## **Terms of Reference**

# Procurement and Installation of Two (2) Units Floor Mounted Inverter Type ACCU

## ABC = PhP 700,000.00

II. C	Background  Due to the insufficient cooling capacity of the existing 1.0 HP portable OAMSS will procure supply of labor, materials, consumables and additional A/C units for UBRAA Office located at 12th Floor DFA Main Objectives	technical skills for the		
Т	Objectives			
u	Objectives  To procure supply of labor, materials, consumables and technical skills for the additional A/C units for UBRAA Office located at 12th Floor Main Building.			
		STATEMENT OF COMPLIANCE		
	<ol> <li>Scope of Works</li> <li>Supply and deliver of the following minimum requirement of package inverter type A/C unit:         <ol> <li>Two (2) units, 3 TR Cooling Capacity, Fan Coil Unit (FCU), Floor mounted type, 220V/1P/60HZ with nominal air flow rate - Low: 24 m3/min, Medium: 28 m3/min, and High: 32 m3/min. Using an environment-friendly refrigerant, R-410A with remote wire controller.</li> <li>Two (2) units, 3 TR Cooling Capacity, Air Cooled Condensing Unit (ACCU), Scroll type Compressor, Inverter type, utilizing R-410A Refrigerant, 220V/1P/60HZ</li> <li>Sizing of wires, conduits, disconnect switches, and main circuit breakers depends on the actual rating of the Air Conditioning Units and are computed based on the PEC Standards.</li> <li>Complete electrical and plumbing (AC drain) works</li> </ol> </li> </ol>			

AHU RM to 12th Floor UBRAA OFFICE or nearest possible power supply subject for approval of OAMSS-EMD)

i. Supply and installation of new wires & cables (including connectors, tapes, etc)

Use: THHN Copper Wire. Diameter of wire in accordance with the AC unit requirements.

ii. Supply and installation of new Grounding wire

Use: THHN Copper Wire. Diameter of wire in accordance with the AC unit requirements.

iii. Supply and installation of new Conduit Works (Including all necessary fittings, supports, painting works, fire retardant sealants, and other accessories, in place)

Use: Intermediate Metal Conduit (IMC)

- iv. Complete supply and installation required plumbing works for the unit's AC drain and minor waterproofing works. Use PVC pipes and fittings and waterproofing using wet and dry sealants.
- e. Supply and installation of new Main Circuit Breakers and Disconnecting Switches (Including all necessary fittings, supports, painting works, fire retardant sealants, and other accessories, in place)
  - All Main Circuit breakers are in NEMA 3R enclosure and the Disconnect Switches are weatherproof for outdoor units.
- 2. Miscellaneous Materials (Hard drawn copper tubing, Type "L" and fittings, PVC pipe and fittings, one inch (1") thick closed cell insulation, aeroflex or equivalent, polyethylene tape, electrical tapes and other materials and accessories as required to complete the system.)
- 3. Mobilization of Equipment.
- 4. Install Indoor/outdoor unit at the location indicated on the approved plans. Exact location as approved, may vary during actual installation [+ or (one) 1 meter] of equipment if necessity warrants. Provide vibration isolators. Fabricates/provides a well-designed based/stand or brackets to ensure safe and reliable system operation.

	The Contractor shall:
IV.	Contractor's Obligations
	20. Demobilization.
	19. Turnover and final acceptance.
	contractor's poor workmanship or negligence must be borne by the contractor.
	18. Restoration cost on damage equipment or any property due to
	17. Clean the area and properly dispose/haul the waste materials and debris.
	16. Conduct final testing and commissioning.
	15. Operate system and take operating data to serve as a guide for needed re-calibration and/or corrective service/s.
	14. Recharge system to full charge condition with R410
	13. Perform flushing on each of the split package type A/C System installed at the subject area.
	12. Break vacuum and charge initial R410A Refrigerant.
	11. Vacuum individually the system.
	10. Insulate the refrigerant suction lines and condensate drain lines by 1-inch-thick closed cell insulation.
	9. Conduct leak testing.
	8. Conduct electrical installation using appropriate electrical breakers, wires, conduits and other electrical materials to ensure safe and reliable system operations.
	7. Install Condensate Drain Pipe (PVC pipe, 1-inch-thick closed cell insulation, polyethylene tape) and its hanger and support system. Tap to the nearest approved drain line.
	6. Perform pipe laying (Hard drawn copper tubes type "L") and system interconnectivities / welding works.
	5. Install outdoor units at roof deck along with the existing installed outdoor units. Exact location may vary during actual installation [+ or - (one) 1 meter] of equipment if necessity warrants. Fabricate angular metal (50mmx50mmx5mm) base/stand and metal support brackets.

1.	Abide by all existing laws, codes, rules and regulations set forth by all government units and authorities;
2.	Perform all works to the full intent of the plans and specification. The principal features of the work do not in any way limit the responsibilities of the Contractor to the general description of the scope of works.
3.	All equipment and components should be branded (not cloned or assembled) and brand new.
4.	Deliver to the Department the enumerated supply of labor, approved materials, consumable and technical skills as stated in the Scope of Works.
5.	Guarantee that it has the capacity to deliver the services required by the DFA.
6.	Replace any defective items free of charge within one (1) year upon acceptance of end users.
7.	Ensure that all units and items are brand new and not refurbished.
8.	Include in the bid proposal/ quotation delivery charges and other necessary cost to complete the project
9.	All work activities for the installation of ACUs shall conform to the National Building Code, Philippine electrical Code, and other applicable installation standards.
10	O. The supplier shall provide manpower whose sole job is to maintain cleanliness such that scraps/parts and other materials no longer needed in the work area should be immediately removed from the workplace; the supplier shall also provide the necessary uniform, identification tags and safety gears to its personnel while working.
11	. Ensure to follow, with strict compliance, to the security and safety protocols by DFA.
12	2. Availability of parts in the local market by local distributor, with certification and/or undertaking for the availability of spare parts within the next ten (10) years.
13	B. Be solely responsible for the protection, security and safety of their personnel, third parties, equipment, installation, the public, and others.

	14. Supply materials, and services not expressly indicated in the technical specification, drawing or in other contract documents which may be necessary for the complete and proper design, installation and commissioning of works shall be provided by the Contractor to ensure a functional and efficient system without extra cost to the Department.	
V.	Site Inspection	
	The Work shall be based on the existing data and physical condition at the worksite. The contractor acknowledges and warrants to have inspected and examined the sites and their surroundings and satisfied himself by submissions of his Tender as to the nature of the work and materials necessary for the completion of the project, the means of access to the site, the accommodation that may be required and all necessary risks, contingencies and other circumstances which may influence or affect the tender. No increase in cost or extension of time will be considered for failure to inspect and examine the worksite and site condition.	
V.	Delivery:	
	All items shall be delivered within ten (10) calendar days upon receipt of the Notice to Proceed (NTP).	
	2. All deliveries shall be made with one (1) day prior notice to the Office of Asset Management and Support Services – Engineering (OAMSS-EMD) from Monday – Friday, 8:00 am to 5:00 pm.	
	3. Deliveries shall be subject to the usual inspection procedures by the Office of Financial Management Service-Financial Resources Management Division (OFMS-FRMD)	
VI.	COVID19 Prevention and safety during operation:	
	The Contractor shall:	
	Ensure that assigned personnel are COVID free before entering the premises;	
	2. Provide and ensure that assigned personnel observe IATF prescribed safety protocols(ie. face mask, face shields, and observe social distancing) within the DFA premises and comply with DFA security requirements; and	

	3. Provide its personnel isopropyl alcohol and hand soap for personal hygiene.	
VII.	Warranty  The Contractor shall provide warranty for the project/equipment after acceptance of the project, twelve (12) months for minor and electronic parts, and twenty-four (24) months for major parts (motors and mechanical parts) of the equipment.	
VIII.	The Contractor shall ensure that all personnel who shall be assigned to the Department shall execute and sign a Non-Disclosure Agreement, which is to be submitted to the Department prior to the commencement of the service.	
IX.	1. Payments shall be made thirty (30) days upon receipt of the sales invoice with complete supporting documents through List of Due and Demandable Accounts Payable (LDDAP). The list of documentary requirements needed for payment will be provided by the Office of Financial Management Services-Financial Resource Management Division (OFMS-FRMD) upon signing the contract.  2. The payment shall be inclusive of all applicable taxes and other lawful charges.	

#### Note:

Bidders must state compliance to each of the provisions in the Terms of Reference/Technical Specifications, as well as to the Schedule of Requirements. The Statement of Compliance must be signed by the authorized representative of the Bidder, with proof of authority to sign and submit the bid for and on behalf of the Bidder concerned. If the Bidder is a joint venture, the representative must have authority to sign for and on behalf of the partners to the joint venture. All documentary requirements should be submitted on or before the deadline for the submission of bids.

### Conformé:

[Signature/s]

[Name of the Bidder/ Bidder's Authorized Representative/s]

[Position] [Date]