Annex B

TERMS OF REFERENCE

I. General Information:

The Bases Conversion and Development Authority (BCDA) requires professional services to perform the preventive/corrective maintenance services of the BCDA's Data Center UPS equipment as described below. ABC for this project is Three Hundred Thousand pesos only (PHP 300,000.00).

Description of Equipment:

 Unit APC, 16KVA, Model Symmetra LX, Serial AD1744120183, Input 220/230/240V

II. Project Requirement:

The Contractor under this TOR will be responsible for the labor and materials required to carry out all preventive/corrective maintenance as outlined in this TOR.

III. Scope of Work:

The Contractor shall provide all materials, supervision, labor, tools, and equipment to conduct Preventive/Corrective Maintenance.

A. One (1) year Preventive/Corrective Maintenance

A.1 Schedule: Quarterly

A.2. Methods/Procedure:

- 1. Visual and actual inspection of the unit's exterior and premises.
 - Checking of UPS environment and room temperature measurement.
- 2. Check the unit's mechanical components.
 - Visual inspection of UPS and identify if some parts and components are in their early breakdown.
 - Check-up of UPS fans, and identify if hissing/bearing sound is present.

3. Checking of UPS Input Parameters

 Conduct data acquisition, and its parameters and check if all are within the normal range.

4. Battery checking.

- Visual inspection of battery status and battery connections
- Check the reading and gather measured battery block voltage
- Conduct UPS Self-Test.

5. Checking of UPS Output Parameters

- Check and gather output voltage measurement, load current, and output frequency.
- Check other parameter readings

6. UPS Testing and Cleaning

- Testing of the communication link between the UPS and servers using UPS software.
- Cleaning of UPS/Removal of unwanted dust particles.

7. Service Report

- Furnishing and submission of Service Report with all gathered readings of UPS parameters with parts/components recommendation either for repair or replacement.
- 8. Labor included for the repair of the UPS in the event of failure and replacement of its components as needed such as electronic cards, electronic modules, motherboard, and its parts and fuses. If any discrepancies are found with the UPS equipment that is not covered under this scope of work then the contractor must provide the following:
 - Detailed report noting the discrepancy found. Bill of Materials (BOM) to include component name, quantity, part number, and price for any repair material required and material lead time.
 - The price quote for repair labor.

A.3. Availability

For emergency calls due to unexpected and unintentional shutdown, malfunctioning, or breakdown of the Equipment:

- Field engineers must be available for 2-4 hours of on-site service response.
- Service phone support must be available 24 hours a day, seven days a week through a service hotline.

IV. Implementation

Upon the issuance of the Notice to Proceed (NTP), the Contractor may proceed with the quarterly maintenance on the first month of each quarter. The contractor should provide BCDA with an email notification at least 2 days before the maintenance works which contains the list of personnel and tools to be used.

V. Qualifications:

Must be a duly registered business, operating in the Philippines for the past five (5) years whose service/products are associated with information and communication technology, including maintenance of uninterruptible power supply.

VI. Payment Terms:

Payment shall be made quarterly with the submission of an accomplished quarterly preventive/corrective maintenance checklist and relevant reports on the service rendered, inclusive of all applicable taxes and fees.

VII. Retention:

No Retention Money Required

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