Tender No - 001/CRRAO/NSM/25-26/05-01

1. **As per Tender** - Tender section and Clause no - SECTION V - PRICE SCHEDULE Summary Format- Supply, Installation, Testing and Commissioning along with Loading, Unloading, Transport, Transit Insurance etc.

Corrigendum – Above clause and table is modified as below. - Tender section and Clause no - SECTION V - PRICE SCHEDULE Summary Format- Supply, Installation, Testing and Commissioning along with Loading, Unloading, Transport, Transit Insurance etc.

Sr. No	Particulars	Unit	Qu ant ity	Supply Price Rs.	GS T Rs.	Inst allat ion Pric e Rs	GS T Rs.	Total Price Rs.
	Bidders to calculate the quantity as per Drawing Layout, SLD and Site visit							
1	Civil and allied works – Raised floor, False ceiling, fire door, gypsum partition, fire rated vision window, equipment foundation work, soil excavation work and refilling for laying of cable, MS work etc. Cabin Civil Work including glass partition, glass door, furniture etc.	Lot	1					
2	UPS 2 X 150 KVA along with Li ION battery bank for 10 minutes back up time, with Battery Rack, Isolator, DC cabling etc.	Set	1					
3	UPS 1 X 75 KVA along with SMF battery bank for 10 minutes back up time, with Battery Stand, Isolator, DC cabling etc.	Set	1					
4	LV Electrical Components, All LT Panels, DBs, IEC sockets, Isolator Panels, In Row Panels etc.	Lot	1					
5	All LT Cabling –Power and Control, Earthing, Cable Trays, SS Cable Tray, perforated mesh cable trays Supports, Cable terminations, Glands and other accessories etc. Modification work in existing substation room.	Lot	1					

6	Internal and External Illumination System along with DBs	Lot	1			
7	In Row Unit along with Air cooled Condenser, Cu piping and other accessories including containment, dummy rack, doors etc. Cu piping needs to be laid thro perforated cable trays.	Lot	1			
8	AC unit 3 T and 3 Nos in UPS and battery room along with Air cooled Condenser, Cu piping and other accessories etc. Cu piping needs to be laid thro perforated cable trays. Cabin AC work including 1 X 1.5 TR split AC unit.	Lot	1			
9	Adiabatic Dry Cooler along with Pump, Grooved Fitting, Piping, Chemical Dozing unit, Expansion tank, air separator, water tank for adiabatic water storage etc.	Lot	1			
10	Fire Alarm system including Detectors, panels, cabling and associated accessories in Server Rack and UPS and Battery room	Lot	1			
11	Fire Suppression system including Gas release panel, cylinder, Manifold, piping and associated accessories inside server racks, UPS and Battery area.	Lot	1			
12	NOVEC Gas with NOVEC cylinder for Server rack	Lot	1			
13	NOVEC Gas with NOVEC cylinder for UPS and battery room.	Lot	1			
14	CCTV system including camera, switch, NVR, Cables, monitors etc.	Lot	1			
15	IBMS software including system (Computer, Monitor) integration of third-party devices, I/O modules, all control and communication cabling etc.	Lot	1			
16	Other IBMS including Water leak detectors, Rodent Repellent, Water quality sensor system	Lot	1			

17	1X 250 KVA DG set along with AMF panel						
18	Any other item, material required to complete the solution	Lot	1				
19	Operation and Maintenance –Year-1	Set	1				
20	Operation and Maintenance –Year-2	Set	1				
21	Racks 45 U 3 no's . along with 2 nos of PDU in each rack.	Set	1				
	Grand Total Rs.				i		
	Grant Total Amount in INR including GST					 	

Detailed Commercial Bid is to be submitted in the format as appearing above.

Notes:

- Prices for individual line items of the BoQ should be mandatorily submitted. CR RAO AIMSCS reserves the right to reject the bid in case bidder fails to quote all the required items.
- 2. Bidder must fill the supply and installation prices separately as per the above table.
- 3. The prices quoted should include the charges towards testing of equipment's, installations and approvals from local electricity board/PWD, electrical/ civil engineering authority, pollution control board, central electricity authority as applicable. The official charges required for the required testing, certification, NOC etc. are to be paid by the bidder. The certifications, NOC etc. shall be in the name of C.R. Rao Advanced Institute of Mathematics, Statistics and Computer Science (AIMSCS).
- 4. The invoice can be raised in compliance with GST requirements, giving full bill of material.

2. Corrigendum new Clause 8.23

Water Quality parameters required are as below

- a. Primary Side water quality required should be as per ASHRAE Guidelines for Equipment in Data Centre, section 5.1.2.4 along with below parameters
 - pH: 7-9
 - Corrosion Inhibitor: Included
 - Sulfides: < 10 ppm
 - Sulfate:<100 ppm
 - Chloride:<50 ppm
 - Bacteria: < 1000 CFUs/mL
 - Total hardness (CaCO3):<200 ppm
 - Residue after evaporation:<500 ppm
 - Turbidity:<200 NTU (Nephelometric)
- b. Bidder to consider Pressure drop at primary circuit is around 22 -25 psi for pump selection.