SETTING UP OF PRESSURE SWING ADSORPTION (PSA) BASED OXYGEN GENERATING PLANTS ALONG WITH ESTABLISHMENT OF MEDICAL OXYGEN SUPPLY LINES AT PUBLIC HEALTH FACILITIES ACROSS THE STATE OF TELANGNA ON "TURNKEY" BASIS AND THEREAFTER OPERATE & MANAGE THE ESTABLISHED FACILITIES FOR THREE YEARS

CONSOLIDATED REPLIES TO BIDDERS' QUERIES

S No.	Page No.	Clause No.	Document	Description of Original Clause	Query	Reply / Corrigendum
1	1. Page 10 of 205 & 2. Page 37 of 205	2.1 (Scope of Work) 4.6.3 (Evaluation Criteria and Methodology for Placing Orders)	RFP	**4.6.3.** The Schedule/Plant-wise L1 determination will be based on the unit total cost of all components, Activities-wise. Accordingly, evaluation of Bids will be independently done for Activity / Activity B / Activity C / Activity D and determination of L1 for each of the Activities will be done and L1 will be declared for each of the Activities. The Bidder, who has been declared as the Lowest Bidder for certain Plants / Activities, shall within the tender issue of LOA (letter of acceptance) execute necessary Agreement for the supply of the allocated quantity of such Plants as specified in the Tender Document after depositing the required amount as Performance Security and on execution of the Agreement such Bidder shall supply the Plants on receipt of Purchase Orders. The format of LOA & Agreement, Purchase Order is as attached with the RFP.	1. As per the clause 4.6.3, we understand that we can quote for any one capacity of Plant (250 LPM / 500 LPM / 1000 LPM) within Activity A. Further, we understand that it is not mandatory to quote for all four Activities (A, B, C & D). Kindly confirm if our above understanding is correct.	Yes.
2	1. Page 10 of 205 & 2. Page 37 of 206	2.1 (Scope of Work) 4.6.3 (Evaluation Criteria and Methodology for Placing Orders)	RFP	**4.6.3.** The Schedule/Plant-wise L1 determination will be based on the unit total cost of all components, Activities-wise. Accordingly, evaluation of Bids will be independently done for Activity / Activity B / Activity C / Activity D and determination of L1 for each of the Activities will be done and L1 will be declared for each of the Activities. The Bidder, who has been declared as the Lowest Bidder for certain Plants / Activities, shall within the tender issue of LOA (letter of acceptance) execute necessary Agreement for the supply of the allocated quantity of such Plants as specified in the Tender Document after depositing the required amount as Performance Security and on execution of the Agreement such Bidder shall supply the Plants on receipt of Purchase Orders. The format of LOA & Agreement, Purchase Order is as attached with the RFP.	1. Are there any limitations on no.of Oxygen Plants bidding for each category? 2. The tender has been floated for 4 different Activities, Do we need to participate in all the activities or we can only participate for PSA Oxygen Generators alone. Please confirm.	1. The Bidder can Bid for a minimum of 5 Plants and in multiples of 5 thereafter. For complete details refer RFP. 2. Yes. Bidder can participate for any one or more Activities. However, whoever takes up Activity A shall have to coordinate with all others who would be doing Activity B / Activity C / Activity D for effective Project implementation / Operation.
3	Page 19 of 205	2.6 (Project Duration)	RFP	Project Duration: The Scheduled Project Completion Period for execution of Works is 3 (three) months. The commencement of Works shall be considered from the date of signing of the Agreement and deemed to be the Project Commencement Date (PCD) as detailed in the Contract Agreement. Accordingly, the detailed Project Execution Plan shall have to be proposed by the Bidder to the Authority for approval prior to commencement of Works at the Site.	Period of execution of work: Is it for supply or Installation & Commissioning too? Please clarify if this is for 45 days' Supply of plant and 90 days of Installation & Commissioning	As per RFP. The period of 3 months given is for completion of all the Works including Installation, Commissioning & Testing.

4	Page number 22 of 205	**3.2.1 (9).** Eliginility and Technical Qualifications	RFP	The Bidder should have supplied, installed, and commissioned minimum three PSA plants/Medical Grade Oxygen Generator Module of at least 250 LPM in India since April 2017. The vendor/bidder has to produce the purchase order copies with satisfactory commissioning certificate issued by the user department/hospital. In this regard, PO copies of the quantities manufactured and installed in any government institutions, semi-government institutions, autonomous institutions, private hospitals of minimum 100 beds (this has to be qualified) are acceptable.	Suggestion: 1. The Bidder should have manufactured tested and supply at least one PSA plant/ Medical grade oxygen cylinder module of at least 250 LPM in India since April 2017. The bidder has to produce the purchase order copies with certificate of testing isued by the user department. 2. And we would request the authority to remove 100 bed capacity clause from this RFP section. 3. As per the eligibility you have asked for three nos 250 lpm's you have asked for it, (or) Bigger capacities are also acceptable, as you are aware that most of the Oxygen Plants are set up during this pandemic only, we request you to kindly waive off the same or consider 1 plant as minimum eligibility, as we have received orders more than 15 plants of various capacities and they are under installation.	1. Accepted as it is a new requirement arising in the Country due to COVID. Please refer Annexure in this regard. Please note that with regards to experinece, experinece certificate issued by the Client shall be provided. 2. Yes and accordingly, please refer to Annexure in this regard.
5	Page 24 of 205	3.2.2 (1) (Technical Qualifications)	RFP	Relevant past similar experience of setting up of Medical Oxygen Generation Plants of capacity of at least 250 LPM anywhere in India: i. Upto 5 Plants for which Bid is submitted – 15; ii. 5 to 25 Plants for which Bid is submitted – 20; and iii. >25 Plants for which Bid is submitted– 25. In case of Consortium, the Lead Member should have supply of Plant experience and Lead Member/Any other Consortium Member can have execution & operations experience. Documents to be submitted: Photocopies of the certificates, any other relevant documents / certificates should be established. The details should cover Bidder experience in execution of the works. Max. Marks: 25	Please Clarify is only PO details will qualify for the technical criteria.	No, experience certificate issued by the Client shall be provided.
6	Page 24 0f 205	3.2.2 (1) (Technical Qualifications)	RFP	Relevant past similar experience of setting up of Medical Oxygen Generation Plants of capacity of at least 250 LPM anywhere in India: i. Upto 5 Plants for which Bid is submitted – 15; ii. 5 to 25 Plants for which Bid is submitted – 20; and iii. >25 Plants for which Bid is submitted– 25. In case of Consortium, the Lead Member should have supply of Plant experience and Lead Member/Any other Consortium Member can have execution & operations experience. Documents to be submitted: Photocopies of the certificates, any other relevant documents / certificates should be established. The details should cover Bidder experience in execution of the works. Max. Marks: 25	Change it To : In case of Consortium, Any one Member should have supply of Plant experience and Lead Member/ Any other Consortium Member can have execution & operations experience.	Agreed and accordingly, please refer to Annexure in this regard.
7	Page 24 0f 206	3.2.2 (1) (Technical Qualifications)	RFP	Relevant past similar experience of setting up of Medical Oxygen Generation Plants of capacity of at least 250 LPM anywhere in India: i. Upto 5 Plants for which Bid is submitted – 15; ii. 5 to 25 Plants for which Bid is submitted – 20; and iii. >25 Plants for which Bid is submitted– 25. In case of Consortium, the Lead Member should have supply of Plant experience and Lead Member/Any other Consortium Member can have execution & operations experience. Documents to be submitted: Photocopies of the certificates, any other relevant documents / certificates should be established. The details should cover Bidder experience in execution of the works. Max. Marks: 25	Can multiple products can be proposed by Consortium?	Yes, can Bid for 250/500/1000 LPM capcity Oxygen Plants.

8	Page 25 of 205	3.2.2 (3) (Technical Qualifications)	RFP	3.2.2 (3)Availability of Key Staff (personnel) members. Documents to be submitted: Self-declared form along with the CVs of each of the Key Personnel. Max. Marks: 10	Please clarify as which staff members CV to be submitted	3.2.2 (3)Availability of Key Staff (personnel) members. Documents to be submitted: Self-declared form along with the CVs of each of the Key Personnel as detailed hereunder. Max. Marks: 10 One Project Head with B Tech / BE or its equivalent qualification and with overall minimum 10 years of experience with demenstrated experience in installation of Oxygen Plants. One Site Engineer (with B Tech / BE / equivalent) for every 5 Plants with minimum 3 years experience who are going to work for the Project along with any other required staff. CVs needs to be atatched.
9	Page 25 of 205	3.2.2 (4) (Technical Qualifications)	RFP	Availability of effective servicing network and preference would be given if Service Centre is located in Hyderabad/South India, in that order. Documents to be submitted: Proof of Service Centre to be established and also to provide a brief write up on the Bidder's methodology and approach for effective service during Warranty Period. Max. Marks: 20	Please clarify as of what proof is required in support of existence of the service centre.	As per RFP. Bidder needs to give information as per Appendix XV along with any document / certificate that can demonstrate the existance of the Service Centre(s).
10	Page 46 of 205	Section 7 (4) (Country of Origin)	RFP	4. **Country of Origin:** 4.1. The Instruments and services to be supplied and provided for the Contract shall have the origin in India or in the countries with which the Government of India has trade relations. 4.2. The word "origin" incorporated in this clause means the place from where the Instruments are mined, manufactured, produced, procured, or processed or from where the services are arranged. 4.3. The country of origin may be specified in the Price Bid / Technical Bid.	1. Are valves manufactured in China allowed? 2. kindly clarify if experience of an OEM from abroad could be considered? As a particular OEM's has supplied 1000 Machines across the Europe.	1. As per RFP. Any item imported shall not be from Countries which are banned / not permitted by Government of India as per any extent guidelines, etc. 2. Please refer to Clause 3.2.1 (1), (2), (3) & (4) of RFP and any other provision relevant in the RFP in this regard.

11	Page 54 of 205 / Page 62 of 205 / Page 62 of 205	Section 7: 15.1 (Warranty) / 26.3 (Liquidated Damages) / 26.7 (Downtown Penalty)	RFP	15.1. The Warranty period is 3 (three) years and shall include all spares/parts, labour and calibration from the date of completion of satisfactory installation and issuance of Final Acceptance Test certificate by the Authority / Authority designated representative. a. The Supplier to provide maintenance service at short notice, not later than 48 hours for routine maintenance during the Warranty. Any further delays beyond permissible or as agreed by the Authority, shall invoke penalty @2.5% of Performance Security per day subjected to a maximum of 50% of the Performance Security beyond which the Authority may terminate the Contract. 26.3. Subject to GCC Clause 29, if the Supplier fails to deliver or install /commission any or all parts of the Plants or fails to perform the services within the time frame(s) incorporated in the Contract including opening of office in Hyderabad as per the undertaking given in the qualification criteria, the Authority shall, without prejudice to other rights and remedies available to the Authority under the Contract, deduct from the Performance Security, as liquidated damages, a sum equivalent to 0.5% of the Corresponding Contract Value per weeks' delay or part thereof on delayed supply of Plants, installation, commissioning and /or services until actual delivery or performance, subject to a maximum of 5% of the Corresponding Contract Value / Contract Price, as the case may be. Once the maximum is reached or delay is more than 10 weeks, the Authority may consider termination of the Contract as per GCC Clause 27. Since the Liquidated damages are in virtue of non-performance of services, it will attract GST also which in turn shall be deducted from the Supplier. 26.7. Downtime Penalty- The maximum time allowed to attend to any maintenance/ repair call by the Supplier shall be within 48 hours to reach areas. The Supplier if does not attend and resolve the maintenance/ repair call within said period, Authority will have the right to levy penalty at the rate of 2.5% of the Performance Security per day.	1. As per clause 15.1 (a) & 26.7 penalty of 2.5% per day, subject to maximum 50% of Performance Security will be applied for any delay in providing maintenance service at short notice (beyond 48 hours). While, as per clause 26.3, the LD will be applicable 0.5% per week, subject to maximum 5% for delayed supply of Plants, installation, commissioning and /or services until actual delivery or performance. In view of above, kindly confirm if both downtown penalty and liquidated damages will be applicable or only liquidated damages, as the LD clause already considers delay in providing services. Further, we wish to inform TSIIC, in case downtown penalty is applied, it should be applicable only on the performance security value of the faulty equipment and not on the entire performance security value. 2. Warranty 3 years from the date of installation, does it include the spares and consumable for all three years(or) is it the extra scope	As per RFP. Clause 26.3 pertains to implementation stage whereas Clause 15.1 & 26.7 refer to Operation stage.
12	Page 55 of 205	Section 7: 15.4 (Warranty)	RFP	During the downtime, the Supplier shall make available the medical oxygen backup in the form of oxygen cylinders to meet hospitals daily requirements failing which this requirement would be met by the respective hospital at the risk and cost of the defaulting Supplier/Vendor.	Is this within 48 hours? Is there any secondary source of cylinder bank?	As per RFP.
13	Page 56 of 205	Section 7: 15.7 (Warranty)	RFP	During Warranty period, the Supplier is required to visit Project Sites at least once in a month commencing from the date of the installation of the Plants for preventive / periodic maintenance of the Plants and any time for attending to repairs / break down calls.	This visit shall be governed by the preventive maintenance plan defined by the supplier. Kindly confirm	Yes, but as approved by the Authority.
14	Page 56 of 205	Section 7: 15.8 (Warranty	RFP	The quality of output of the PSA Oxygen Generation Plant should be tested from third party NABL approved Lab every year during the warranty period & submit a copy of same to respective Hospitals. The testing charges on each occasion shall be borne by the Supplier/Vendor.	1. Please clarify of any preference twords the NABL approved Labs in Telangana. 2. Is there any 3rd party inspection by the organizations like NABL/PSI is required!?	As per RFP.
15	Page 56 of 205	Section 7(16)- Life Span	RFP	Minimum 15 years and certificate in this regard should be from OEM. The Supplier should also certify the availability of all the parts/spares/accessories delivered with the equipment to be available for 15 years. Certification from the OEM should be produced in this respect.	This seems to be very high…. Our proposed life span is 5-7 years. Kindly confirm.	10 years Life span for the Plant is permitted and please refer to Annexure in this regard.
16	Page 57 of 205	Section 7: 20 (Sub-Contracts)	RFP	20.1 The Supplier shall notify the Authority in writing of all sub-contracts awarded under the Contract if not already specified in its tender. Such notification, in its original tender or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the Agreement. 20.2 Sub-contract shall be only for bought out items and sub-assemblies. 20.3. Sub-contracts shall also comply with the provisions of GCC Clause 4 ("Country of Origin").	We shall be able to mention the same at the time of LOA. Kindly confirm	No. Please refer to Annexure in this regard.

17	Page 58 of 205	Section 7: 24.1 (a), (b) (Terms and Mode of Payment	RFP	**Plant And Its Installation** a. On delivery of the Plant 40% payment of the Contract Price of Activity A shall be paid on receipt of goods in good condition and upon the submission of the following documents: i. Two copies of supplier's invoice % showing contract number, goods description, quantity, unit price and total amount; ii. Consignee Receipt Certificate in original issued by the authorized representative of the Consignee in the format as annexed to RFP; iii. Packing list identifying contents of each package; iv. Inspection certificate issued by the nominated Inspection agency, if any. v. Insurance Certificate vi. Certificate of origin. b. On Commissioning of the Plant: Balance 60% payment would be made against Final Commissioning Certificate to be issued by the consignees. Final acceptance certificate and Installation Certificate in the formats as annexed to this RFP will be released by the Authority / Consignee on completion of installation, commissioning and training, handing over the Plant to the Consignee Hospital and receiving the satisfactory testing report of the Oxygen output from PSA Plant. After commissioning, a joint team of Hospital staff and the Supplier will collect the sample of oxygen output and get the sample analysis report of the PSA Oxygen Generation Plant output from third party NABL approved Lab & submit a copy of same signed by Hospital authority along with the final acceptance certificate to the Authority for payment.	Commissioning will happen after 3-5 days of delivery, What is the final commissioning certificate? Suggestion (A) **Plant And Its Installation** a. On delivery of the plant 80% of the payment of contract price of the activity A shall be paid on reciet of goods in good condition and upon the submission of the following documents. 1. Two copies of suppliers invoice showing contract number, Goods discription, Quantity, unit price and total amount. 2). Consignee Reciept Certificate in original issue by authorized representative in the format as annexed to Rpf. 3). Packing list, identifying contents of each package. 4). Inspection certificate issued by nominated inspection agency if any, 5) Insurence Certificate 6). Certificate of origin.	RFP hold good. Final commission Certificate is issued on successful competion of installation, commissioning and testing of Plants at the respective Hospitals.
18	Page 63 of 205	Section 7: 26.8	RFP	The Supplier is required to complete the supply of the full equipment set at the allocated site/sites within 45 days from issue of LOA and install and commission the equipment within 3 (three) months from signing of the Contract.	Are all plants to be delivered within 45 days? Kindly confirm	Yes, As per RFP.
19	Page 64 of 205	on 7: 31.2 (Fail-Safe Proced	RFP	The Supplier shall indicate in detail the fail-safe procedure(s) in case of the following: ? Power failure ? Voltage variation ? Frequency variation ? Temperature and humidity variations.	Please clarify if the fail safe condition is only for the Primary/ Secondary source changeover? Which other Valves/ instruments are required as Fail safe	As per RFP.
20	Page 72 of 205	Section 8 A (I)	RFP	I. Salient Features ? High Reliability, full independency and automation. ? Reduced Logistics, low cost, minimum maintenance. ? Absolutely Oil free and safe. ? 24/7-365 days operation, Onsite production of oxygen instantaneously from ambient air. ? High Performance molecular sieve. ? Stored oxygen supply for transient power failures. ? Compliance with European/Indian Pharmacopeia and ISO 10083: 2006E. ? Low Energy consumption. ? Frame Built, Skid Mounted design. ? High Quality Touch screen control unit and remote-control access.	Please clarify if this is a mandatory requirement?	All the items supplied / commissioned / works executed have to comply with the Specifications as defined in the RFP.
21	Page 74 of 205	Section 8 A (IV) (1) (xi)	RFP	The air compressor shall be manufactured to internationally acceptable standards with CE mark and ISO 9001 and ISO 13485 certification. ISO 8573-1: Compressed air – Part 1: Contaminants and purity classes. ISO 8573-2: Compressed air – contaminant measurement – Part 2: Oil aerosol content. ISO 8573-4: Compressed air – contaminant measurement – Part 4: particle content. ISO 5011: Inlet air cleaning equipment for internal combustion engines and compressors – performance testing.	Any particular reason fpr having CE certification? Kindly clarify.	Stands deleted, please refer to Annexure in this regard.

22	Page 78 of 205	Section 8 A (IV) (9)	RFP	8 A (iv) 9. Main Electrical Panel: i. The Main electrical control Panel should be compatible with Oxygen plant and allied equipment. ii. The Panel should have automatic starter, overload protection, single phase preventer, timer assemblies, emergency stop buttons and indication lamps etc. for successful operation of all the components of the Oxygen plant. iii. Equipment shall be earthed in an approved manner as per I.E.E. rules and acceptable to the local authority. iv. Earthing station shall be provided by the Service Provider. No medical gases pipe shall be used for electrical earthing. v. Entire installation shall be done taking care to follow all safety regulations under BIS standards for electrical installation of oxygen generation plant. vi. Charging of the panel to me included in the scope of work (this requires Cable lying, electrification work from the main panel and earthing works). The entire cabling from the mains to the panel should be armored cable up to 30 mtrs only. vii. The control panel provided with the Plant should have following features as minimum: □ LCD illuminated display. □ Meters □ Pressure in product tank is visual on the display. Range is adjustable □ Prepared for oxygen purity monitoring. Range is scalable in the control panel □ Alarms - All alarms described on the controllers display for easy and fast recovery. Alarms on air dryer and air compressor should be monitored by the controller (requires digital signals) □ Drain Control - Automatic drain control for the air vessel to ensure proper air quality □ Smart delivery - Intelligent delivery based on pressure and purity □ Service indicator - The system should automatically detect when the service is needed (based on operating hours) and should display a message.	1. Based on our experience with PSA plants, there are atleast 4 earthing pits required. Please clarify the exact requirement. 2. What could be the distance considered for electrical cabling from main source?	1. As per RFP. Earthing pits shall be provided as per the requirement. 2. The distance may differ from location to location. The Bidder shall assume the same for different hospitals given in the list.
23	Page 79 of 205	Section 8 A (IV) (11)	RFP	Servo voltage stabilizer of suitable capacity for oxygen plant and allied equipment's with input voltage range 300V-480V & output voltage 415+1% rating 3 phase 50Hz, micro processed based digital display suitable for unbalanced/balanced supply and unbalanced/balanced load copper wound with by-pass switch, MCCB, selector switches, complete in all respect.	1. 415 V + 1% seems to be very narrow, usually the voltage tolerance are +/- 10%. Also for 1000 LPM plant, based on our experience, this has not been the need given the load of 85 KW for 1000 LPM. 2.Also there is no mention of DG requirement, We suggest to have a backup DG to support this Load.	1. As per RFP. 2. No, DG is not part of the RFP. It will be taken up separatly based on requirements. However, Vendor shall have to make suitable provisions in the wiring.
24	Page 80 of 205	Section 8 A (IV) (18)	RFP	Minimum 15 years and certificate in this regard should be from OEM. Vendor should also certify the availability of all the parts/spares/accessories delivered with the equipment to be available for 15 years. Certification from the OEM should be produced in this respect.	Please clarify if this is for a particuar equipment within the PSA plant. We will need to check with the OEM / Manufactures. So far in our experience this has not been the case.	10 years Life span for the Plant is permitted and please refer to Annexure in this regard.
25	Page 82 of 205	Section 8 A (IV) (24) (ii)	RFP	Frequency of visits to all User Institution concerned during Warranty - One visit every 1 month (12 visits in a year) or one visit after every 3000 hours of usage (whichever is earlier) for periodic/ preventive maintenance and any time for attending repairs / break down calls. Training and Capacity Building of one day has to be imparted every year after the installation, date and time to be decided on mutual agreement between the vendor and user department.	Please clarify if this is the mandate to have monthlly vists for preventive maintenance.	Yes, As per RFP.
26	Page 82 of 205	Section 8 A (IV) (24) (iii)	RFP	Uptime in a year- The bidder shall ensure uptime of 95%. The bidder shall provide up-time warranty of complete equipment, the uptime being calculated on 24 (hrs) X 7 (days) basis, failing which the extension of Warranty period will be extended by double the downtime period.	This seems to be very high, 95% in year means 10 breakdowns of 48 hours each. This does not include hospital governed downtime or maintenance related down time. Penalty clause to be removed: Extension of Warranty double the down time.	As per RFP. It does not include hospital governed downtime or maintenance related downtime.

27	Page 82 of 205	Section 8 A (IV) (25)	RFP	**Quality Certificates:** b. ISO 13485: 2016 certification – for design of medical systems. d. The Medical grade oxygen concentrator/generator shall be either US FDA approved or CE or should have CE (Conformity European) /European Certificate (EC) number and a certificate that the oxygen generated complies with Medical grade standard of the OEM be uploaded.	1. This seems to be only for concentrators. Kindly clarify. 2. we also request you to delete the same clause.	1.As per RFP. 2. Accepted as it is a new requirement arising in the Country due to COVID, refer Annexure in this regard.
28	Page 82 of 206	Section 8 A (IV) (25)	RFP	**Quality Certificates:** a. Copy of ISO certification or GMP Certificate of its original equipment manufacturer. b. ISO 13485: 2016 certification – for design of medical systems. c. ISO 10083/ EN ISO 7396-1/ EN 737-3 European Standards and should be in accordance with medical device directives 93/42/EEC or Medical use international standard regarding the supply of oxygen via oxygen generators for a use in medical gases distribution networks. d. The Medical grade oxygen concentrator/generator shall be either US FDA approved or CE or should have CE (Conformity European)/European Certificate (EC) number and a certificate that the oxygen generated complies with Medical grade standard of the OEM be uploaded.	We pressume that none in India have manufactured oxygen plants of this capacity before, because of which it is impossible to get ISO certificates. We request you to delete the condition. We are manufacturing oxygen plants with the tie up with Central Government Organization as the works have been taken up by many companies on emergency basis to support medical oxygen system in the Country.	Accepted as it is a new requirement arising in the Country due to COVID, please refer to Annexure in this regard.
29	Page 85 of 205	Section 8 B (9)	RFP	9. All commissioning tests like blow down test, pressure test, cross connection test, purge test, valve test, alarm test, piping particulate and purity test, operational pressure test, gas concentration test, gas purity test, final tie-in test, etc., has to be performed after installation by a third party such as TUV/SGS/Bureau veritas etc. who is technically competent and experienced with pipeline installation and who meets the requirements of ASSE 6000.	1. We will need to find Installers who meet this requirement.	Yes, commissioning tests have to be performed by a third party as per RFP.
30	Page 86 of 205	Section 8 B	RFP	**(B) SUPPLY, INSTALLATION AND COMMISSIONING OF LINE LOCKABLE ISOLATION VALVES WITH STUB PIPES:** 1. The gas specific and labelled isolation valves should be provided for each area as appropriate in the whole system as per standard (HTM 02- 01/NFPA99 C/ISO 7396-1/EN/DIN/BIS standards) at branch of each riser, and on each separate main line. These valves should be CE or its equivalent certified. They should be nonlubricated, 90 degree turn level, ball type with PTFE seats, made of metal suitable for medical gases. 2. The lockable line valves must be degreased full bore ball valve type (with copper stub pipes) of appropriate size as required. 3. All valves should be made up of brass body, end cap and stem with frill bore chrome plated brass ball and should be operable by quarter turn of handle. All ball valve units should be locked in fully closed or open position. 4. All valves should be pneumatically tested at twice the working pressure and factory degreased. 5. All coper tubing should be factory fitted to prevent valve seat damage during soldering. 6. All ball valve should connect by 22 MM stub pipes having O- ring seal in union to distribution system from any direction entry pipes, but for vacuum there should be option of 42 MM valve housed in same box as 22 MM valve, but connection to distribution system can be external to box. 7. All ball valves should be connected to pipeline in such a way that they can be replaced/ repaired without distorting the pipeline.	Please clarify if these are also applicabe if we only quote for the Supply, Installation & Commissioning of the PSA Plant	Not applicable, in case the Bid is not submitted for referred Activity.

31	Page 86 of 205	Section 8 C	RFP	**SUPPLY, INSTALLATION AND COMMISSIONING OF AREA VALVE BOX:** It should be installed outside every ward and ICU. 1. Area valve service units (AVSU) should with HTM02-01 / NFPA99c / ISO7396-l /EN / DIN / BIS standards and should provide zone isolation facility for use in emergency or for maintenance. 2. AVSU should be pre-piped and incorporate pre fitted ball valve (as specified) with NIST connectors, cleaned for oxygen use, supplied with capped ends, i n a box with emergency access. It should be factory tested for gas tightness and rubber pipe grommets should be provided. 3. A colour coded service identity label should be provided behind valve handle and gas flow direction should be indicated. 4. It should be reliable and easy to operate and must have NIST connectors facilitate easy purge, sample & pressure testing and emergency supply system or as per guideline of standard to be followed. 5. AVSU should be installed into the natural route that would be passed on emergency exit from Department Unit. 6. All AVSU should be placed in lockable aluminum powder coated aesthetic boxes with front toughened glass window which can easily be broken on need, and it 5hould break in to very small pieces that cause no injury to personnel. The window should conceal exposed piping and valves inside the box and should be labelled “Caution-Medical gas Shut —OFF Valves- Close Only in Emergency”. 7. Placement of the valve within the zone valve box should be such that the removable window cannot be placed when any valve is closed. 8. A physical barrier (spade) shall be capable of insertion when require on either side of valve without the need of totally dis mental ling the line valve. 9. All wetted parts (except seals and gaskets) should be brass or copper. 10. Valve box should be of two/ three gas service as per requirement.	Please clarify if these are also applicabe if we only quote for the Supply, Installation & Commissioning of the PSA Plant	Not applicable, in case the Bid is not submitted for referred Activity.
32	Page 87 of 205	Section 8 D	RFP	**SUPPLY, INSTALLATION AND COMMISSIONING OF MEDICAL GAS AREA LINE PRESSURE ALARM SYSTEM.** It should be installed at every nursing station of ward and in every ICU area. 1. Microprocessor controlled medical gas central alarm should be capable of monitoring up to 03 medical gas services by means of pressure sensors which detect deviation from normal operating limits of either pressure or vacuum. It should satisfy the standards of HTM02-01/ ISO7396-1 / NFPA99 C/ EN/DIN/BIS and should be BIS /US-FDA/EU CE certified with 4 digit notified body number or American ETL/UL listed). 2. It should have display of line pressure (high-normal-low). 3. Area alarm should be controlled by LCD display touch screen on which there should be display of each gas service. 4. Alarm panel must accommodate sensors for each specific gas and gas specific NIST/ DISS demand check for each sensor. 5. An audible alarm for high-.and low-pressure condition with visible failure indication with mute and reset facility should be provided. 6. The unit should be small and compact designed in a box of light weight and should have plugin component, wall mounted. Test and alarm acknowledge facility (mute for 15-60 minutes}. 7. Alarm penal should have test facility to prove integrity of intimal circuit and sensors. It should be connected through pressure and vacuum switches which should be made up of brass wetted parts and house PCBA with line continuity monitoring resistors. Electrical connectors should be designed for frequent disassembly. The panel should be 100% digital and should not require re-calibration. 8. The unit should be designed to accept an electrical input range of 120-240 volts AC — 50-60 hertz. The source voltage should be stepped down with a self-contained transformer. 9. The body and housing of the pressure switch should be manufactured by impact resistant, rigid and corrosion proof material. 10. Each alarm should provide a Audible / visual alarm to indicate availability of electric power. 11. Medical gas area alarm should be for 2 or 3 services of oxygen, art, vacuum as per requirement. 12. Electric connection to area alarm device should be provided by bidder.	1. Please clarify if these are also applicabe if we only quote for the Supply, Installation & Commissioning of the PSA Plant 2. what could be the distance from the mainfold connectivity.	Not applicable, in case the Bid is not submitted for referred Activity.

33	Page 88 of 205	Section 8 E	RFP	**SUPPLY, INSTALLATION AND COMMISSIONING OF MASTER ALARM PANEL:** 1. Should complies with HTM02-01/NFPA99C/ISO7396-1/EN/DIN/BIS standards and should have Indian FDA/US-FDA/EU-CE certificate with 4 digit notified body number or American ETL/UL listed. 2. Master alarm should be LCD touch screen type, modular in design and should be fitted with required number of master alarm module and should be incorporated into corrosion resistant metal box with mounting brackets. 3. The master alarms should be capable to monitor minimum 20-30 Points. Each point represents an alarm condition that the source equipment might have. When an alarm condition exists, a red light flashes and the audible alarm sounds. 4. For a alarm condition audio-visual indication and display alarm condition from source supply (source equipment and manifold) and master distribution status should be there. For several alarm conditions, most recent alarm light should flash while other alarm lights should remain lit. 5. Master alarm management system should & designed to display alarm conditions from the source supply units indicating the broad status of the source equipment and manifolds as well as the master distribution status front the source supplies. Depending on the alarm priority, a visual and audible alarm should be initiated to indicate an alarm condition. Each panel shall display and/or input up to 30-40 point alarms. 6. Master alarm should be able to monitor following alarm conditions: □ Oxygen source empty/ fault □ Oxygen cylinder banak empty/ fault □ Emergency bank empty/ fault □ Air compressor faulty/ operational □ Vacuum pump faulty / operational □ Vacuum deficiency □ Other MGPS signals and alarms Bidder shall be responsible for all cabling from local alarm panels to master alarm panel.	Please clarify if these are also applicabe if we only quote for the Supply, Installation & Commissioning of the PSA Plant	Not applicable, in case the Bid is not submitted for referred Activity.

34	Page 89 of 205	Section 8 F	RFP	**SUPPLY, INSTALLATION AND COMMISSIONING OF TERMINALS/ GAS OUTLETS POINTS WITH INLET PROBES/ FLOW METERS WITH HUMIDIFIERS/ VACUUM UNITS: I.** GAS OUTLETS AND SUCTION VACUUM TERMINALS: □ Terminal Units (Gas Outlets) with probes/Adaptou for 02, Compressed Air 4, vacuum). □ The Medical gas outlets shall confirm to HTM 02-01s NFPA 99 C/EN/DIN/ ISO 7396-1/ BIS standards. □ Front Loading Type, 100% metallic Terminal Outlets should be designed to dispense medical gases (or an inlet for medical vacuum) to the secondary equipment (flow meters, Suction regulators, etc.) at the point of use and is gas specific so that secondary devices cannot be “attached” to the wrong gas. □ When not in use the gas in a non-flowing state within the Outlet (Terminal unit) sealed by “O” ring. The adapter when inserted the poppet inside and the gas starts flowing and sealing is ensured by the “O” ring or a seat. This “O” ring should prevent leakage and to prevent movement of probe side by side or upside down and should be replaceable on wear and tear. □ The Outlets are Quick Connect Type and gas specificity is accomplished by "Pin indexing." □ Terminal Units (Gas Outlets) with probes/Adaptou for 02, Compressed Air 4, vacuum). □ The Medical gas outlets shall confirm to HTM 02-01s NFPA 99 C/EN/DIN/ ISO 7396-1/ BIS standards. □ Front Loading Type, 100% metallic Terminal Outlets should be designed to dispense medical gases (or an inlet for medical vacuum) to the secondary equipment (flow meters, Suction regulators, etc.) at the point of use and is gas specific so that secondary devices cannot be “attached” to the wrong gas. □ When not in use the gas in a non-flowing state within the Outlet (Terminal unit) sealed by “O” ring. The adapter when inserted the poppet inside and the gas starts flowing and sealing is ensured by the “O” ring or a seat. This “O” ring should prevent leakage and to prevent movement of probe side by side or upside down and should be replaceable on wear and tear. □ The Outlets are Quick Connect Type and gas specificity is accomplished by "Pin indexing." Oxygen outlet should be provided with butter fly valves for the individual maintenance of the gas outlet without shutting of the whole supply. The outlets should have following features: 1. 100% metallic. 2. Push to insert and press-to-release mechanism for probes. 3. Allows plugging of probes from front. 4. Self-ceiling volve on disengaging the probe (quick disconnect). 5. Smooth quick action	Please clarify if these are also applicabe if we only quote for the Supply, Installation & Commissioning of the PSA Plant	Not applicable, in case the Bid is not submitted for referred Activity.

35	Page 90 of 205	Section 8 F (ii)	RFP	**WARD VACUUM UNITS:** 1. It should be continuous vacuum regulator, compact, strong and ergonomic device. 2. Ward vacuums unit should be of light weight, compact wall mounted type with all fixing materials having following components — ⍰ It should have manual adjustment of the vacuum gauge from -45degree to +45degree for a better visibility and should have protective bumper device. ⍰ Compact, strong and ergonomic suction regulator with central adjustment knob with free minimum rotation to control required. ⍰ vacuum with colour coding for 0-750 MM of Hg or more. ⍰ It should have a device with a metal outlet tubing threaded nipple integrated in the body of the regulator ⍰ A polycarbonate/ polysulfone, autoclavable, non-breakable 1000 cc collection jar (covered under warranty), fitted with anti-overflow safety device to prevent transfer of liquid to vacuum regulator, pipeline and to pump. and antibacterial filter. The jar should be transparent to view liquid level. ⍰ Should have on/off knob. ⍰ It should have manual adjustment of the vacuum gauge from -45degree to +45degree for a better visibility and should have protective bumper device. ⍰ Compact, strong and ergonomic suction regulator with central adjustment knob with free minimum rotation to control required. ⍰ vacuum with colour coding for 0-750 MM of Hg or more. ⍰ It should have a device with a metal outlet tubing threaded nipple integrated in the body of the regulator ⍰ A polycarbonate/ polysulfone, autoclavable, non-breakable 1000 cc collection jar (covered under warranty), fitted with anti-overflow safety device to prevent transfer of liquid to vacuum regulator, pipeline and to pump. and antibacterial filter. The jar should be transparent to view liquid level. ⍰ Should have on/off knob. The unit should confirm to HTM 02-01/ NFPA 99 C/EN/DIN/ ISO 7396-1/BIS standards. It should be CE or any equivalent certified.	Please clarify if these are also applicabe if we only quote for the Supply, Installation & Commissioning of the PSA Plant	Not applicable, in case the Bid is not submitted for referred Activity.
36	Page 91 of 205	Section 8 F (III)	RFP	**BACK PRESSURE COMPENSATED FLOW METER WITH HUMIDIFIER:** It should confirm to HTM 02-01/ NFPA 99 C/EN/DIN/ ISO 7396-I/BIS standards. 1. Should provide gas flow in range of 0-15 LPM (calibration within +/- 10%) adjustable by a knob at inlet pressure of 50-60 psi. The knob should be reliable, heavy duty type having accuracy and tightness even after repeated and prolonged use and there should be no leakage after closing the knob. 2. It should have expanded scale for reading accuracy. 3. Flow meter body should be of brass chrome plated material. 4. Graduated flow tube and other component should be of clear impact resistant, durable polycarbonate and should have improved readability at low flow. 5. Filer of stainless-steel wire mesh at inlet to prevent particulate matter entry. 6. Humidifier bottle of 200-300 cc made of autoclavable, unbreakable, clear polycarbonate/ polysulfone, having integrated relief valve. 7. Humidifier Bottle should be covered under warranty. 8. Should be BIS/Indian FDA/US-FDA/EUROPEAN CE certified with 4 digit notified body number I American ETU UL Listed 9. Humidifier Bottle should be covered under warranty. 10. should be BIS/CE certified/ UL Listed.	Please clarify if these are also applicabe if we only quote for the Supply, Installation & Commissioning of the PSA Plant	Not applicable, in case the Bid is not submitted for referred Activity.

37	Page 92 of 205	Section 8 F (IV)	RFP	**BED HEAD PANELS (HORIZONTAL /VERTICAL):** 1. Should be as per HTM02-011 ISO 7396 /93/42/CE/BIS regulations and standards. 2. It should have 1200/ 1500 mm length (as per space availability) and features as mentioned: ▯ Efficient, safe robust design in multiple extruded aluminum section (powder coated) joined together, having smooth curved surfaces with choice of colours of fascia plates and base. ▯ Should be installed by separate wall mounting plates. ▯ Unit should have factory assembled for electrical and mechanical components. ▯ It should have segregation of services like low voltage, high voltage supply, medical gases and maintained with 3 channel arrangement which should be individually serviceable. ▯ Should have integrated rail system with good strength to mount accessories and should be mounted in such a way to support load on rail adequately. ▯ Should have provision for oxygen-2, vacuum-2, medical air-1 holder for vacuum jar-1, pre fitted 5/15 A combined electric socket-6, data socket-1, spare space -2. ▯ Entire pipeline should run in continuous without break for each unit and should come out from back or side of bed head panel. The Pipes should be of medical grade and labelled for each gas to avoid cross connections. ▯ All electrical sockets should be prewired with at least 2.5 mm copper wire and all wires should be connected to external power supply by safe and single connector. 3. All electric connections to bed head panel will be done by the Supplier. 4. Bed head panel should be supplied with examination lamp or inbuilt lighting system, IV pole and bedhead call bell along with oxygen flow meter with humidifier bottle, monitor bracket and suction unit System should be incorporated for the bed head call bell.	Please clarify if these are also applicabe if we only quote for the Supply, Installation & Commissioning of the PSA Plant	Not applicable, in case the Bid is not submitted for referred Activity.
38	Page 161 of 205	Annexure C Activity C (2) (Financial Bid)	RFP	2. **Medical Grade Copper Pipe with Required Copper Fittings** 2.1 Supply and fixing of Copper Pipe Lines of 12 mm dia. 0.7 mm thick for distribution, pipes shall be half drawn, tempered, seamless, phosphorous deoxidized, non-arsenic and de-greased confirming to BS 2871-1971 Part-1 (Table-X) and the chemical compositions shall be as per BS 6017 of 1981 table-2 with third party Test Certification, including cost and Conveyance of pipes, cost of necessary specials made of copper and suitable for a steam working pressure of 17 bar and should confirm to BS 864 with specially made for brazed socket type connections. 2.2 Supply and fixing of Copper Pipe Lines of 15 mm dia. 0.9 mm thick for distribution, pipes shall be half drawn, tempered, seamless, phosphorousdeoxidized, non-arsenic and de-greased confirming to BS 2871-1971 Part-1 (Table-X) and the chemical compositions shall be as per BS 6017 of 1981 table-2 with third party Test Certification, including cost and Conveyance of pipes, cost of necessary specials made of copper and suitable for a steam working pressure of 17 bar and should confirm to BS 864 with specially made for brazed socket type connections. 2.3 Supply and fixing of Copper Pipe Lines of 22 mm dia. 0.9 mm thick for distribution, pipes shall be half drawn, tempered, seamless, phosphorous deoxidized, non-arsenic and de-greased confirming to BS 2871-1971 Part-1 (Table-X) and the chemical compositions shall be as per BS 6017 of 1981 table-2 with third party Test Certification, including cost and Conveyance of pipes, cost of necessary specials made of copper and suitable for a steam working pressure of 17 bar and should confirm to BS 864 with specially made for brazed socket type connections. 2.4 Supply and fixing of Copper Pipe Lines of 28 mm dia. 0.9 mm thick for distribution, pipes shall be half drawn, tempered, seamless, phosphorous deoxidized, non-arsenic and de-greased confirming to BS 2871-1971 Part-1 (Table-X) and the chemical compositions shall be as per BS 6017 of 1981 table-2 with third party Test Certification, including cost and Conveyance of pipes, cost of necessary specials made of copper and suitable for a steam working pressure of 17 bar and should confirm to BS 864 with specially made for brazed socket type connections. 2.5 Supply and fixing of Copper Pipe Lines of 42 mm dia. 1.2 mm thick for distribution, pipes shall be half drawn, tempered, seamless, phosphorous deoxidized, non-arsenic and degreased confirming to BS 2871-1971 Part-1 (Table-X) and the chemical compositions shall be as per BS 6017 of 1981 table-2 with third party Test Certification, including cost and Conveyance of pipes, cost of necessary specials made of copper and suitable for a steam working pressure of 17 bar and should confirm to BS 864. with specially made for brazed socket type connections. 2.6 Supply and fixing of Copper Pipe Lines of 54 mm dia. 1.2 mm thick for distribution, pipes shall be half drawn, tempered, seamless, phosphorous deoxidized, non-arsenic and degreased confirming to BS 2871-1971 Part-1 (Table-X) and the chemical compositions shall be as per BS 6017 of 1981 table-2 with third party Test Certification	Please clarify if these are also applicable if we only quote for the Supply, Installation & Commissioning of the PSA Plant	Not applicable, in case the Bid is not submitted for referred Activity.

39	Page 163 of 205	Annexure C Activity C (3) (Financial Bid)	RFP	**Supply and Fixing of GAS OUTLETS:** Supply and fixing Gas Outlet Points for Oxygen with S Brackets, self-ceiling brass valves with nut and cap and it should be 100% self-sealing type, so that at the time of removal of probe, it should stop gas flow automatically, out let should be single hand insertion, non inter changeable for specific gas, it should accept only correct medical gas adapter. with down tube of the specific gas should be brazed with brass bracket of the outlet, there after brass bracket should be fixed in wall with the help of the steel screw, with self-sealing valve which should be screwed with the front portion of brass bracket and there after it should be covered by plastic cover duly colour coded as per specific gas, design of outlet should be such that it can be installed vertically on wall, horizontally on ICCU panel and also vertical to fit in pendants including cost and conveyance of all materials, erecting charges, commissioning charges and all other labour charges etc. (Oxygen-323, Nitrous Oxide-15, Air-145 & Vacuum-161)	Please clarify if these are also applicabe if we only quote for the Supply, Installation & Commissioning of the PSA Plant	Not applicable, in case the Bid is not submitted for referred Activity.
40	Page 163 of 205	Annexure C Activity C (4) (Financial Bid)	RFP	**Supply and Fixing of AREA ALARM PANELS:** 4.1 Supply and fixing of 4 Gas Digital Alarm Panel consisting of all necessary accessories i.e., pressure sensors, regulators, hand valves, pressure gauges etc. including cost and conveyance of all materials, transportation charges etc. 4.2 Supply and fixing of 3 Gas Digital Alarm Panel consisting of all necessary accessories i.e., pressure sensors, regulators, hand valves, pressure gauges etc. including cost and conveyance of all materials, transportation charges etc.	Please clarify if these are also applicabe if we only quote for the Supply, Installation & Commissioning of the PSA Plant	Not applicable, in case the Bid is not submitted for referred Activity.
41	Page 164 of 205	Section C (5) (Financial Bid)	RFP	**FACTORY DEGREASED ISOLATION VALVES FOR MEDICAL USAGE WITH BRASS ADOPTERS:** 5.1 Supply and fixing of 15 mm dia. Isolation Valves with necessary end fittings designed for a working pressure of 300 psi / 27 inc. Hg. Vacuum, Non-Ferrous, Non-Lubricated with 90 degrees turn, Hand lever operated of standard make of valves including Cost of conveyance, transportation charges, fixing charges and testing charges and all labour charges etc. 5.2 Supply and fixing of 22 mm dia. Isolation Valves with necessary end fittings designed for a working pressure of 300 psi / 27 inc. Hg. Vacuum, Non-Ferrous, Non-Lubricated with 90 degrees turn, Hand lever operated of standard make of valves including Cost of conveyance, transportation charges, fixing charges and testing charges and all labour charges etc. 5.3 Supply and fixing of 28 mm dia. Isolation Valves with necessary end fittings designed for a working pressure of 300 psi / 27 inc. Hg. Vacuum, Non-Ferrous, Non-Lubricated with 90 degrees turn, Hand lever operated of standard make of valves including Cost of conveyance, transportation charges, fixing charges and testing charges and all labour charges etc. 5.4 Supply and fixing of 42 mm dia. Isolation Valves with necessary end fittings designed for a working pressure of 300 psi / 27 inc. Hg. Vacuum, Non-Ferrous, Non-Lubricated with 90 degrees turn, Hand lever operated of standard make of valves including Cost of conveyance, transportation charges, fixing charges and testing charges and all labour charges etc. 5.5 Supply and fixing of 54 mm dia. Isolation Valves with necessary end fittings designed for a working pressure of 300 psi / 27 inc. Hg. Vacuum, Non-Ferrous, Non-Lubricated with 90 degrees turn, Hand lever operated of standard make of valves including.	Please clarify if these are also applicabe if we only quote for the Supply, Installation & Commissioning of the PSA Plant	Not applicable, in case the Bid is not submitted for referred Activity.
42	General		RFP	Alternate Power	1. Please clarify if the DG provision is currently there or not for the said load. 2. Supply of DG fuel comes under which party's scope?	1. No, DG is not part of the RFP. It will be taken up separatly based on requirements. However, Vendor shall have to make suitable provisions in the wiring. 2. Not in the scope of work of the Bidder.
43	General		RFP	Secondary Bank	Please clarify if the Secondary Source/ Cylinder Oxygen Bank Exists or not, how is the Hospital currently Managing the Oxygen needs	As per RFP. Bidders are advised to visit the Hospitals, the list as given in Annexure I of the RFP.

44	General	RFP	General	Being an MSME based at Hyderabad(Telangana), does the bidder have the privilege of Exemption for EMD as Govt of Telengana should support MSME's.	Yes, accordingly, please refer to Annexure in this regard.
45	General	RFP	General	The 3phase, 415V power supply provision from nearby electric connecting point, cabling, transformer and electrical distribution panel permissions and roles of TSIIC in this regard?	TSIIC will facilitate for any permissions as per the provisions of RFP.
46	General	RFP	General	Is there any LD charges or penalties involves, please clarify?	Yes. Please refer to Clause 15 & Clause 26 of Section 7 of the RFP in this regard.
47	General	RFP	General	Who will be the work completion certifying authority?	The Hospital is required to issue Installation cum Handover document (Appendix VIII) after successful Commissioning of the Plant and Testing of Plant output from 3rd party NABL accredited Lab along with FAC i.e., Final Acceptance Certificate (Appendix XVII).
48	General	RFP	General	What would be the payment terms and conditions, is there any interest charges applicable in case of late payment by department?	As per the RFP. Please refer to Section 7: Clause 24 in this regard. No, interest charges whatsoever for late payment will be paid.
49	General	RFP	General	As a manufacturer we are following all European medical standards and the zeolite is importing from ZEOCHEM, Switcher land which will be costly, compared to chinese one, so request you to please consider this point in the eligibility criteria as ZEOCHEM (Switzerland), HONEYWELL (USA) as approved brands	As per RFP, please refer to Section 8: (5). Molecular Seive Units Point No. iv in this regard.
50	General	RFP	General	Are there any extra charges applicable for extra work done or for the work which is not specifically mentioned under vendor scope?	No. Please refer Clause 2.1 (Scope of Work) of the RFP in this regard.
51	General	RFP	General	Please confirm Compressor Qty for per Plant.	One Compresor per Plant. Please refer Annexure in this regard.
52	General	RFP	General	Is Any Bank Guarantee Considered?	Please refer to EMD / Performance Security Clause of RFP in this regard.

53	General	RFP	General	Compressor (KW) mentioned for 250 LPM in Bid is 22 KW, Kindly confirm can we consider – 30 KW, Similarly Compressor (KW) mentioned for 500 LPM in Bid is 45 KW, Can we consider 55KW, and for 1000LPM can we consider 110 KW.	As per RFP.
54	General	RFP	General	Can we consider payment terms for Supply of Oxygen Plants as 30% Advance, 60% against proforma invoice and balance 10% against commissioning of the Plant.	As per RFP.
55	General	RFP	General	Can 1000 LPM systems can be offered as 2* 500 LPM redundant system?	No.
56	General	RFP	General	Could the Delivery timelines be changed as mentioned below: 1) 250 LPM- 20 units : 8-10 weeks 2) 500 LPM- 51 Units : 22-28 weeks or weekly supply of 2 Systems to maximum 3 3). 100 LPM 61 Units : 25-30 weeks from the date of PO (deliveries can be started after 8 th week and 2-3 systems per week. (Because of “Shortage of RAW Material Zeolite Molecular Sieves and Takes time for manufacturing PSA oxygen plant”)	As per RFP.
57	General	RFP	General	Can they allow pre-fabricated units on Construction works?	Yes, as per RFP.
58	General	RFP	General	Can Payment Conditions to be modified as mentioned below: a. Advance along with PO @ 40 % b. Against material Delivery: 30% c. Against Installation: 20% d. 1 Month Post installation warranty (30 Days) : 10 %	As per RFP.
59	General	RFP	General	Can the authority reduce PBG deposit to 3 % instead of 5%?	As per RFP.
60	General	RFP	General	Kindly clarify more on Payment terms for Man-power supply.	The amount will be paid prorate on monthly basis as per the amount as quoted by the Bidder/ Vendor in its Bid.
61	General	RFP	General	Can the authority extend Submission Date for another Two Weeks? Kindly consider.	Bid Due Date extened upto 20.07.2021 and please refer to Corrigendum in this regard.
62	General	RFP	General	Can the Oxygen Plant site be covered by ACC / RCC or Containerised version is also Ok?	Please refer to Clause 2.1 (Scope of Work) - Activity B in this regard.

63	General	RFP	General	Is soil test of Oxygen plant site is completed or it is part of tender? Kindly confirm.	It is part of the RFP, the Vendor has to arrange Soil test done.

ANNEXURE					
S No.	**Page No.**	**Clause No.**	**Document**	**Original Clause**	**Amended Clause**
1	Page 2 0f 205	Schedule of Bidding Process - S No. 8	RFP	15.00 hours IST on 08.07.2021.	15.00 hours IST on 20.07.2021. Accordingly, wherever, Bid Due Date is mentioned in the RFP, it should be read as 20.07.2021 only.
2	Page 2 0f 205	Schedule of Bidding Process - S No. 13	RFP	**S No. 13.** The EMD to be furnished as per the details as provided in Annexure II of the RFP. The EMD to be payable either through online payment through net-banking / debit card / credit card or in the form of a Bank Guarantee in favour of TSIIC and drawn on any scheduled bank.	S No. 13. The EMD to be furnished as per the details as provided in Annexure II of the RFP. The EMD to be payable either through online payment through net-banking / debit card / credit card or in the form of a Bank Guarantee in favour of TSIIC and drawn on any scheduled bank. Online payment can be made in favour of TSIIC, A/c No. 304011029457, IFSC Code KKBK0007451, Abids Road Branch, Kotak Mahindra Bank. MSMEs are exempted from furnishing the EMD and further details in this regard are as detailed hereunder. a. Vide Gazette no. CG-DL-E-26062020-220191 dt. 26.06.2020, Ministry of MSME have revised criteria for classifying the enterprises as Micro, small and medium enterprises with effect from 1st July 2020 and accordingly the following firms will be exempted from submission of EMD: i. Micro and Small Enterprises as per classification given in MSME Notification dated 26.06.2020 registered under “Udyam Registration” w.e.f 01.07.2020 will be granted exemption from payment of Earnest Money Deposit. Udyam Registration Certificate has to be produced in support of above. ii. The existing Micro and Small Enterprises as per classification given in MSME Act 2006 registered till 30.06.2020 and holding Permanent Registration Certificate from the District Industries Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or any other body specified by Ministry of Micro Small and Medium Enterprises will be granted exemption from payment of Earnest Money Deposit till 31.03.2021. Registration Certificate has to be produced in support of above. b. The MSME Units will be required to furnish a notarized undertaking (as per Annexure-VIII) to the effect that in the event of non-fulfilment or non- observance of any of the conditions stipulated in the contract, the MSE Unit shall pay a penalty, equivalent to the Earnest Money Deposit to offset the loss incurred by the Tender Inviting Authority consequent on such breach of any bid condition. c. The MSMEs participating in the tender shall enclose with their tender a copy of their valid registration certificate with District Industries Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or any other body specified by Ministry of Micro Small and Medium Enterprises in support of their being an MSME, failing which their tender will be liable to be ignored/rejected.
3	Page number 22 of 205	3.2.1 (9). Eliginility and Technical Qualifications	RFP	The Bidder should have supplied, installed, and commissioned minimum three PSA plants/Medical Grade Oxygen Generator Module of at least 250 LPM in India since April 2017. The vendor/bidder has to produce the purchase order copies with satisfactory commissioning certificate issued by the user department/hospital. In this regard, PO copies of the quantities manufactured and installed in any government institutions, semi-government institutions, autonomous institutions, private hospitals of minimum 100 beds (this has to be qualified) are acceptable.	The Bidder should have supplied, installed, and commissioned minimum one PSA plants/Medical Grade Oxygen Generator Module of at least 250 LPM in India since April 2017. The vendor/bidder has to produce the purchase order copies with satisfactory commissioning certificate/ experience certificate issued by the user department/hospital. In this regard, PO copies of the quantities manufactured and installed in any government institutions, semi-government institutions, autonomous institutions, private hospitals of minimum 100 beds (this has to be qualified) are acceptable.

4	Page 24 0f 205	3.2.2 (1) (Technical Qualifications)	RFP	Relevant past similar experience of setting up of Medical Oxygen Generation Plants of capacity of at least 250 LPM anywhere in India: i. Upto 5 Plants for which Bid is submitted – 15; ii. 5 to 25 Plants for which Bid is submitted – 20; and iii. >25 Plants for which Bid is submitted– 25. In case of Consortium, the Lead Member should have supply of Plant experience and Lead Member/Any other Consortium Member can have execution & operations experience. Documents to be submitted: Photocopies of the certificates, any other relevant documents / certificates should be established. The details should cover Bidder experience in execution of the works. Max. Marks: 25	Relevant past similar experience of setting up of Medical Oxygen Generation Plants of capacity of at least 250 LPM anywhere in India: i. Upto 5 Plants for which Bid is submitted – 15; ii. 5 to 25 Plants for which Bid is submitted – 20; and iii. >25 Plants for which Bid is submitted– 25. In case of Consortium, Any one Member should have supply of Plant experience and Lead Member/ Any other Consortium Member can have execution & operations experience. Documents to be submitted: Photocopies of the certificates, any other relevant documents / certificates should be established. The details should cover Bidder experience in execution of the works. Max. Marks: 25
5	Page 25 of 205	3.2.2 (3) (Technical Qualifications)	RFP	3.2.2 (3)Availability of Key Staff (personnel) members. Documents to be submitted: Self-declared form along with the CVs of each of the Key Personnel. Max. Marks: 10	3.2.2 (3)Availability of Key Staff (personnel) members. Documents to be submitted: Self-declared form along with the CVs of each of the Key Personnel as detailed hereunder. Max. Marks: 10 One Project Head with B Tech / BE or its equivalent qualification and with overall minimum 10 years of experience with demenstrated experience in installation of Oxygen Plants along CVs of Site Engineers (with B Tech / BE / equivalent) with minimum 3 years experience who are going to work for the Project along with any other required staff CVs needs to be atatched.
6	Page 56 of 205	Section 7(16)- Life Span	RFP	Minimum 15 years and certificate in this regard should be from OEM. The Supplier should also certify the availability of all the parts/spares/accessories delivered with the equipment to be available for 15 years. Certification from the OEM should be produced in this respect.	Minimum 10 years and certificate in this regard should be from OEM. The Supplier should also certify the availability of all the parts/spares/accessories delivered with the equipment to be available for 10 years. Certification from the OEM should be produced in this respect.
7	Page 57 of 205	Section 7: 20 (Sub-Contracts)	RFP	20.1 The Supplier shall notify the Authority in writing of all sub-contracts awarded under the Contract if not already specified in its tender. Such notification, in its original tender or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the Agreement. 20.2 Sub-contract shall be only for bought out items and sub-assemblies. 20.3. Sub-contracts shall also comply with the provisions of GCC Clause 4 (“Country of Origin”).	20.1 The Supplier shall notify the Authority in writing of all sub-contracts, if any, awarded under the Contract for Activity B, Activity C & Activity D as specified in its tender. Such notification, in its original tender or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the Agreement. 20.2 Sub-contract for Activity A shall be only for bought out items and sub-assemblies. 20.3. Sub-contracts shall also comply with the provisions of GCC Clause 4 (“Country of Origin”).
8	Page 73 of 205	Section 8: A. TECHNICAL SPECIFICATIONS OF MEDICAL OXYGEN GENERATION PLANT INCLUDING ACCESSORIES	RFP	IV. COMPONENTS ALONG WITH THEIR SPECIFICATIONS: 1. Compressed Air system consisting screw type compressor (2 numbers to be supplied with each PSA system)	IV. COMPONENTS ALONG WITH THEIR SPECIFICATIONS: 1. Compressed Air system consisting compressor (1 number or as per requirement to be supplied with each PSA system)

9	Page 82 of 205	Section 8 A (IV) (25)	RFP	Quality Certificates: b. ISO 13485: 2016 certification – for design of medical systems. d. The Medical grade oxygen concentrator/generator shall be either US FDA approved or CE or should have CE (Conformity European) /European Certificate (EC) number and a certificate that the oxygen generated complies with Medical grade standard of the OEM be uploaded.	Stands deleted.
10	Page 159 of 205	APPENDIX IV	RFP	ANNEXURE A FINANCIAL BID	ANNEXURE A FINANCIAL BID (Ref Clause 2.1: Scope of Work Activity A & SECTION 8: A. Technical Specifications of Medical Oxygen Generation Plant including Accessories) The Bid should be inline with the Scope of Work and the Specifications as defined for the Activity in the RFP.
11	Page 160 of 205	APPENDIX IV	RFP	ANNEXURE B FINANCIAL BID	ANNEXURE B FINANCIAL BID (Ref Clause 2.1: Scope of Work Activity B) The Bid should be inline with the Scope of Work as defined for the Activity in the RFP.
12	Page 188 of 205	Appendix VIII - Format for Joint Bidding Agreement for Consortium Point No. 8	RFP	In case of an award of a Contract, all the Members to the Consortium agreement do hereby agree that Lead Member shall furnish Performance Security by way of an irrevocable & unconditional Bank Guarantee for 10% of the contract value in the prescribed format and as per terms of the Contract Agreement.	In case of an award of a Contract, all the Members to the Consortium agreement do hereby agree that Lead Member shall furnish Performance Security by way of an irrevocable & unconditional Bank Guarantee for 5% of the contract value in the prescribed format and as per terms of the Contract Agreement.