

Tender No:TPSODL/OT/2021-22/008				
Package Name:Rate Contract for civil, Electrical and other Non-IT Infra for Data Center readiness at Berhampur, TPSODL				
Reply to Technical and Commercial Pre-Bid Queries				
Sr. No.	Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPSODL Response
1	2	3	4	5
1	Page no. 21 Clause no. 2.3	Building Management System (BMS): VESDA system Make: Aisence / Xtralis	Please incorporate additional makes of VESDA Kindly amend the clause " Make: Aisence / Xtralis/ Securiton/Siemens" -- Proposing additional reputed makes	No changes
2	Page no. 21 Clause no. 2.3	Building Management System (BMS): CCTV SURVEILLANCE SYSTEM Make: Alconlink / Honeywell/ Equivalent	Please incorporate additional makes of CCTV Kindly amend the clause " Make: Alconlink / Honeywell/ Hanwha/Hikvision/ Equivalent"--- Proposing additional reputed makes	No changes
3	Page no. 21 Clause no. 2.3	Building Management System (BMS): ACCESS CONTROL SYSTEM Make: Honeywell / HID / Equivalent	Please incorporate additional makes of ACCESS CONTROL SYSTEM Kindly amend the clause " Make: Honeywell / HID/ Siemens/Morpho/Equivalent"-- Proposing additional reputed makes	No changes
4	Page no. 21 Clause no. 2.3	Building Management System (BMS): Electromagnetic Lock (Double Leaf & Single leaf), Magnetic contact Make:BELL	Please incorporate additional makes of Electromagnetic Lock (Double Leaf & Single leaf), Magnetic contact Kindly amend the clause " Make: BELL/EBELCO/ALGATEC" -- Proposing additional reputed makes	No changes
5	Page no. 22 Clause no. 2.3	Building Management System (BMS): ANALOGUE ADDRESSABLE FIRE ALARM SYSTEM (Fire Panel/Smoke Detector/MCP/Hooter cum strobe/CM/MM/FIM/RI) Make: Honeywell / GST	Please incorporate additional makes of ANALOGUE ADDRESSABLE FIRE ALARM SYSTEM Kindly amend the clause " Make: Honeywell / GST/ SIEMENS" -- Proposing additional reputed makes	No changes
6	Page no. 22 Clause no. 2.3	Building Management System (BMS): NOVAC-FIRE SUPPRESSION SYSTEM Make: Kidde	Please incorporate additional makes of NOVAC-FIRE SUPPRESSION SYSTEM Kindly amend the clause " Make: Kidde/ Siemens/3M" --Proposing additional reputed makes	No changes
7	Page no. 22 Clause no. 2.3	Building Management System (BMS): WATER LEAK DETECTION SYSTEM (WLDS) Make: System Sensor	Please incorporate additional makes of WATER LEAK DETECTION SYSTEM (WLDS)Kindly amend the clause " Make: System Sensor/C-system"--- Proposing additional reputed makes	No changes
8	Page no. 22 Clause no. 2.3	Building Management System (BMS): RODENT REPELLENT SYSTEM Make: Maser	Please incorporate additional makes of RODENT REPELLENT SYSTEM Kindly amend the clause " Make: Maser/C-system"--- Proposing additional reputed makes	No changes
9	Page no. 23 Clause no. 2.3	Building Management System (BMS): BUILDING MANAGEMENT SYSTEM WEB-BASED SERVER SOFTWARE Make: Delta-Loytec / Honeywell / Equivalent	Please incorporate additional makes of BMS Software Kindly amend the clause " Make: Delta-Loytec / Honeywell /Siemens/ Equivalent " ---Proposing additional reputed makes	No changes
10	Page no. 23 Clause no. 2.3	Building Management System (BMS): BUILDING MANAGEMENT SYSTEM WEB-BASED SERVER SOFTWARE Make: Delta-Loytec / Honeywell / Equivalent	Please incorporate additional makes of BMS Software Kindly amend the clause " Make: Delta-Loytec / Honeywell /Siemens/ Equivalent " ---- Proposing additional reputed makes	No changes
11	Page no. 23 Clause no. 2.3	Building Management System (BMS): BMS System Software : Supply, installation, testing and commissioning of the simultaneous minimum 5 user Web Based Graphical Software meeting the requirements in the Given I/O Summary	As per requiremen server with 1 client license will be sufficient for this requirement BMS application . Also client may be web client / physical client ---- Proposing BMS license based on requirement	No changes
12	Page no. 23 Clause no. 2.3	Building Management System (BMS): During operation & maintenance if any controller is required to be replaced than software shall have feature to download logics in new controller as of old one, from control once the old controllers IP is mapped in new one.	Logic building process is different for different OEMs. Logic can be built from separate tool. Hence kindly accept logic building through separate commissioning tool.---Proposing additional feature of BMS software as this is OEM specific	No changes
13	Page no. 24 Clause no. 2.3	Building Management System (BMS): iii. CCTV Integration	Tender is not clear about CCTV intergation with BMS. We suggest CCTV integration with BMS through hard points from NVR in case of any alarm as separate CCTV system proposed here.Please clarify -- Clarification	No changes

Sr. No.	Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPSODL Response
14	Page no. 24 Clause no. 2.3	Building Management System (BMS): PROGRAMMABLE & APPLICATION SPECIFIC CONTROLLER (DDC) - UL & BTL certified SITC of Bacnet IP Direct Digital Controllers, The networkable controllers shall be ,UL & BTL certified with 32 bit microprocessor, real time clock & programmable memory. The Controller shall have built-in two Ethernet ports to form RSTP loop to have savings on Cables and address communication failure issue. The networkable DDC's shall be capable of peer to peer communication.	For any communication failure in DDC , alarm will be generated in BMS , also DDC have memory to store data. No requirement of two ethernet ports for communication failure issue. Also additional cable required for ---- Clarification	No changes
15	Page no. 24 Clause no. 2.3	Building Management System (BMS): Each DDC & IO Module shall have built in Display to monitor & control Connected points from Controller itself.	Monitoring and controlling of DDC can be done through portable operator terminal . Also in this there is no IO points to control, only monitoring points. Kindly remove this specification. -- Clarification	No changes
16	Page no. 24 Clause no. 2.3	Building Management System (BMS): The Controller shall have built in memory, minimum 3 GB, to save, Alarms, Trends, Schedules & graphics for the connected points	3GB memory is OEM specific. We have BMS software to storing and monitoring of alarms , trends & graphics. Kindly remove this specification.--- Clarification	No changes
17	Page no. 25 Clause no. 2.3	Building Management System (BMS): Temperature and humidity Sensor/ Controller for Temperature and humidity Sensor/Controller for Access control Readers & Locks Make: Delta-Loytec / Honeywell / Equivalent	Please incorporate additional makes Kindly amend the clause " Make: Delta-Loytec / Honeywell /Siemens/ Equivalent"----Proposing additional make	No changes
18	Page no. 25 Clause no. 2.3	Building Management System (BMS): Controller for Access control Readers & Locks	Tender is not clear about Access control intergation. Access control is a separate system from where status of door/ user report/ access permission etc. can be done. Please clarify--- Clarification	No changes
19	Page no. 29 ANNEXURE-II	Technical Specifications and ComplianceThe proposed OEMs should have presence in IDC/Gartner.	Please clarify which products required presence in IDC/Gartner .---Clarification	No changes
20	Page no. 48 Clause no. 1.6	Technical Specifications – Fire, Safety, Security, Surveillance and BMS A detail table of items must be submitted with quantity and type of items.	This is a BOQ based tender , BOQ already provided . Kindly clarify if design qty deviate from BOQ qty what need to be done.---Clarification	No changes
21	Page no. 50 Clause no. 1.6	1.6.5 Access Control System . Physical access controlled also have to be configured which ever required. The scope will include all the access control system mechanisms including authentication, prioritization and monitoring.	Please clarify what type physical access control required and BOQ dees not call for any physical access control. Please clarify----clarification	No changes
22	Page no. 50 Clause no. 1.6	1.6.5 Access Control System The bidder has to supply and configure at least 100 number of proximity	Proximity is very old technology which may lead security issue. Kindly suggest smart card 13.56 Mhz.----- clarification	No changes
23	Page no. 50 Clause no. 1.6.8	Technical Specifications and Compliance The complete system shall be including an electronic system control panel, multiple control modules, distance type sensing cable and all required auxiliary accessories.	Distance type sensing and digital type WLD two different technology. Kindly clarify which one is required.-----clarification	No changes
24	Page no. 52 ANNEXURE-II	Data Center Integrated Building Management System: Confirm what redundancy options the controllers can provide (e.g. dual network connections etc.).	Network redundancy can be achieved by laying two set network cable. Also data can be stored in local DDC in case of communication failure. Hardware redundancy not required for this type of application. Kindly clarify.----clarification	No changes
25	Page no. 52 ANNEXURE-II	Data Center Integrated Building Management System: The controllers shall be provided with their own internal battery backup power supply, capable of maintaining all memory including the real time clock for not less than 72 hours	UPS power will be available near equipment. 72 hours backup not required .Kindly clarify.---clarification	No changes
26	Page no. 53 ANNEXURE-II	ii. TECHNICAL SPECS OF GRAPHICS SOFTWARE: minimum 5 simultaneous users/client on LAN and 20 User/Client licenses for remote operation.	For this application this is very high specification. One server with 1 client is sufficient.Kindly clarify.----clarification	No changes

Sr. No.	Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPSODL Response
27	Page no. 54 ANNEXURE-II	Energy Management & Reporting Software should have built-in feature for energy management to create reports based on trend logs for energy & other data points. Reports can be generated in PDF, Excel, or Word format. They can be automatically distributed via e-mail. The generation of a report can be triggered in one of the following ways:	For this application this is very high specification. Application w.r.t energy management is very limited. Kindly clarify what is expected out BMS software. ---clarification	No changes
28	Page no. 54 ANNEXURE-II	DDC Integrator: The Modular DDC controller should have features of a keypad/jog dial and a built-in graphical display (with minimum 120x60) with backlight. This allows for both local configuration and monitoring of the correct function and also local override. Remote access is provided via VNC	For this application this is very high specification. Already BMS software is available for graphics viewing/controlling/monitoring purpose. DDC can be installed in BMS room itself. Also a portable operator terminal can be used for monitoring / controlling from DDC. Kindly clarify. ---clarification	No changes
29	Page no. 53 - 58 ANNEXURE-II	DDC Integrator: All specification of DDC controller	DDC specification very exaggerative in nature. DDC features already explained in page 51 & 52. For this application this is very high specification. Please remove specification mentioned in page 53-58. ---clarification	No changes
30	Page no. 71 ANNEXURE-II	Access Control System The scope of work involves supply, installation, testing and commissioning of Access Control system for Server Room with requisite GUI software, PC and database for monitoring the entry/exit by authorized persons.	PC is not part of BOQ. Kindly clarify whether it needs to quote separately or not. ---clarification	No changes
31	Page no. 71 ANNEXURE-II	Closed Circuit Television (CCTV) System The NVRs shall be connected to the PC provided with user friendly GUI for remote monitoring. The NVR shall be capable for multiple camera displays for live viewing or play back while recording, continuous motion detection, alarm, pre alarm handling and schedule recording modes.	PC is not part of BOQ. Kindly clarify whether it needs to quote separately or not. ---clarification	No changes
32	Page no. 71 ANNEXURE-II	Closed Circuit Television (CCTV) System Twisted pair telemetry shall be employed to control pan/tilt/zoom functions. Viewing/Monitoring would be done from the Systems Department.	PTZ camera is not part of BOQ. Kindly clarify whether it needs to quote separately or not. ---clarification	No changes
33	Page no. 72 ANNEXURE-II	Water Leak Detection System The system shall also be designed to trip the AC when the sensor is activated.	Tripping of PAC/AC is not recommended through WLD for water leakage. Kindly clarify. It can be done from FDA panel also. ---clarification	No changes
34	Page no. 72 - 77 ANNEXURE-II	BMS Specification of BMS /DDC	Entire Specification BMS/DDC is OEM specific. However function requirement can be achieved by any OEM w.r.t requirement specified in tender. BMS is going to be used for Fire, Temp/RH sensor, UPS, PAC, Energy meter integration only. BMS use is very limited. Please remove these specifications. ---clarification	No changes
35			Please share the CAD drawing layout of Data center	No changes
36	Page no. 26 Clause no. 2.5	Make--Approved makes	We request you to please approve "Bluebox" make for Precision AC. We are having our parent company "Swegon" from Sweden and we have Indian manufacturing factory at Koparkhairane, Navi Mumbai where we manufacture Precision AC, Chiller, heatpumps supporting the Govt Make in India initiative. We have done many critical installations across India in many datacenters in Govt and private sector. Attached is company profile for ref.	No changes
37	Page no. 26 Clause no. 2.5	Technical -- Supply of 18 TR Floor mounted, bottom discharge, air cooled DX type CRAC units for Server Room application, equipped with most advanced industry technology to operate at higher return air temperatures (scalable up to 41 Deg C in case of additional load), guaranteeing precise control of Data Centres and Server Room	The machine return air temperature cannot be scalable up to 40 Deg C as there is a chance of compressor winding getting damaged and machine will not work, so it is not recommended. The design mentioned in the tender is at 24 Deg C and more return air temperature the higher the condensing. So request you to please delete the point	No changes

Sr. No.	Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPSODL Response
38	Page no. 26 Clause no. 2.5	Technical --- The Indoor unit shall comprise of Digital Scroll Compressor, Fibreglass corrosion resistant in floor EC fans, evaporator DX cooling coil with hydrophilic coating, microprocessor controllers, TXV, Driers, G4 Filter, Suction and Discharge piping, internal power and control wiring, crankcase heaters, infrared humidifier, HP/LP cutouts, power and control contactors, water leak detectors and other electrical accessories	we request you to pl approve multiple fixed scroll compressor option also. Digital scroll is an inefficient compressor and this compressor is given by single specific manufacturer only. We request you to pl approve scroll compressor so that other bidders can also participate. Digital scroll is not used in any other air-conditioning systems due to its inefficiency and many operational issue like hunting, very high noise. All manufacturer have fixed scroll compressor in their product range, so request you to pl approve machine with fixed scroll compressor else it will be a single make specific product	No changes
39			Also pl advice on the raised floor height available in the datacenter. For machines with infloor EC fan the raised floor heat required is 720mm so that it will get fit. So we request you to pl approve fan section inside the machine also. This feature is available with all Precision AC manufacturer	No changes
40	Page no. 26 Clause no. 2.5	Technical-- The unit shall be suitable for operation of 415 Volts, 50 Hz, 3 Phase, 4 wire AC supply. Each unit should be having individual display panel, which shall display date, time actual & det values, operating conditions, signal faults, collective faults, limiting values and PAC wellness alarm / service alarm to reduce the down time and unit memory shall hold the 400 most recent events with ID number, time and date stamp for each event.	Every manufacturer will have their own controller and features. This specification is for single make of units and other manufacturer cannot comply to same. Request you to pl approve controller feature as per manufacturer for better operation and performance	No changes
41	Page no. 26 Clause no. 2.5	Technical--- The dimensions of the unit shall not be more than 844mm x 890mm x 1970mm (L x D x H)	The requirement is for 62.5kW machine and the machine dimension will be either 1750x850x1990 (mm) or 2150x890x1990(mm) based on the required machine configuration. The dimension mentioned in the tender is not possible	No changes
42	2.7. Server and Network Rack Page No. 27	42 U 600mm X 1200mm Server Rack with both 1 side perforated door, castor wheel, and Fan Tray with two nos. Fan and Hardware Mounting	It is to be noted that the server racks in both the rows to have the following accessories as a mandatory . 1) Airsealing kit this will not allow cold air to get max with hot air . 2) Bottom base plinth instead of castors , base plinth will not allow any open space at the bottom which will make way for cold air loss. 3) Cooling fans are not required for DC racks as it will unnecessarily exhaust the cold air from rack mixing with to air creating short circuit 4) Brush panels from top & bottom to be made mandatory for cable entry and also cover the open space with brushes 5) SPL Extension frame at rear side for mounting tool less PDU 6) 1U Blanking panels 20 nos per rack to cover the unused space .	No changes
43	2.7. Server and Network Rack Page No. 27	42 U 600mm X 1200mm Network Rack with both 1 side perforated door, castor wheel, and Fan Tray with two nos. Fan and Hardware Mounting	It is to be noted that the network racks racks should have a size of 42ux 800x 1200mm in both the rows. 1) Airsealing kit this will not allow cold air to get max with hot air . 2) Bottom base plinth instead of castors , base plinth will not allow any open space at the bottom which will make way for cold air loss. 3) Cooling fans are not required for DC racks as it will unnecessarily exhaust the cold air from rack mixing with to air creating short circuit 4) Brush panels from top & bottom to be made mandatory for cable entry and also cover the open space with brushes 5) SPL Extension frame at rear side for mounting tool less PDU 6) 1U Blanking panels 20 nos per rack to cover the unused space . 7) Cable baskets 300mm for routing UTP cables	No changes
44	2.7. Server and Network Rack Page No. 27	Make: VALRACK / Schneider / Rittal	Request tender committee to Include WQ INDIA make for Server & Network racks .	No changes

Sr. No.	Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPSODL Response
45	Page No. 13,point no 7.7	Payment Terms: Payments shall be made in parts - a. 60% of invoice value against only supply items of BOQ, shall be released within 30 days from the date of submission of invoice. EIC shall verify the invoice.	a. 80% of invoice value against only Supply items of BOQ, shall be released within 30 days from the date of submission of invoice. b. Remaining amount shall be released within 30 days from the date of submission of verified invoices. Invoices against remaining amount shall be submitted by BA on mutual agreement between EIC and BA.	No changes
46	Page No. 32,point no 3	Battery Design Requirement The UPS battery system shall be sized for [110] kVA at [0.9] power factor for [30] minutes.	The UPS battery system shall be sized for [120] kVA at [0.9] power factor for [30] minutes. Remarks:-UPS size is 120 KVA	Accepted
47	Page No. 84,point no 1.6.9	v. All Server Racks to be supplied are 800mm x 1200 mm with castor wheel and Network Racks to be supplied are 800mm x 1000 mm. All are having perforated door and height will be 42U.	All Server Racks to be supplied are 600mm x 1200 mm with castor wheel and Network Racks to be supplied are 600mm x 1000 mm. All are having perforated door and height will be 42U. Remarks:-As per BOQ it is mentioned 600mmX1200 mm ad 600mmX1000 mm. in page no. 28	Accepted
48	Page No. 67,point no 11	Specification of Precision Air-conditioning System (Compliance): The frame and panels shall be constructed of heavy gauge Zinc -anneal corrosion resistant sheet steel. The fan section shall be insulated with minimum 25 mm thick fire rated insulation. The cabinet shall be powder coated and have a textured finish.	Instead of "Zinc -anneal corrosion resistant sheet" please mention " CRCA powder coated " and instead of "25 mm thick" please mention 20 mm thick . Remarks:-Currently Zinc-anneal corrosion resistant sheet not available with Vertiv or Uniflair. All are CRCA power Coated and maximum 20mm thick fire rated insulation.	Accepted
49	Page No. 67,point no 16	The blower shall be centrifugal type, double inlet, double width, statically and dynamically balanced.	The blower shall be centrifugal type, single inlet, single width , statically and dynamically balanced. Remarks:-Machine Specification is with EC FAN, which don't have double inlet and double width.	Accepted
50	Page No. 13,point no 7.7	Drawing, Type Test details along with a sample of each item as specified at Annexure I	Test Details can submit during the execution of work before final commissioning and acceptance of work.	Accepted