Section VII. Technical Specifications

Notes for Preparing the Technical Specifications

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying their bids. In the context of Competitive Bidding, the specifications (e.g. production/delivery schedule, manpower requirements, and after-sales service/parts) must be prepared to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of transparency, equity, efficiency, fairness and economy in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation and post-qualification facilitated. The specifications should require that all items, materials and accessories to be included or incorporated in the goods be new, unused, and of the most recent or current models, and that they include or incorporate all recent improvements in design and materials unless otherwise provided in this Contract.

Samples of specifications from previous similar procurements are useful in this respect. The use of metric units is encouraged. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods. Deletions or addenda should then adapt the General Technical Specifications to the particular procurement.

Prudence must be exercised in drafting specifications to ensure that they are not restrictive. In the specification of standards for equipment, materials, and workmanship, recognized Philippine and international standards should be used as much as possible. Where other particular standards are used, whether national standards or other standards, the specifications should state that equipment, materials, and workmanship that meet other authoritative standards, and which ensure at least a substantially equal quality than the standards mentioned, will also be acceptable.

The following clause may be inserted in the Special Conditions of Contract or the Technical Specifications:

Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest edition or revision of the relevant standards and codes shall apply, unless otherwise expressly stated in this Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name shall not be allowed except for reasons of technical compatibility, interoperability, servicing, maintenance, or preservation of supplier warranty in order to keep the performance, functionality, and useful life of the equipment, in which case, the Procuring Entity shall indicate the reasons or justifications for availing of the exception as part of the Technical Specifications, Scope of Work, or Terms of Reference, as the case may be.

Where appropriate, drawings, including site plans as required, may be furnished by the Procuring Entity with the Bidding Documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Bid or for prior review by the Procuring Entity during contract execution.

Bidders are also required, as part of the Technical Specifications, to complete their statement of compliance demonstrating how the items comply with the specification.

Technical Specifications

Item	Specification	Statement of Compliance
		[Add 2 columns if the award criterion to be used is MEARB, or MARB (one for parameters and one for rating)] **Bidders must state "Comply" or "Not Comply" for each specification and provide the corresponding performance parameters for offered equipment.** Each response must be supported by a clear documentary support in the bid and properly cross-referenced. Acceptable evidence includes unaltered manufacturer sales brochures, official specification sheets, product samples, independent test results, and similar documents. Claims should be backed by documentary support. If the evidence contradicts the claim, the bid may be rejected. Any false statement—whether in the compliance form or supporting documents—found during evaluation, post-qualification, or contract implementation may be considered fraudulent in accordance with ITB Clause 3.1(a)(ii) and without prejudice to the imposition of appropriate administrative, civil, and criminal penalty in accordance with law.
LOT 1	**CUSTOMIZED, MADE-TO-ORDER HIGH CAPACITY TWO (2) SETS OF 10KVA ENTERPRISE RACKMOUNT UPS** • **Complete two (2) sets of 10KVA Rackmount UPS Controller** and 30minutes extended-runtime daisy-chained battery banks • **Power Rating:** 10 kVA / 10 kW (Unity Power Factor, PF = 1.0) • **Topology:** Online Double Conversion (VFI) • **Form Factor:** 2U Rack-mountable with all necessary heavy-duty rail	

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CERTIFICATION INTERNATIONAL SOCOTEC ISO 9001

	kits for the controllers and all battery cabinets • **Input Voltage/Frequency:** 100–280 VAC (full load 175–280 VAC); 40–70 Hz. • **Output Voltage / Frequency:** 200 / 208 / 220 / 230 / 240 VAC (selectable); 50/60 Hz ± 0.05 Hz, Pure Sine Wave • **Efficiency:** Up to 95.5% (Online mode) • **Battery Architecture:** Extended Runtime • **Model:** External Battery Cabinets only • **The UPS controller must NOT contain internal batteries** to ensure optimal thermal management and weight reduction • **Target Runtime:** Minimum of Thirty (30) minutes of backup time per 10kVA set at an estimated 80% datacenter load. • **Supplier must provide the exact quantity** of daisy-chained external battery packs required to meet this runtime • **Battery Charger:** Heavy-duty built-in charger supporting up to 8A to ensure rapid recovery and recharging of the massive external battery banks • **Communication/Management:** Must include an SNMP / Network Management Card for each controller for remote monitoring and network-based shutdown triggers • **Electrical Tapping & Cabling:** Supplier must provide all necessary industrial-grade cables, wires, circuit breakers, and conduits. Includes professional direct electrical tapping from the facility's main stable electrical source to the UPS units • **HCI Integration:** Complete configuration and seamless integration of the UPS network management cards with the existing Hyperconverged Infrastructure (HCI) environment to facilitate automated, graceful shutdown	

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	sequences during extended power outages • **Knowledge Transfer:** Provision of a minimum four (4) hours of hands-on technical training and knowledge transfer for datacenter personnel, covering UPS operation, emergency bypass, battery testing, and alert management • **Warranty:** Minimum of one (1) year comprehensive warranty covering the UPS controllers, all battery packs, and free on-site service support. **Pricing:** All hardware, software licenses, labor, installation, and delivery costs must be VAT Inclusive.	
LOT 2	**MADE-TO-ORDER HIGH-PERFORMANCE ON-PREMISE AI NEURAL NETS COMPUTER SERVER (STUDIO M5 ULTRA)** • **System Model:** Studio (Enterprise AI Compute Server Configuration - Made to Order) • **Processor Architecture:** M5 Ultra SoC, up to 36-Core CPU for heavy multi-threaded workloads, up to 80-Core GPU for parallel tensor compute and local model inference, 32-Core Neural Engine for high-throughput on-device machine learning acceleration • **Memory Architecture:** 256GB • **Unified Memory:** 1.2TB/s Memory Bandwidth for ultra-low latency inference, large-scale LLM parameter loading, and high-speed vector embeddings • **Internal Storage:** 8TB High-Speed Solid-State Drive (SSD), **Networking & I/O:** Built-in 10Gb Ethernet (Nbase-T supporting 1Gb, 2.5Gb, 5Gb, and 10Gb via RJ-45), Multiple high-speed Thunderbolt / USB-C ports and integrated HDMI	
*** ***Nothing Follows*****		

Additional Requirements:

The technical specification that shall be submitted by the Bidder shall include, among others:

a. *Product specifications as supported by manufacturer's brochures or catalogues for Lot 1 & Lot 2;*
b. *Certification from the manufacturer or main distributor that the Bidder is an authorized dealer, reseller, or partner for Lot 1 & Lot 2;*
c. *Certification of an existing, functional Service Center within the Philippines capable of providing local technical support for Lot 1 & Lot 2;*
d. *Bidder's certification that it provides local after-sales support for Lot 1 & Lot 2; and*
e. *Bidder's certification for a minimum of one (1) year warranty on parts and labor for Lot 1 & Lot 2.*

I hereby verify to comply with all the above requirements.

_____
Signature over printed name of the authorized representative

_____
Company name

_____
Date