Amendment no. VII Dated 13.09.2018 HSCC/PUR/CNCI/Kolkata/Medical Equipment/02/A dt. 13.07.2018

Procurement of Medical Equipment CNCI 2nd Campus

All bidders are requested to note the following:

Item no. 03- PET – CT (Positron Emission Tomography CT Scan)

Tender Specifications	May Please read as
Broad outlines of the turnkey work are as following:	PET CT will placed on first floor hence
A. Civil & Plumbing Work	water proofing of the whole roofing of
Water proofing of the whole roof by Brick Bat COBA. Water proofing treatment of the mother slab should also be done with tapecreate (CICO)	the whole roof by Brick Bat COBA is not
chemical and 12 mm thick cement plaster protecting layer.	applicable
C. Air Conditioning	Air Conditioning Specifications may
The scope comprises the Supply, Installation, Testing and Commissioning of Energy Efficient VRV System of Blue Star / Hitachi / Trane / Carrier make.	please read as: VRV/Ductable Split/Split AC to be
1) Air cooled Variable Refrigerant flow Units having 100% inverter type IVRFB outdoor unit having capacity 84 H.P (28 HP x 3 nos.) and multiple	Installed in designated area to maintain
indoor units.	temperature as per PET-CT requirement.
2) The temperature range in the PET scanner rooms should be between 22 ± 2 degree Celsius. The variation in temperature should not exceed one degree Celsius per hour.	Proper Air conditioning system with suitable capacity of TR should be provided for the designated area(Blue
3) The indoor units on any circuit can be of different type and also controlled individually. Compressor installed in each modular outdoor unit shall be equipped with Scroll / Rotary (100 % invertor).	Star / Hitachi / Trane / Carrier) Proper ventilation in electrical, UPS rooms, Toilets
4) Outdoor unit shall be suitable for mix match connection of all type of indoor units.	Warranty: 5 years and CMC of 5 years after the expiry of warranty period, as a
5) The refrigerant circuit shall include liquid & gas shut-off valves and a solenoid valves and an accumulator is the system demands. The refrigerant should be R410a Only.	part of the main PET/CT equipment.
Variety of Indoor Units should be as under: -	
6) Indoor units shall be either ceiling mounted cassette type, ceiling mounted Ductable type, wall mounted type, Package type etc. which shall be decided at the time of execution each unit shall have electronic control valve to control refrigerant flow rate in response to load variations of the rooms	
7) The ceiling mounted type units shall include pre-filter, fan section and DX-coil section. The housing of the unit shall be powder coated galvanized steel.	
8) Ceiling Mounted Ductable Type units shall be suitable for ceiling mounted type. The unit shall include pre filter, fan section & DX coil section.	
9) Ceiling Suspended type unit shall be suitable for ceiling suspended arrangement below false ceiling. The unit includes pre filter, fan section & DX coil section.	
10) A multifunctional compact centralized controller shall be provided with the system. It shall be able to control the Starting/stopping of Airconditioners as a zone or group or individual unit. Temperature setting for each indoor unit or zone.	
11) All refrigerant piping for the air conditioning system shall be constructed from soft seamless up to 19.1mm and hard drawn copper	

refrigerant pipes for above 19.1mm with copper fittings and silver-soldered joints. All joints in copper piping shall be sweat joints using low temperature brazing and or silver solder. The suction line pipe size and the liquid line pipe size shall be selected according to the manufacturers specified outside diameter. All refrigerant pipes shall be properly supported with cable trays of suitable size and anchored to the building structure using steel hangers, anchors, brackets and supports.

Pipe Insulation on liquid and suction refrigerant lines including all fittings, valves and strainer bodies, etc. shall be insulated with 13 mm thick Elastomeric Nitrile rubber Class 'O'.

Package AC Units:

- 12) Supply, Installation, Testing & commissioning of packaged Air conditioning units having Capacity- 8.75 TR x 2 nos. (Non VRF) (Air cooled) with Scroll compressors, statically dynamically balanced centrifugal blower having nominal air flow with eco friendly R407C/410a Refrigerant and Inbuilt safety devices for compressor protection like thermal protector, Internal pressure, cutout enclosure etc shall be equipped with synthetic filters of following capacity complete with ducting work, Grill works, Insulation work and providing & fixing Electrical Panel along with cables etc. complete in all respect (make Blue Star / Hitachi / Trane / Carrier).
- 13) An electrical cable, if required from / to the air-conditioning panel will be supplied and fixed by the vendor
- 14) The outlet drainage pipes from the air-conditioning units should be connected to the drainage ducts outside the building. If required, floor traps/manholes should be provided to collect the condensed water and connected with the drainage system of the Institute.
- 15) Proper Ventilation in electrical, UPS rooms, Toilets
- 16) Five digital temperature and humidity control reader to be provided
- 17) Warranty: 5 Years and CMC of 5 Years after the expiry of warrant period, as a part of the main PET/CT equipment

All other terms and conditions of the tender enquiry document shall remain unchanged. Prospective bidders are advised to regularly visit HSCC website/ CPP as corrigendum /amendments etc. if any, will be notified on this portal only, no separate advertisement will published in the news papers.

Sr. CGM-I, HSCC (I) Ltd For & on behalf of Director CNCI, Kolkata