented verifiable information for a minimum level of experience of three years in the inspection, repair, maintenance and overhaul of the type and size of equipment they are proposing to service. Emergency/repair response times are 4-hours on-site. Inspections shall be performed on an annual basis. Inspections can be performed in one series of inspections within a short time period or spaced throughout the year as long as each piece of equipment is inspected every twelve months. The Inspection Schedule will be coordinated with NCAH.

The successful bidder must also certify he is a manufacturer trained technical service organization with proprietary software and hardware for specified equipment, if it is a requirement of the manufacturer.

Awards will be made for a 1-year base period with four optional 1-year annual renewal periods. Renewal decisions will be made two months prior to the potential renewal date. The decision to renew

will be at the sole discretion of the USDA. Annual price adjustments will be based on successful bidder's prices submitted at the time of the original bid.

Excluding emergencies, normal scheduled inspections and service work will be performed during regular workdays, 7:00 AM – 5:00 PM, local time. To facilitate completion of service work that would not require an additional full day of activities, extension of time before and after normal working hours will be considered upon a 2-week advance written request from the Contractor.

NCAH Equipment List

Uninterruptible Power Supplies

Unit ID	Manufacturer	kVA	Model Number	Building	Room/Location
UPS-009-01	Power ware	18	9170 Series	9	2011
UPS-009-02	Power ware	18	9170 Series	9	2011
UPS-020-01	Toshiba	300	G8000 Series	20	0105
UPS-020-03	Chloride	50	EDP 70 Series	20	0103
UPS-020-04	Chloride	50	EDP 70 Series	20	BM32
UPS-020-05	Eaton	50	93PM-50-1	20	BM43A
UPS-020-06	Chloride	30	EDP 70 Series	20	BM54
UPS-153-01	Toshiba	3.6	1600EP Series	153	North Unit
UPS-153-02	Toshiba	3.6	1600EP Series	153	South Unit
UPS-154-01	Schneider	20kVA	GVSUPS0K0B5D	154	Telecom
UPS-156-01	Power ware	30	9355 Series	156	MCC

Contractor Requirements

3.0 Technical Requirements / Tasks

Visual Inspection

- Check area for any safety concerns that may affect the safety of the technician and NCAH personnel.
- Check subassemblies, wiring harnesses, contacts, cables and other major components for burns or broken wires.
- Clean or replace all air filters.
- Check all fans for slow start and free rotation.
- Check AC input and output for proper wiring, grounding and verify NEC code standards.
- Check input and output grounding is proper and sufficient for NCAH application.
- Check and record alarm logs.
- Check all circuit boards and connections for cleanliness and or possible problems.
- Check all breakers, power connections, fuses and controls for excessive heating or swelling via thermal scan and reading.
- Check AC and DC capacitors for swelling or leakage.
- Check for DC capacitor vent caps that have extruded more than 1/8".
- Check all nuts, bolts, screws and connectors for tightness and heat discoloration.

Power Checks

- Check input voltage, amperage, and frequency readings for proper levels and balance. Also check power quality and harmonic distortion levels.

- Check output voltage, amperage, and frequency readings for proper levels and balance. Also check power quality and harmonic distortion levels.
- Check bypass voltage and frequency for proper available power.
- Check input power and harmonic filters for proper operation and balance.
- Check output power and harmonic filters for proper operation and balance.
- With NCAH approval, perform operational tests of the system including unit transfer and battery discharge.
- Review system performance with NCAH to address any questions and to schedule any repairs, depending on availability of NCAH.

Internal Component Checks

- Check and calibrate any logic and control signals as specified in the manufacturer's maintenance procedures.
- Check all indicators and meters for proper operation and calibration adjusting as necessary in accordance with the manufacturer's maintenance procedures.
- Check and calibrate all power supply settings in accordance with manufacturer's specified settings.
- Check rectifier voltage and current balance for proper operation.
- Check inverter voltages and balance for proper operation.
- Check static switch voltages and inspect for any leakage.
- Check fuses on the DC capacitor deck for continuity, if applicable.
- Install or perform Engineering Field Change Notices (FCN), as necessary.

External Environmental Checks

- Check ambient temperature of the UPS room.
- Check location for cleanliness and accessibility.

VRLA Battery System Checks

- Inspect the appearance and cleanliness of all batteries, connectors, cabinet(s) or rack(s), and room(s).
- Check each battery for signs of damage to the case, cover or terminals, staining of the case, terminals or surrounding areas, excessive swelling, evidence of melting or thermal damage to the cover and terminal post-seal plus support cabinet(s) or rack(s) for signs of physical damage, corrosion, etc.
- Confirm battery cabinet(s) or rack(s) hardware integrity and tighten connections, as necessary.
- Clean and retighten all terminal connectors and check for NO-OX grease or oil on all connections (when needed and/or accessible).
- Check system float voltage and current and adjust if necessary to manufacturer's specified settings.
- Measure and record DC bus ripple voltage when applicable.
- Measure and record all internal impedance readings.
- Measure and record all battery connection resistances in micro-ohms, when applicable.
- Measure individual battery temperatures and check for any hot spots or readings which are out of the manufacturer's recommended temperature variance, when accessible.
- Perform individual battery load testing, when accessible.
- Record battery date codes, number of cells and strings.

4.0 Government Furnished

NCAH will provide escorts for technicians

5.0 Deliverables / Schedule

Key Deliverables

Item No.	*Deliverable*	*Objective*	*Due*
1	*Proposed Project Plan*	• Provide a comprehensive report for each uninterruptible power system covering the tasks performed in the above procedures. • Provide a summary of all non-completed tasks with explanation of reason for non-completion and recommendation to correct condition. • Provide a summary of maintenance and/or recommendation items which need to be completed prior to the next annual inspection.	*No later than 5 business days after inspection*

6.0 Travel

Not applicable

7.0 Contractor's Key Personnel

Not applicable

8.0 Security Requirements

At least a 2-week notice needs to be given before work is to begin.

All contractors must check in at main gate and main desk in the lobby Southwest entrance to building 20 each day to receive contractor pass (driver's license will be needed). A real ID will also be needed to access the government property.

All contractors must be escorted when inside buildings (unless they have contractor linc pass authorization).

Working hours are between 7:00 am and 5:00 pm daily.

9.0 Data Rights

Not applicable

10.0 Section 508 – Electronic and Information Technology Standards

Not applicable

Attachment