Amendment No. 3

Date: 18/03/2016

Sub: Amendment to the Tender Enquiry Document

Ref: (i) TED: HLL/PCD/PMSSY/AIIMS-II/14-RT-01/15–16 dated 31.12.2015
(ii) Clarification dated 04.01.2016, 12.01.2016 & 18.01.2016.
(iii) Amendment No.02 dated 07.03.2016

The following amendments are being incorporated in the referred tender enquiry document based on the Pre-bid Meeting held on 12/01/2016. The bidders have to also take cognizance of the Clarifications and Amendment referred above.

SECTION - II
GENERAL INSTRUCTIONS TO TENDERERS (GIT)

D. SUBMISSION OF TENDERS

1) For:-

22. Submission of Tenders
(i) PRICE BID (ONLY ONLINE).

2. Along with price bid recent purchase order copies for the same model and technical configuration issued by institute of National importance / reputed central / state government hospitals should be uploaded in pdf form for price reasonability.

Read as:

22. Submission of Tenders
(i) PRICE BID (ONLY ONLINE).

2. Along with price bid recent purchase order copies for the same model and technical configuration issued by institute of National importance / reputed central / state government hospitals should be uploaded in pdf form for price reasonability.

Added para:-
The supplier shall justify the present quotes based on previous purchase orders for similar project executed either in india or Globally. If they quote any new model or upgraded version of earlier model, they may mention the same in their tender.

Section – VII
Technical Specifications

1. **Existing Specification:**

   Para: 1.4 Fully Automatic Oxygen Control Panel (IMPORTED):
   The Manifold control panel should be **digital**, fully automatic type and switches from "Bank in Use" to "Reserve bank "without fluctuation in delivery supply line pressure.

   Read as:
   Para: 1.4 Fully Automatic Oxygen Control Panel (IMPORTED):
   The Manifold control panel should be **digital/ analogue**, fully automatic type and switches from "Bank in Use" to "Reserve bank " without fluctuation in delivery supply line pressure.

2. **Existing Specification:**

   Para: 1.4 Fully Automatic Oxygen Control Panel (IMPORTED):
   Automatic control panel should be constructed in accordance with the requirement of international standards.
   The fully automatic oxygen control panel should comply with HTM 02-01/NFPA 99C/DIN/EN/ISO-7396-1 standards. It should be European CE Certified or UL listed **under Medical Devices Directive**.

   Read as:
   Para: 1.4 Fully Automatic Oxygen Control Panel (IMPORTED):
   Automatic control panel should be constructed in accordance with the requirement of international standards.
   The fully automatic oxygen control panel should comply with HTM 02-01/NFPA 99C/DIN/EN/ISO-7396-1 standards. **It should be European CE Certified or UL listed.**

3. **Existing Specification:**

   Para: 1.4 Fully Automatic Oxygen Control Panel (IMPORTED):
   Control panel should have Alarm reset switch to control and monitor the alarm indications by the operator. All high pressure manifold regulators should contain no halogenated polymers and have **adiabatic certification**.

   Read as:
   Para: 1.4 Fully Automatic Oxygen Control Panel (IMPORTED):
   Control panel should have Alarm reset switch to control and monitor the alarm indications by the operator. All high pressure manifold regulators should contain no halogenated polymers and have **adiabatic certification/Undertaking from manufacturer**.

4. **Existing Specification:**

   Para: 2.2 Fully Automatic Nitrous Oxide Control Panel (IMPORTED)
   The fully automatic N2O control panel should comply with HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1 STANDARD. It should be European CE Certified or UL listed **under Medical Devices Directive**.

Read as:

Para: 2.2 Fully Automatic Nitrous Oxide Control Panel (IMPORTED)

The fully automatic N2O control panel should comply with HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1 STANDARD. **It should be European CE Certified or UL listed.**

5. Existing Specification:

Para: 2.2 Fully Automatic Nitrous Oxide Control Panel (IMPORTED):

Control panel should have Alarm reset switch to control and monitor the alarm indications by the operator. All high pressure manifold regulators should contain no halogenated polymers and have **adiabatic certification**.

Read as:

Para: 2.2 Fully Automatic Nitrous Oxide Control Panel (IMPORTED):

Control panel should have Alarm reset switch to control and monitor the alarm indications by the operator. All high pressure manifold regulators should contain no halogenated polymers and have **adiabatic certification/Undertaking from manufacturer**.

6. Existing Specification:

Para: 2.2 Fully Automatic Nitrous Oxide Control Panel (IMPORTED):

The Manifold control panel should be **digital**, fully automatic type and switches from "Bank in Use" to "Reserve bank " without fluctuation in delivery supply line pressure.

Read as:

Para: 2.2 Fully Automatic Nitrous Oxide Control Panel (IMPORTED):

The Manifold control panel should be **digital/ analogue**, fully automatic type and switches from "Bank in Use" to "Reserve bank " without fluctuation in delivery supply line pressure.

7. Existing Specification:

Para: 3.1 Fully Automatic Control panel for CO2 System (IMPORTED):

The Manifold Control System should supply any type of medical gas from both left and right hand manifold banks. Operation and performance criteria should fully satisfy the requirements of HTM 02-01/ NFPA 99 C/EN/DIN/ ISO 7396-1 standard. The fully automatic CO2 control panel should comply with the standard. It should be European CE Certified or **UL listed under Medical Devices Directive**.

Read as:

Para: 3.1 Fully Automatic Control panel for CO2 System (IMPORTED):

The Manifold Control System should supply any type of medical gas from both left and right hand manifold banks. Operation and performance criteria should fully satisfy the requirements of HTM 02-01/ NFPA 99 C/EN/DIN/ ISO 7396-1 standard. The fully automatic CO2 control panel should comply with the standard. **It should be European CE Certified or UL listed.**

8. Existing Specification:

Para 3.1 Fully Automatic Control panel for CO2 System (IMPORTED)
Control panel should have Alarm reset switch to control and monitor the alarm indications by the operator. All high pressure manifold regulators should contain no halogenated polymers and have **adiabatic certification**.

Read as:
Para 3.1 Fully Automatic Control panel for CO2 System (IMPORTED):
Control panel should have Alarm reset switch to control and monitor the alarm indications by the operator. All high pressure manifold regulators should contain no halogenated polymers and have **adiabatic certification/Undertaking from manufacturer**.

9. Existing Specification:

Para 3.1: Fully Automatic Control panel for CO2 System (IMPORTED)
All regulators should be protected from over-pressurization by relief valves which are vented to atmosphere. There should be a bypass valve fitted to the 2nd stage regulators to allow CO2 to be vented outside the manifold room during the commissioning stage. Regulators shall comply with BS EN ISO 10524-2 and shall have documented test reports available confirming successful completion of the oxygen ignition tests stated therein. Multi stage regulators combined into single unit is not acceptable.

Read as:
Para 3.1: Fully Automatic Control panel for CO2 System (IMPORTED):
Regulators shall comply with BS **EN ISO 10524-2/as per NFPA Standard**

10. Existing Specification:

Para: 3.1 Fully Automatic Control panel for CO2 System (IMPORTED)
The Control Panel should be housed in a single panel having a solid construction using epoxy technology in a glass reinforced **polymer moulding** for high strength, high chemical and corrosion resistance.

Read as:
Para: 3.1 Fully Automatic Control panel for CO2 System (IMPORTED)
The Control Panel should be housed in a single panel having a solid construction using epoxy technology in a glass reinforced **polymer moulding/Metalic** for high strength, high chemical and corrosion resistance.

11. Existing Specification:

Para 3.1: Fully Automatic Control panel for CO2 System (IMPORTED)
The cover should hinge upwards but should remain facing outward for manual operation and maintenance accessibility.

Read as:
Para 3.1: Fully Automatic Control panel for CO2 System (IMPORTED)
The cover **should openable** for manual operation and maintenance accessibility.

12. Existing Specification:

Para 3.1: Fully Automatic Control panel for CO2 System (IMPORTED)
For added safety the voltage inside the panel should not exceed **12v dc**.

Read as:

Para 3.1: Fully Automatic Control panel for CO2 System (IMPORTED)
For added safety the voltage inside the panel should not exceed **12v/24v dc**.

13. Existing Specification:

Para 3.1 Fully Automatic Control panel for CO2 System (IMPORTED)
To aid maintenance, the connections within the panel should be flat face/'O' ring design and facilitate easy removal of the regulators and pressure switches. There should be manual changeover buttons so that servicing either side of the system can be simply achieved. The PCB's should be linked with plug and socket connectors for easy removal. The manifold control systems should **be 'CE' marked under the Medical Devices Directive (Lloyd's Register Quality Assurance).**

Read as:
Para 3.1: Fully Automatic Control panel for CO2 System (IMPORTED)
To aid maintenance, the connections within the panel should easy removal of the regulators and pressure switches. There should be manual changeover buttons so that servicing either side of the system can be simply achieved. The PCB's should be linked with plug and socket connectors for easy removal. **The manifold control systems should be 'CE' marked/ UL listed.**

14. Existing Specification:

Para 4.1.1 Vacuum Pump Module
It should fully comply and meets with the requirements of the standard.
Designed flow capacity should be minimum 5000 LPM ± 10% variation in pentaplex/Quadraplex configuration.
It should be European CE marked/UL listed. The medical vacuum plant shall comprise pentaplex/Quadraplex, air-cooled, oil lubricated rotary vane vacuum pumps to provide a **flow rate of at least 7000l/min ± 10%**as per the relevant standard (i.e. as per HTM 02-01/NFPA99C/DIN/EN/ISO 7396 standard) to provide the desired flow of the hospital to maintain a vacuum level of 450 mmHg at the plant connection point. **(Flow rate of at least 5000l/min±10% for AIIMS Rishikesh in lieu of 7000l/min)**

Read as:

Para 4.1.1 Vacuum Pump Module:
It should fully comply and meets with the requirements of the standard.
It should be European CE marked/UL listed. The medical vacuum plant should be air-cooled, oil lubricated rotary vane vacuum pumps to provide a primary **flow rate of at least as mentioned below & standby flow rate at least of as mentioned below as per the relevant standard (i.e. as per HTM 02-01/ NFPA99C/DIN/EN/ISO 7396 standard) to provide the desired flow of the hospital to maintain a vacuum level of 450 mmHg at the plant connection point.**

Flow Requriments as below -
for AIIMS Bhopal - Minimum flow 7000-8000 LPM as primary and 7000-8000 LPM as standby
for AIIMS Bhubaneswer, AIIMS Patna, AIIMS Raipur & AIIMS Jodhpur - Minimum flow 6000-7000 LPM as primary and 6000-7000 LPM as standby
AIIMS Rishikesh - Minimum flow 4500-5500 LPM as primary and 4500-5500 LPM as standby

15. Existing Specification:

Para 4.1.1 Vacuum Pump Module:
Each vacuum pump shall be fitted with anti-vibration pads between the pump foot and mounting frame. The plant shall be fitted with duplex bacteria filter system. Each individual filter shall have the capacity to deliver full design flow such that one set is designated duty and the other will be standby. Bacteria filters shall have efficiency at least 99.999% when tested by the sodium flame method in accordance **with BS 3928:1969** utilising particles in the 0.02 to 2 micron size range. The pressure drop across each clean filter at 50% of the system design flow should not exceed 25 mm Hg (3 kPa) at a vacuum of 475mm of Hg (63 kPa). Bacteria filters shall be marked with the legend 'Bio-Hazard'.

Read as:
Para 4.1.1 Vacuum Pump Module:
Each vacuum pump shall be fitted with anti-vibration pads between the pump foot and mounting frame. The plant shall be fitted with duplex bacteria filter system. Each individual filter shall have the capacity to deliver full design flow such that one set is designated duty and the other will be standby. Bacteria filters shall have efficiency at least 99.999% when tested by the sodium flame method in accordance with **BS 3928:1969/respective standard** utilising particles in the 0.02 to 2 micron size range. The pressure drop across each clean filter at 50% of the system design flow should not exceed 25 mm Hg (3 kPa) at a vacuum of 475mm of Hg (63 kPa). Bacteria filters shall be marked with the legend 'Bio-Hazard'.

16. Existing Specification:

Para 4.1.2 Vacuum Receiver
The vacuum receiver shall be made of rust free corrosion resistant steel and fabricated as per **IS:2825** for a vacuum pressure of 760mmHg. It should include bypass valves, manual drain valves, vacuum gauge. Vacuum reservoir shall have total volume of at least 100 % of plant output in one minute in terms of free air aspired at normal working pressure.

Read as:
Para 4.1.2 Vacuum Receiver
The vacuum receiver shall be made of rust free corrosion resistant steel and fabricated **as per ASTM/BS/ISO/DIN standard** for a vacuum pressure of 760mmHg. It should include bypass valves, manual drain valves, vacuum gauge. Vacuum reservoir shall have total volume of at least 100 % of plant output in one minute in terms of free air aspired at normal working pressure.

17. Existing Specification:

Para: 4.1.3 System Controls
The control include individual self-protected combination motor controls with short circuit, single phase and thermal overload protection, individual control circuit transformers with fuse less primary and secondary protection, pressure sensors, temperature switches with reset

buttons, and an electronic controller to automatically change the operating sequence of the compressors. The system should have a status display to show the system pressure, elapsed time, maintenance interval, fault conditions, and silence button, lighted Hand-Off-Automatic selector switches and safety disconnect operating handles.

Read as:

Para: 4.1.3 System Controls

The control include individual self-protected combination motor controls with short circuit, single phase and thermal overload protection, individual control circuit transformers with fuse less primary and secondary protection, pressure sensors, temperature switches with reset buttons, and an electronic controller to automatically change the operating sequence of the compressors. The system should have a status display to show the system pressure, elapsed time, maintenance interval, fault conditions, and silence button, lighted Hand-Off-Automatic selector switches and safety disconnect operating handles**/NEMA as per NFPA.**

18. Existing Specification:

Para 4.3 Theatre Vacuum unit

It must consist of the following: - 1no. Suction Regulator and **2nos. 4000ml** polysulfone/ polycarbonate collection jar and both to be mounted on a trolley.

Read as:

Para 4.3 Theatre Vacuum unit

It must consist of the following: - 1no. Suction Regulator and **2 x 2000ml or more** polysulfone/ polycarbonate collection jar and both to be mounted on a trolley.

19. Existing Specification:

Para 5.1 Air Compressor (Imported)

Pentaplex /Qudraplex Rotary screw/scroll Continuous duty Compressed Air System with Desiccant Dryers. Air compressor with multistage air/oil filters or oil free compressor should be supplied.

All compressors to contain timed automatic drain valves for system purging control. All pressure receivers to contain timed automatic drain valves for system purging control

Read as:

Para 5.1 Air Compressor (Imported)

Rotary screw/scroll Continuous duty Compressed Air System with Desiccant Dryers. Air compressor with multistage air/oil filters **(Filters should be covered under warranty & CMC period and oil free air quality should be checked half yearly) or oil free compressor should be supplied.**

All compressors to contain timed automatic drain valves for system purging control. All pressure receivers to contain timed automatic drain valves for system purging control

20. Existing Specification:

Para 5.1.1. Compressor Modules

It should be Pentaplex/Quadruplex Medical Air Plant (Imported)of 7000 lpm (Package unit). The medical air plant shall fully comply with the requirements of the HTM 02-01/ NFPA 99 C/EN/DIN. It should be European CE/ UL listed.

Medical quality air shall be delivered at a nominal pressure of 400 kPa (4 bar) or 700 kPa(7 bar) gauge for supply of the hospital medical air system. **The medical air plant shall deliver both medical and surgical air, with a minimum total flow rate of 7000 l/min.** Compressor plant should be designed in such a way that compressors will switch on in a sequential manner as per flow demand.

Three/two identical air compressors should run to provide a flow rate of 7000lpm and two identical air compressors will be standby. The compressors should be standalone ones with independent power supply. It should comply with the HTM 02-01/ NFPA 99 C/EN/DIN/ ISO 7396-1).

Read as:

Para 5.1.1.Medical Air Plant (Imported) (Package unit).
The medical air plant shall fully comply with the requirements of the HTM 02-01/ NFPA 99 C/EN/DIN. It should be European CE/ UL listed.

Medical quality air shall be delivered at a nominal pressure of 400 kPa (4 bar) and 700 kPa(7 bar) gauge for supply of the hospital medical air system. **The medical air plant shall deliver both medical and surgical air, with a total minimum primary flow rate of 6000-7000 l/min and total minimum standby flow rate of 3000-3500l/min except AIIMS Bhopal. The minimum total primary flow rate for AIIMS Bhopal should be 7000-8000 l/min and total minimum standby flow rate should be 4000-4500 l/min.** Compressor plant should be designed in such a way that compressors will switch on in a sequential manner as per flow demand. The compressors should be standalone ones with independent power supply. It should comply with the HTM 02-01/ NFPA 99 C/EN/DIN/ ISO 7396-1).

21. Existing Specification:

Para 5.1.1. Compressor Modules
Each rotary screw/scroll compressors should be suitable for both continuous and frequent start/stop operation at a nominal outlet pressure of **13 bar** shall be provided. The duty compressors shall be automatically rotated by the plant control system to ensure even wear.

Read as:
Para 5.1.1. Compressor Modules
Each rotary screw/scroll compressors should be suitable for both continuous and frequent start/stop operation at a nominal outlet pressure of **11 bar** shall be provided. The duty compressors shall be automatically rotated by the plant control system to ensure even wear.

22. Existing Specification:

Para 5.1.1. Compressor Modules
Stage 1: Coalescing filter upstream of the desiccant dryer for removing liquid water, oil and oil aerosol down to 0.1mg/cu.m (0.1 ppm) and particles down to 1micron.
Stage 2: Particulate filter after the desiccant dryer for dust protection and removing particles down to 1 micron.
Stage 3: Bacteria filter for removing particles down to 0.01 micron.
Purity should be tested as per the standard

Read as:

Para 5.1.1. Compressor Modules

Stage 1: Coalescing filter upstream of the desiccant dryer for removing liquid water, oil and oil aerosol down to 0.1mg/cu.m (0.1 ppm) and particles down to 1micron.

Stage 2: Particulate filter after the desiccant dryer for dust protection and removing particles down to 1 micron.

Stage 3: Bacteria filter for removing particles down to 0.01 micron.

Added: Activated carbon filter: max remaining total oil content of 0.003 mg/m³, tested according to HTM02-01 and ISO 8573-5 & ISO12500-2 (if required in standards)

Purity should be tested as per the standard and Air quality should be as per European Pharmacopoeia/ US Pharmacopoeia

23. Existing Specification:

Para 6.1 Piping specifications

Copper pipe should be as per standard **BS: EN 13348 :2008** standards; Solid drawn, seamless, deoxidized, non-arsenical, half hard, tempered and degreased copper pipe conforming to the standard. All copper pipes should be degreased & delivered capped at both ends. The pipes should be accompanied with manufacturers test certificate for the physical properties & chemical composition.

Read as:

Para 6.1 Piping specifications

Copper pipe should be as per standard **BS: EN 13348 :2008/ ASTM B819 Latest Version standards**; Solid drawn, seamless, deoxidized, non-arsenical, half hard, tempered and degreased copper pipe conforming to the standard. All copper pipes should be degreased & delivered capped at both ends. The pipes should be accompanied with manufacturers test certificate for the physical properties & chemical composition.

24. Existing Specification:

Para 7.2 Medical Gas Alarm (Main & Area)

The medical gas central alarms should be capable of monitoring 6 medical gas services by means of pressure sensors which detect deviations from the normal operating limits of either pressure or medical vacuum. The area alarm should have a digital/analogue display of pressures. The medical gas area alarm should fully satisfy the HTM 02-01/ NFPA 99 C/EN/DIN requirements and should be **CE Certified or UL listed under Medical Devices Directive.**

Read as:

Para 7.2 Medical Gas Alarm (Main & Area)

The medical gas central alarms should be capable of monitoring 6 medical gas services by means of pressure sensors which detect deviations from the normal operating limits of either pressure or medical vacuum. The area alarm should have a digital/analogue display of pressures. The medical gas area alarm should fully satisfy the HTM 02-01/ NFPA 99 C/EN/DIN requirements and should be **European CE Certified or UL listed.**

25. Existing Specification:

Para 9.2 Horizontal and Vertical Bed Head Panel:

Added Para: The size of vertical & Horizontal bed head panel should be sufficient to accommodate all the services specified**(Approx 1800mm),** However the size and shape of panel should be as per the requirement of respective AIIMS. The design, color & drawing of panel should be approved by respective AIIMS before installation.

26. Existing Specification:

Para 11. AGSS - Conrol system:
AGSS design should be dependent upon flow rate and pressure drop characteristics of the individual components of a systems, it is essential that terminal units, remote controls and pump units. AGSS Remote Control indicator must be provided for each OT with the system.

Read as:
Para 11. AGSS - Conrol system:
AGSS design should be dependent upon flow rate and pressure drop characteristics of the individual components of a systems, it is essential that terminal units, **remote controls(If required) and pump units. AGSS Remote Control indicator (If required) should be provided for each OT with the system.**

Note: The major systems quoted by the bidder ie O2, N2O, CO2, Vacuum, Air & Alarm should comply to the single standard ie HTM 02-01/ NFPA 99 C/EN/DIN

- ***The BOQ for the supply of this system has been revised for all the consignees and is as below:***

BOQ FOR MGPS - AIIMS BHOPAL		
SN.	**Item Description**	**Quantity**
1	**LIQUID OXYGEN TANKS-20KL (1No) and 10KL (1 No)** (As per Technical Specification)	
1.1	**20**KL vessel, 10KL vessel, VIE's, AV coils and accessories **(Ownership basis – One time)**	**01 Set**
1.2	Installation and commissioning charges - **One time charges**	**Lump Sum**
1.3	Charges for laying of 1" copper line for Hospital block**. (Length will be charged as actuals at the rate quoted)**	**100 m**

1.4	Total Cost of **civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles, if required**(Steel structure for exposed lines with PVC pipe protected on 2" pole of 20 ft height, on concrete foundation at a spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement)	Per Trenching/ Support pole rate **– Lump Sum**
1.5	**Total Civil Works cost** a) Fencing in MS properly anchored and painted to withstand corrosion; b) Foundation for one number of **20** KL tank & 10 KL Tank. c) Gate 5m wide with double leaf & 1 m wicket gate d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system **h) any other, if required**	**Lump Sum**
1.6	Basic price of **Liquid Medical Oxygen** (including delivery charge) (Rate should be quoted for Per Kg. basis for 20KL/10KL – **refilling cost**)	**For 20KL/10 KL**
1.7	Fully Automatic control Panel for switching between Primary LMO **(20 KL)**, Secondary **(10 KL) and Emergency cylinder Bank as per technical specifications.**	01 Set
2	**Emergency Oxygen Supply Manifold System, (2x20 size**) (As per Technical Specification)	1 Set
2.1	**Fully Automatic Oxygen Control Panel System** (As per Technical Specification)	01 No.
2.2	**Oxygen Flow meter with Humidifier Bottle** (As per Technical Specification)	1000 Nos.
3	**Fully Automatic Manifold Control Panel for Nitrous Oxide** (As per Technical Specification)	01 No.
3.1	**Nitrous Oxide Manifold System, (2x10 size)** (As per Technical Specification)	01 Set
3.2	**Emergency Nitrous Oxide Manifold System (2x4 size) with control panel** (As per Technical Specification)	01 Set
4	**Medical Air Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
4.1	Air Filtration System	02 Sets
4.2	Pressure reducing station	02 Sets
4.3	Desiccant Air Dryer	02 Sets

5	**Medical Vacuum Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
6	**Ward Vacuum Unit** (As per Technical Specification)	1000 Nos.
7	**Theater Vaccum Unit for Operation Theaters** (As per Technical Specification)	40 Nos.
8	**Fully Automatic Manifold Control Panel for CO2** (As per Technical Specification).	01 No.
8.1	**CO2 Manifold System, (2x4 size)** (As per Technical Specification)	01 Set
9	**Duplex AGSS System** (As per Technical Specification)	02 Sets
10	**Copper Pipes** (As per Technical Specification)	
	108 mm OD x 1.5 mm thick	100 m
	76 mm OD x 1.5 mm thick	700 m
	54mm OD X 1.2mm thick	1000 m
	42mm OD X 1.2mm thick	2000 m
	35mm OD X 1.2mm thick	1100 m
	28mm OD X 1 mm thick	4000 m
	22mm OD X 1 mm thick	14000 m
	15mm OD X 1 mm thick	11000 m
	12mm OD X 1 mm thick	14000 m
11	**Gas Outlet Points/ Terminal Units with probe** (As per Technical Specification)	
	Oxygen outlet with probe	1360 Nos.
	Nitrous Oxide outlet with probe	12 Nos.
	Medical Air 4 outlet with probe	450 Nos.
	Vacuum outlet with probe	1360 Nos.
	CO2 outlet with probe	4 Nos.
	AGSS outlet with probe	12 Nos.
12	**AREA VALVE BOX (WITHOUT VALVES)** (As per Technical Specification)	
	Valve Box - 3 Gas Service with NIST Connection	80 Nos.
	Valve Box - 5 Gas Service with NIST Connection	60 Nos.
	Valve Box - 6 Gas Service with NIST Connection	10 Nos.
13	**MEDICAL GAS ALARM PANEL** (As per Technical Specification).	
13.1	Medical Gas Area Alarm for 2 services (Oxygen and Vacuum)	60 Nos.
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 Air and Vacuum)	50 Nos.
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 Air , AGSS ,and Vacuum)	35 Nos.

13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 Air ,AIR 7 bar AGSS ,and Vacuum)	10 Nos.
13.5	Master Alarm Panel (As per Technical Specification)	01 No.
14	**LINE ISOLATION VALVES**	
	12 mm ball valve	340 Nos.
	15 mm ball valve	340 Nos.
	22 mm ball valve	80 Nos.
	28 mm ball valve	40 Nos.
	35 mm ball valve	30 Nos.
	42 mm ball valve	40 Nos.
	54 mm ball valve	20 Nos.
	76 mm ball valve	10 Nos.
	108 mm ball valve	03 Nos.
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards. **200m for O2, Air & Vaccum** **50m for Co2,AGSS, N2O**	**200m/50m (Each)**
16	Supply of O2 cylinders-Class D type bulk	100 Nos.
17	Supply of N2O cylinders-Class D type bulk	50 Nos.
18	Supply of CO2 cylinders-Class D type	10 Nos.
19	Bed Head Vertical Wall Panel	100 Nos.
20	Bed Head Horizontal Wall Panel	320 Nos.
21	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant	Lump Sum

Note: For AIIMS Bhopal all work needs to be done in same time. The entire MGPS work need to be completed within 300 days as mentioned in the list of requirement.

BOQ FOR MGPS - AIIMS BHUBANESWAR

SN.	Item Description	Quantity
1	**LIQUID OXYGEN TANKS-20KL (1No) and 10KL (1 No)** (As per Technical Specification)	
1.1	**20**KL vessel, 10KL vessel, VIE's, AV coils and accessories **(Ownership basis – One time)**	**01 Set**
1.2	Installation and commissioning charges - **One time charges**	**Lump Sum**
1.3	Charges for laying of 1" copper line for Hospital block**. (Length will be charged as actuals at the rate quoted)**	**100 m**

1.4	Total Cost of **civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles, if required**(Steel structure for exposed lines with PVC pipe protected on 2" pole of 20 ft height, on concrete foundation at a spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement)	Per Trenching/ Support pole rate **– Lump Sum**
1.5	**Total Civil Works cost** a) Fencing in MS properly anchored and painted to withstand corrosion; b) Foundation for one number of **20** KL tank & 10 KL Tank. c) Gate 5m wide with double leaf & 1 m wicket gate d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system **h) any other, if required**	**Lump Sum**
1.6	Basic price of **Liquid Medical Oxygen** (including delivery charge) (Rate should be quoted for Per Kg. basis for 20KL/10KL – **refilling cost**)	**For 20KL/10 KL**
1.7	Fully Automatic control Panel for switching between Primary LMO **(20 KL)**, Secondary **(10 KL) and Emergency cylinder Bank as per technical specifications.**	01 Set
2	**Emergency Oxygen Supply Manifold System, (2x20 size**) (As per Technical Specification)	1 Set
2.1	**Fully Automatic Oxygen Control Panel System** (As per Technical Specification)	01 No.
2.2	**Oxygen Flow meter with Humidifier Bottle** (As per Technical Specification)	760 Nos.
3	**Fully Automatic Manifold Control Panel for Nitrous Oxide** (As per Technical Specification)	01 No.
3.1	**Nitrous Oxide Manifold System, (2x10 size)** (As per Technical Specification)	01 Set
3.2	**Emergency Nitrous Oxide Manifold System (2x4 size) with control panel** (As per Technical Specification)	01 Set
4	**Medical Air Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
4.1	Air Filtration System	02 Sets
4.2	Pressure reducing station	02 Sets
4.3	Desiccant Air Dryer	02 Sets

5	**Medical Vacuum Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
6	**Ward Vacuum Unit** (As per Technical Specification)	760 Nos.
7	**Theatre Vacuum Unit for Operation Theatres** (As per Technical Specification)	32 Nos.
8	**Fully Automatic Manifold Control Panel for CO2** (As per Technical Specification).	01 No.
8.1	**CO2 Manifold System, (2x4 size)** (As per Technical Specification)	01 Set
9	**Duplex AGSS System** (As per Technical Specification)	02 Sets
10	**Copper Pipes** (As per Technical Specification)	
	108 mm OD x 1.5 mm thick	300 m
	76 mm OD x 1.5 mm thick	600 m
	54mm OD X 1.2mm thick	200 m
	42mm OD X 1.2mm thick	2500 m
	35mm OD X 1.2mm thick	3000 m
	28mm OD X 1 mm thick	3000 m
	22mm OD X 1 mm thick	4000 m
	15mm OD X 1 mm thick	10000 m
	12mm OD X 1 mm thick	12000 m
11	**Gas Outlet Points/ Terminal Units with probe** (As per Technical Specification)	
	Oxygen outlet with probe	1100 Nos.
	Nitrous Oxide outlet with probe	02 Nos.
	Medical Air 4 outlet with probe	300 Nos.
	Vacuum outlet with probe	1100 Nos.
	CO2 outlet with probe	04 Nos.
	AGSS outlet with probe	02 Nos.
12	**AREA VALVE BOX (WITHOUT VALVES)** (As per Technical Specification)	
	Valve Box - 3 Gas Service with NIST Connection	50 Nos.
	Valve Box - 5 Gas Service with NIST Connection	24 Nos.
	Valve Box - 6 Gas Service with NIST Connection	06 Nos.
13	**MEDICAL GAS ALARM PANEL** (As per Technical Specification).	
13.1	Medical Gas Area Alarm for 2 services (Oxygen and Vacuum)	15 Nos.
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 Air and Vacuum)	35 Nos.
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 Air , AGSS ,and Vacuum)	24 Nos.

13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 Air ,AIR 7 bar AGSS ,and Vacuum)	06 Nos.
13.5	Master Alarm Panel (As per Technical Specification)	01 No.
14	**LINE ISOLATION VALVES**	
	12 mm ball valve	240 Nos.
	15 mm ball valve	210 Nos.
	22 mm ball valve	70 Nos.
	28 mm ball valve	30 Nos.
	35 mm ball valve	35 Nos.
	42 mm ball valve	20 Nos.
	54 mm ball valve	10 Nos.
	76 mm ball valve	05 Nos.
	108 mm ball valve	02 Nos.
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards. **150m for O2, Air & Vacuum** **30m for Co2,AGSS, N2O**	**150m/30m (Each)**
16	Supply of O2 cylinders-Class D type bulk	100 Nos.
17	Supply of N2O cylinders-Class D type bulk	50 Nos.
18	Supply of CO2 cylinders-Class D type	10 Nos.
19	Bed Head Vertical Wall Panel	100 Nos.
20	Bed Head Horizontal Wall Panel	200 Nos.
21	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant	Lump Sum

Note: **For AIIMS Bhubaneswar, under Phase-1,i.e, in first 200 days all MOTs covered under Phase I (out of 25 MOT 14 MOTs are covered under Phase I please refer MOT Document AIIMS -15) , ALL ICUs in the Hospital Building, all High Dependent Units, 1 No. Block of private ward, 0 Level of Hospital Building, 400 Beds in patients ward in Hospital Building should be made functional**. Balance work needs to be done in next 100 days.

BOQ FOR MGPS - AIIMS JODHPUR

SN.	Item Description	Quantity
1	**LIQUID OXYGEN TANKS-20KL (1No) and 10KL (1 No)** (As per Technical Specification)	
1.1	**20**KL vessel, 10KL vessel, VIE's, AV coils and accessories **(Ownership basis – One time)**	**01 Set**
1.2	Installation and commissioning charges - **One time charges**	**Lump Sum**
1.3	Charges for laying of 1" copper line for Hospital block**. (Length will be charged as actuals at the rate quoted)**	**100 m**
1.4	Total Cost of **civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles, if required**(Steel structure for exposed lines with PVC pipe protected on 2" pole of 20 ft height, on concrete foundation at a spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement)	Per Trenching/ Support pole rate **– Lump Sum**
1.5	**Total Civil Works cost** a) Fencing in MS properly anchored and painted to withstand corrosion; b) Foundation for one number of **20** KL tank & 10 KL Tank. c) Gate 5m wide with double leaf & 1 m wicket gate d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system **h) any other, if required**	**Lump Sum**
1.6	Basic price of **Liquid Medical Oxygen** (including delivery charge) (Rate should be quoted for Per Kg. basis for 20KL/10KL – **refilling cost**)	**For 20KL/10 KL**
1.7	Fully Automatic control Panel for switching between Primary LMO **(20 KL)**, Secondary **(10 KL) and Emergency cylinder Bank as per technical specifications.**	01 Set
2	**Emergency Oxygen Supply Manifold System, (2x20 size**) (As per Technical Specification)	1 Set
2.1	**Fully Automatic Oxygen Control Panel System** (As per Technical Specification)	01 No.
2.2	**Oxygen Flow meter with Humidifier Bottle** (As per Technical Specification)	710 Nos.

3	**Fully Automatic Manifold Control Panel for Nitrous Oxide** (As per Technical Specification)	01 No.
3.1	**Nitrous Oxide Manifold System, (2x10 size)** (As per Technical Specification)	01 Set
3.2	**Emergency Nitrous Oxide Manifold System (2x4 size) with control panel** (As per Technical Specification)	01 Set
4	**Medical Air Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
4.1	Air Filtration System	02 Sets
4.2	Pressure reducing station	02 Sets
4.3	Desiccant Air Dryer	02 Sets
5	**Medical Vacuum Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
6	**Ward Vacuum Unit** (As per Technical Specification)	710 Nos.
7	**Theatre Vacuum Unit for Operation Theatres** (As per Technical Specification)	34 Nos.
8	**Fully Automatic Manifold Control Panel for CO2** (As per Technical Specification).	01 No.
8.1	**CO2 Manifold System, (2x4 size)** (As per Technical Specification)	01 Set
9	**Duplex AGSS System** (As per Technical Specification)	02 Sets
10	**Copper Pipes** (As per Technical Specification)	
	108 mm OD x 1.5 mm thick	400 m
	76 mm OD x 1.5 mm thick	400 m
	54mm OD X 1.2mm thick	1500 m
	42mm OD X 1.2mm thick	2000 m
	35mm OD X 1.2mm thick	4000 m
	28mm OD X 1 mm thick	4000 m
	22mm OD X 1 mm thick	6000 m
	15mm OD X 1 mm thick	7000 m
	12mm OD X 1 mm thick	11000 m
11	**Gas Outlet Points/ Terminal Units with probe** (As per Technical Specification)	
	Oxygen outlet with probe	1060 Nos.
	Nitrous Oxide outlet with probe	03 Nos.
	Medical Air 4 outlet with probe	300 Nos.
	Vacuum outlet with probe	1060 Nos.
	CO2 outlet with probe	04 Nos.

	AGSS outlet with probe	03 Nos.
12	**AREA VALVE BOX (WITHOUT VALVES)** (As per Technical Specification)	
	Valve Box - 3 Gas Service with NIST Connection	40 Nos.
	Valve Box - 5 Gas Service with NIST Connection	28 Nos.
	Valve Box - 6 Gas Service with NIST Connection	06 Nos.
13	**MEDICAL GAS ALARM PANEL** (As per Technical Specification).	
13.1	Medical Gas Area Alarm for 2 services (Oxygen and Vacuum)	40 Nos.
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 Air and Vacuum)	40 Nos.
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 Air , AGSS ,and Vacuum)	28 Nos.
13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 Air ,AIR 7 bar AGSS ,and Vacuum)	06 Nos.
13.5	Master Alarm Panel (As per Technical Specification)	01 No.
14	**LINE ISOLATION VALVES**	
	12 mm ball valve	300 Nos.
	15 mm ball valve	220 Nos.
	22 mm ball valve	80 Nos.
	28 mm ball valve	35 Nos.
	35 mm ball valve	10 Nos.
	42 mm ball valve	10 Nos.
	54 mm ball valve	20 Nos.
	76 mm ball valve	10 Nos.
	108 mm ball valve	02 Nos.
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards. **150m for O2, Air & Vacuum** **30m for Co2,AGSS, N2O**	**150m/30m (Each)**
16	Supply of O2 cylinders-Class D type bulk	100 Nos.
17	Supply of N2O cylinders-Class D type bulk	50 Nos.
18	Supply of CO2 cylinders-Class D type	10 Nos.
19	Bed Head Vertical Wall Panel	100 Nos.
20	Bed Head Horizontal Wall Panel	150 Nos.
21	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant	Lump Sum

Note: **For AIIMS Jodhpur, under Phase-1,i.e, in first 200 days the supply, installation and commissioning of MGPS equipment viz. Compressor, Vacuum unit and Manifold room, MGPS Outlets at 1, 2 & 3 Floor Wards , 4 OT,s on 2 Floor and in labour rooms, High Risk pregnancy monitoring**

rooms adjoining the OT on 2nd Floor, 10 OT,s on 4 Floor, Pre & Postoperative recovery ward on 4 Floor, ICU in 3 Floor of DT & OT Block should be made functional . Balance work needs to be done in next 100 days.

BOQ FOR MGPS - AIIMS PATNA

SN.	Item Description	Quantity
1	**LIQUID OXYGEN TANKS-20KL (1No) and 10KL (1 No)** (As per Technical Specification)	
1.1	**20**KL vessel, 10KL vessel, VIE's, AV coils and accessories **(Ownership basis – One time)**	**01 Set**
1.2	Installation and commissioning charges - **One time charges**	**Lump Sum**
1.3	Charges for laying of 1" copper line for Hospital block**. (Length will be charged as actuals at the rate quoted)**	**100 m**
1.4	Total Cost of **civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles, if required**(Steel structure for exposed lines with PVC pipe protected on 2" pole of 20 ft height, on concrete foundation at a spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement)	Per Trenching/ Support pole rate **– Lump Sum**
1.5	**Total Civil Works cost** a) Fencing in MS properly anchored and painted to withstand corrosion; b) Foundation for one number of **20** KL tank & 10 KL Tank. c) Gate 5m wide with double leaf & 1 m wicket gate d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system **h) any other, if required**	**Lump Sum**
1.6	Basic price of **Liquid Medical Oxygen** (including delivery charge) (Rate should be quoted for Per Kg. basis for 20KL/10KL – **refilling cost**)	**For 20KL/10 KL**
1.7	Fully Automatic control Panel for switching between Primary LMO **(20 KL)**, Secondary **(10 KL) and Emergency cylinder Bank as per technical specifications.**	01 Set
2	**Emergency Oxygen Supply Manifold System, (2x20 size**) (As per Technical Specification)	1 Set

2.1	**Fully Automatic Oxygen Control Panel System** (As per Technical Specification)	01 No.
2.2	**Oxygen Flow meter with Humidifier Bottle** (As per Technical Specification)	900 Nos.
3	**Fully Automatic Manifold Control Panel for Nitrous Oxide** (As per Technical Specification)	01 No.
3.1	**Nitrous Oxide Manifold System, (2x10 size)** (As per Technical Specification)	01 Set
3.2	**Emergency Nitrous Oxide Manifold System (2x4 size) with control panel** (As per Technical Specification)	01 Set
4	**Medical Air Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
4.1	Air Filtration System	02 Sets
4.2	Pressure reducing station	02 Sets
4.3	Desiccant Air Dryer	02 Sets
5	**Medical Vacuum Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
6	**Ward Vacuum Unit** (As per Technical Specification)	900 Nos.
7	**Theatre Vacuum Unit for Operation Theatres** (As per Technical Specification)	36 Nos.
8	**Fully Automatic Manifold Control Panel for CO2** (As per Technical Specification).	01 No.
8.1	**CO2 Manifold System, (2x4 size)** (As per Technical Specification)	01 Set
9	**Duplex AGSS System** (As per Technical Specification)	02 Sets
10	**Copper Pipes** (As per Technical Specification)	
	108 mm OD x 1.5 mm thick	200 m
	76 mm OD x 1.5 mm thick	400 m
	54mm OD X 1.2mm thick	1000 m
	42mm OD X 1.2mm thick	1200 m
	35mm OD X 1.2mm thick	2000 m
	28mm OD X 1 mm thick	3000 m
	22mm OD X 1 mm thick	6000 m
	15mm OD X 1 mm thick	8000 m
	12mm OD X 1 mm thick	12500 m

11	**Gas Outlet Points/ Terminal Units with probe** (As per Technical Specification)	
	Oxygen outlet with probe	1100 Nos.
	Nitrous Oxide outlet with probe	06 Nos.
	Medical Air 4 outlet with probe	200 Nos.
	Vacuum outlet with probe	1100 Nos.
	CO2 outlet with probe	04 Nos.
	AGSS outlet with probe	06 Nos.
12	**AREA VALVE BOX (WITHOUT VALVES)** (As per Technical Specification)	
	Valve Box - 3 Gas Service with NIST Connection	20 Nos.
	Valve Box - 5 Gas Service with NIST Connection	30 Nos.
	Valve Box - 6 Gas Service with NIST Connection	06 Nos.
13	**MEDICAL GAS ALARM PANEL** (As per Technical Specification).	
13.1	Medical Gas Area Alarm for 2 services (Oxygen and Vacuum)	40 Nos.
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 Air and Vacuum)	20 Nos.
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 Air , AGSS ,and Vacuum)	30 Nos.
13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 Air ,AIR 7 bar AGSS, and Vacuum)	06 Nos.
13.5	Master Alarm Panel (As per Technical Specification)	01 No.
14	**LINE ISOLATION VALVES**	
	12 mm ball valve	320 Nos.
	15 mm ball valve	220 Nos.
	22 mm ball valve	120 Nos.
	28 mm ball valve	20 Nos.
	35 mm ball valve	25 Nos.
	42 mm ball valve	15 Nos.
	54 mm ball valve	10 Nos.
	76 mm ball valve	12 Nos.
	108 mm ball valve	02 Nos.
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards. **150m for O2, Air & Vacuum** **30m for Co2,AGSS, N2O**	**150m/30m (Each)**
16	Supply of O2 cylinders-Class D type bulk	100 Nos.
17	Supply of N2O cylinders-Class D type bulk	50 Nos.
18	Supply of CO2 cylinders-Class D type	10 Nos.
19	Bed Head Vertical Wall Panel	100 Nos.
20	Bed Head Horizontal Wall Panel	150 Nos.

21	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant	Lump Sum

Note: For AIIMS Patna, under Phase-1,i.e, in first 200 days, 13 OT' (4 OT s in Trauma Block, 4 OT in hospital block ground floor, 5 OTs in D Block Hospital Building) , CCU, Pre & Post- Operative Ward in 6 Floor at Trauma & Hospital Block should be made functional. Balance work needs to be done in next 100 days.

BOQ FOR MGPS - AIIMS RAIPUR

SN.	Item Description	Quantity
1	**LIQUID OXYGEN TANKS-20KL (1No) and 10KL (1 No)** (As per Technical Specification)	
1.1	**20**KL vessel, 10KL vessel, VIE's, AV coils and accessories **(Ownership basis – One time)**	**01 Set**
1.2	Installation and commissioning charges - **One time charges**	**Lump Sum**
1.3	Charges for laying of 1" copper line for Hospital block**. (Length will be charged as actuals at the rate quoted)**	**100 m**
1.4	Total Cost of **civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles, if required**(Steel structure for exposed lines with PVC pipe protected on 2" pole of 20 ft height, on concrete foundation at a spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement)	Per Trenching/ Support pole rate **– Lump Sum**
1.5	**Total Civil Works cost** a) Fencing in MS properly anchored and painted to withstand corrosion; b) Foundation for one number of **20** KL tank & 10 KL Tank. c) Gate 5m wide with double leaf & 1 m wicket gate d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system **h) any other, if required**	**Lump Sum**
1.6	Basic price of **Liquid Medical Oxygen** (including delivery charge) (Rate should be quoted for Per Kg. basis for 20KL/10KL – **refilling cost**)	**For 20KL/10 KL**
1.7	Fully Automatic control Panel for switching between Primary LMO **(20 KL)**, Secondary **(10 KL) and Emergency cylinder Bank as per technical specifications.**	01 Set

2	**Emergency Oxygen Supply Manifold System, (2x20 size**) (As per Technical Specification)	1 Set
2.1	**Fully Automatic Oxygen Control Panel System** (As per Technical Specification)	01 No.
2.2	**Oxygen Flow meter with Humidifier Bottle** (As per Technical Specification)	900 Nos.
3	**Fully Automatic Manifold Control Panel for Nitrous Oxide** (As per Technical Specification)	01 No.
3.1	**Nitrous Oxide Manifold System, (2x10 size)** (As per Technical Specification)	01 Set
3.2	**Emergency Nitrous Oxide Manifold System (2x4 size) with control panel** (As per Technical Specification)	01 Set
4	**Medical Air Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
4.1	Air Filtration System	02 Sets
4.2	Pressure reducing station	02 Sets
4.3	Desiccant Air Dryer	02 Sets
5	**Medical Vacuum Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
6	**Ward Vacuum Unit** (As per Technical Specification)	900 Nos.
7	**Theatre Vacuum Unit for Operation Theatres** (As per Technical Specification)	33 Nos.
8	**Fully Automatic Manifold Control Panel for CO2** (As per Technical Specification).	01 No.
8.1	**CO2 Manifold System, (2x4 size)** (As per Technical Specification)	01 Set
9	**Duplex AGSS System** (As per Technical Specification)	02 Sets
10	**Copper Pipes** (As per Technical Specification)	
	108 mm OD x 1.5 mm thick	300 m
	76 mm OD x 1.5 mm thick	400 m
	54mm OD X 1.2mm thick	1000 m
	42mm OD X 1.2mm thick	1200 m
	35mm OD X 1.2mm thick	7000 m
	28mm OD X 1 mm thick	3000 m
	22mm OD X 1 mm thick	10000 m

	15mm OD X 1 mm thick	8000 m
	12mm OD X 1 mm thick	12000 m
11	**Gas Outlet Points/ Terminal Units with probe** (As per Technical Specification)	
	Oxygen outlet with probe	1010 Nos.
	Nitrous Oxide outlet with probe	02 Nos.
	Medical Air 4 outlet with probe	160 Nos.
	Vacuum outlet with probe	1010 Nos.
	CO2 outlet with probe	04 Nos.
	AGSS outlet with probe	02 Nos.
12	**AREA VALVE BOX (WITHOUT VALVES)** (As per Technical Specification)	
	Valve Box - 3 Gas Service with NIST Connection	20 Nos.
	Valve Box - 5 Gas Service with NIST Connection	24 Nos.
	Valve Box - 6 Gas Service with NIST Connection	06 Nos.
13	**MEDICAL GAS ALARM PANEL** (As per Technical Specification).	
13.1	Medical Gas Area Alarm for 2 services (Oxygen and Vacuum)	40 Nos.
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 Air and Vacuum)	20 Nos.
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 Air , AGSS ,and Vacuum)	24 Nos.
13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 Air ,AIR 7 bar AGSS ,and Vacuum)	06 Nos.
13.5	Master Alarm Panel (As per Technical Specification)	01 No.
14	**LINE ISOLATION VALVES**	
	12 mm ball valve	300 Nos.
	15 mm ball valve	230 Nos.
	22 mm ball valve	90 Nos.
	28 mm ball valve	65 Nos.
	35 mm ball valve	10 Nos.
	42 mm ball valve	15 Nos.
	54 mm ball valve	10 Nos.
	76 mm ball valve	10 Nos.
	108 mm ball valve	03 Nos.
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards. **150m for O2, Air & Vacuum** **30m for Co2,AGSS, N2O**	**150m/30m (Each)**
16	Supply of O2 cylinders-Class D type bulk	100 Nos.
17	Supply of N2O cylinders-Class D type bulk	50 Nos.
18	Supply of CO2 cylinders-Class D type	10 Nos.

19	Bed Head Vertical Wall Panel	100 Nos.
20	Bed Head Horizontal Wall Panel	200 Nos.
21	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant	Lump Sum

Note: For AIIMS Raipur, under Phase-1, i.e, in first 200 days ,10 OT's on 4 Floor, 2 OT's on ground Floor of A Block should be made functional. Balance work needs to be done in next 100 days

BOQ FOR MGPS - AIIMS RISHIKESH

SN.	Item Description	Quantity
1	**LIQUID OXYGEN TANKS-20KL (1No) and 10KL (1 No)** (As per Technical Specification)	
1.1	**20**KL vessel, 10KL vessel, VIE's, AV coils and accessories **(Ownership basis – One time)**	**01 Set**
1.2	Installation and commissioning charges - **One time charges**	**Lump Sum**
1.3	Charges for laying of 1" copper line for Hospital block**. (Length will be charged as actuals at the rate quoted)**	**100 m**
1.4	Total Cost of **civil construction for running the pipeline from LO plant to Hospital block either by trenching or by supporting poles, if required**(Steel structure for exposed lines with PVC pipe protected on 2" pole of 20 ft height, on concrete foundation at a spacing of 3 m. 1" copper tubing inserted in 1.5" PVC/ HDP heat resistant pipe clamped on support at the top of the pole. PVC pipes sealed by 1.5" PVC coupling & PVC cement)	Per Trenching/ Support pole rate **– Lump Sum**
1.5	**Total Civil Works cost** a) Fencing in MS properly anchored and painted to withstand corrosion; b) Foundation for one number of **20** KL tank & 10 KL Tank. c) Gate 5m wide with double leaf & 1 m wicket gate d) 2 no: s of 10 kg DCP fire extinguishers e) 4 no. s of Fire buckets f) 8 no: s of sodium vapour lamps on poles g) Signage for the system **h) any other, if required**	**Lump Sum**
1.6	Basic price of **Liquid Medical Oxygen** (including delivery charge) (Rate should be quoted for Per Kg. basis for 20KL/10KL – **refilling cost**)	**For 20KL/10 KL**
1.7	Fully Automatic control Panel for switching between Primary LMO **(20 KL)**, Secondary **(10 KL) and Emergency cylinder Bank as per technical specifications.**	01 Set

2	**Emergency Oxygen Supply Manifold System, (2x20 size**) (As per Technical Specification)	1 Set
2.1	**Fully Automatic Oxygen Control Panel System** (As per Technical Specification)	01 No.
2.2	**Oxygen Flow meter with Humidifier Bottle** (As per Technical Specification)	620 Nos.
3	**Fully Automatic Manifold Control Panel for Nitrous Oxide** (As per Technical Specification)	01 No.
3.1	**Nitrous Oxide Manifold System, (2x10 size)** (As per Technical Specification)	01 Set
3.2	**Emergency Nitrous Oxide Manifold System (2x4 size) with control panel** (As per Technical Specification)	01 Set
4	**Medical Air Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
4.1	Air Filtration System	02 Sets
4.2	Pressure reducing station	02 Sets
4.3	Desiccant Air Dryer	02 Sets
5	**Medical Vacuum Plant (Package Unit) including electrical control panel** (As per Technical Specification)	01 Set
6	**Ward Vacuum Unit** (As per Technical Specification)	620 Nos.
7	**Theatre Vacuum Unit for Operation Theatres** (As per Technical Specification)	24 Nos.
8	**Fully Automatic Manifold Control Panel for CO2** (As per Technical Specification).	01 No.
8.1	**CO2 Manifold System, (2x4 size)** (As per Technical Specification)	01 Set
9	**Duplex AGSS System** (As per Technical Specification)	02 Sets
10	**Copper Pipes** (As per Technical Specification)	
	108 mm OD x 1.5 mm thick	250 m
	76 mm OD x 1.5 mm thick	300 m
	54mm OD X 1.2mm thick	600 m
	42mm OD X 1.2mm thick	2000 m
	35mm OD X 1.2mm thick	800 m
	28mm OD X 1 mm thick	3500 m
	22mm OD X 1 mm thick	8000 m

	15mm OD X 1 mm thick	6000 m
	12mm OD X 1 mm thick	8000 m
11	**Gas Outlet Points/ Terminal Units with probe** (As per Technical Specification)	
	Oxygen outlet with probe	775 Nos.
	Nitrous Oxide outlet with probe	02 Nos.
	Medical Air 4 outlet with probe	122 Nos.
	Vacuum outlet with probe	775 Nos.
	CO2 outlet with probe	04 Nos.
	AGSS outlet with probe	02 Nos.
12	**AREA VALVE BOX (WITHOUT VALVES)** (As per Technical Specification)	
	Valve Box - 3 Gas Service with NIST Connection	20 Nos.
	Valve Box - 5 Gas Service with NIST Connection	21 Nos.
	Valve Box - 6 Gas Service with NIST Connection	04 Nos.
13	**MEDICAL GAS ALARM PANEL** (As per Technical Specification).	
13.1	Medical Gas Area Alarm for 2 services (Oxygen and Vacuum)	30 Nos.
13.2	Medical Gas Area Alarm for 3 services (Oxygen, MA4 Air and Vacuum)	26 Nos.
13.3	Medical Gas Area Alarm 5 services (Oxygen, N2O, MA4 Air , AGSS ,and Vacuum)	21 Nos.
13.4	Medical Gas Area Alarm 6 services (Oxygen, N2O, MA4 Air ,AIR 7 bar AGSS ,and Vacuum)	04 Nos.
13.5	Master Alarm Panel (As per Technical Specification)	01 No.
14	**LINE ISOLATION VALVES**	
	12 mm ball valve	170 Nos.
	15 mm ball valve	120 Nos.
	22 mm ball valve	30 Nos.
	28 mm ball valve	15 Nos.
	35 mm ball valve	05 Nos.
	42 mm ball valve	20 Nos.
	54 mm ball valve	15 Nos.
	76 mm ball valve	05 Nos.
	108 mm ball valve	02 Nos.
15	Supply installation testing and commissioning of Medical gas hose assemblies Hoses shall be color coded throughout their length as specified in British standards. **150m for O2, Air & Vacuum** **20m for Co2,AGSS, N2O**	**100m/20m (Each)**
16	Supply of O2 cylinders-Class D type bulk	100 Nos.
17	Supply of N2O cylinders-Class D type bulk	50 Nos.
18	Supply of CO2 cylinders-Class D type	10 Nos.

19	Bed Head Vertical Wall Panel	100 Nos.
20	Bed Head Horizontal Wall Panel	100 Nos.
21	Electric wiring inside the gas manifold and plant room including control panel for Vacuum plant & Air plant	Lump Sum

Note: For AIIMS Rishikesh, under Phase-1,i.e, in first 200 days , Medical Gas Plant Room, 10 OT's, ICU at B6 Block, Fifth Floor Hospital Building , OPD 3 & 4 Floor should be made functional. Balance work needs to be done in next 100 days.

Section – IX
Qualification Criteria

1. For:-

6. Financial Status: Eligible Bidders should not have incurred any loss in more than 2 years during the last five years ending 31st March 2015. Audited Profit & Loss account and Balance Sheet (duly notarized copies) for the immediate last five consecutive financial years should be submitted along with the bid

Read as:-

6. Financial Status: Eligible Bidders should not have incurred any loss in more than 2 years during the last five years ending **31st March 2015, 30th June 2015, 30th September 2015 or 31st December 2015 or any other month as applicable.** Audited Profit & Loss account and Balance Sheet (duly notarized copies) for the immediate last five consecutive financial years should be submitted along with the bid.

Added Para:

Whoever meets the qualification requirement need to quote directly. If the Indian subsidiary is meeting all the qualification parameter, they can quote directly or else the foreign principal can quote directly and they may mention in their bid that services will be rendered through their Indian offices in India. However, they will be entirely responsible for execution of the contract as per terms and conditions and scope of services defined in the TED.

2. For:-

7. Manufacturer Authorization:

Eligible bidders should submit a mandatory letter of authority from the Foreign Principal / Manufacturer, mentioning country of origin with name of manufacturing company for major products quoted by them.

For the following major items, Manufacturer's Authorization as per Section XIV- A should be submitted:

1	Fully Automatic Oxygen Control Panel
2	Oxygen Flow meter
3	Fully Automatic Nitrous Oxide Control Panel
4	Fully Automatic Control panel for CO2 System
5	VACUUM SYSTEMS
6	MEDICAL AND SURGICAL AIR SYSTEM
7	ALARM SYSTEM
8	AREA VALVE SERVICE UNIT
9	BED HEAD PANELS
10	GAS OUTLETS
11	AGSS (Anesthetic Gas Scavenging System)

For all the other items, Manufacturer's Authorization as per Section XIV- B should be submitted.

Read As:-

7. Manufacturer Authorization:

Eligible bidders should submit a mandatory letter of authority from the Foreign Principal / Manufacturer, mentioning country of origin with name of manufacturing company for major products quoted by them.

For the following major items, Manufacturer's Authorization as per Section XIV- A should be submitted:

1	Fully Automatic Oxygen Control Panel
2	***Deleted***
3	Fully Automatic Nitrous Oxide Control Panel
4	Fully Automatic Control panel for CO2 System
5	VACUUM SYSTEMS
6	MEDICAL AND SURGICAL AIR SYSTEM
7	ALARM SYSTEM
8	***Deleted***
9	***Deleted***
10	GAS OUTLETS
11	AGSS (Anesthetic Gas Scavenging System)

For all the other items, Manufacturer's Authorization as per Section XIV- B should be submitted.

Added Para:

Bidder must in his bid clearly spell out what product and technical configuration he is quoting against the tender requirement. The manufacturer of the quoted product should also be binding legally to perform against the said contract including warranty and CMC terms.

SECTION – XI
PRICE SCHEDULE

B) PRICE SCHEDULE FOR GOODS TO BE IMPORTED FROM ABROAD

For:-

Note: -

4. Custom duty @ 11.64% and 2% C& F charges will be added to the CIP price to arrive at the DDP price for evaluation purpose.

Read As:-

4. Custom duty **@ 16.27%** and 2% C& F charges will be added to the CIP price to arrive at the DDP price for evaluation purpose.

PROFORMA 'A'
PROFORMA FOR PERFORMANCE STATEMENT

Added Para:

Bidder may submit performance certificate duly linked mentioning order number, date of delivery, installation, commissioning and value by the end user.

All other contents of the tender enquiry including terms & conditions remain unaltered.

Note: Prospective Bidders are also advised to check the website regularly prior to the closing date and time of online submission of bids

The representation made by the bidders for MOT, MGPS and CSSD are enumerated as under along with the recommendation of competent authority

Sl.No	Tender Specification	Representation	Decision by the committee
1	Bidders should have successfully executed globally in last five years from the date of tender opening, similar turnkey project of value, equivalent to or exceeding 50% of the estimated tender value.	Similar equipment supplier should also be considered not just turnkey.	Since, the project involves substantial involvement of turnkey works, experience only in equipment supply may not be sufficient and accordingly experience of executing similar turnkey project was asked in the qualification requirement.
2	Example/Clarification : Similar Project means for CSSD means CSSD meeting major technical parameters of the current BOQ floated in the tender enquiry document	Please delete this line as this is limiting the scope of performance that you are asking.	As explained above the qualification parameter need not be changed.
3	Eligible Bidders should not have incurred any loss in more than 2 years during the last five years ending 31st March 2015	Kindly remove the loss part as this is limiting the competition. The financial year consider to be 31stDec 2015 as all the foreign companies has their all financial endings upto 31st December.	The loss part may not be removed as the present project involves significant investment and companies with loss in more than two out last five years may face problem in executing the contract financially. However we may keep last five years ending 31st March 2015, 30th June 2015, 30th September 2015 or 31stDecember 2015 or any other month as applicable.
4	Financial Status: Eligible Bidders should not have incurred any loss in more than 2 years during the last five years ending 31st March 2015. Audited Profit & Loss account and Balance Sheet (duly notarized copies) for the immediate last five consecutive financial years should be submitted along with the bid	Eligible Bidders should have a positive net worth and should not have any loss in more than 2 years during the last five years ending 31st March 2015. The financial status of Foreign Original equipment manufacturer should be accepted against the financial status of its 100% owned subsidiary in India only if the bidder (i.e. 100% owned subsidiary in India) submits an undertaking from foreign original equipment manufacturer stating that they would be responsible for completing all contractual obligations in case the bidder/ Indian subsidiary company fails to do so.	Bidder is a separate legal entity independent of its parent company. Relaxing the qualification requirement, based upon credential and guarantee given by parent company, in particular when qualification criteria itself is bare minimum, will tantamount to award of contract to a bidder who itself is not financially and technically capable to execute the contract. Also execution, running and maintenance part is of prime importance in these projects. As, such committee recommended that firms request can't be accepted to. After detailed discussion and

Sl.No	Tender Specification	Representation	Decision by the committee
		The undertaking should be duly notarized/ certified by Chamber of Commerce in the country of Original Equipment manufacturer.	deliberation it was decided by the committee that it may be clarified to the likely bidders that whoever meets the qualification requirement need to quote directly If the Indian subsidiary is meeting all the qualification parameter they can quote directly or else the foreign principal can quote directly and they may mention in their bid that services will be rendered through their Indian offices in India. However, they will be entirely responsible for execution of the contract as per terms and conditions and scope of services defined in the TED.
5	Qualification criteria of bidder will be evaluated	Performance/Qualification criteria of the foreign manufacturer should be considered for the qualification of the Indian bidder being turnkey project	Same as above
6	Presently cumulative increment is 100%.	Cumulative order value should be reduced by half (50%) to increase the competition for both single order value requirement, minimum work of similar nature requirement and solvency requirement	It may be noted that the amount of work considered is i) 30% of the estimated cost for turnover requirement, applied cumulatively for two or more sites . ii)10% of the estimated cost for one single order of Minimum work of similar nature, applied cumulatively for two or more sites iii) 50% of the estimated cost to be executed in last 05 years, applied cumulatively for two or more sites iv) 30% of the estimated cost for solvency, applied cumulatively for two or more sites .
7	Cumulative requirement	we request you to relax it so that more bidders can qualify for more schedules	
8	Cumulative requirement	Cumulative performance of the Indian bidders (acting as agents) should be removed.	
9	50% similar product execution requirement of estimated value and solvency 30% requirement of estimated value.	Shall be reduced to 15% of estimated value	

Sl.No	Tender Specification	Representation	Decision by the committee
			The above has been duly deliberated and finalized by the 23 member committee and Apex committee. Further relaxation will only weaken the cause of the tender qualification criteria. Hence, may not be changed.
10	Solvency certificate	It should be removed as it provides no assurance/safeguard to the client/tenderer	It was deliberated that in the last scrapped tender , it was noted that different bank issue solvency certificate differently i.e. one bank may issue solvency certificate of "X" amount to one company but another bank will issue solvency certificate of "Y" amount to same company. However the term in financial language means "the degree to which the current assets of an individual or an entity exceed the current liability of that individual or entity". **After due deliberations, committee recommended to keep the tender clause unchanged as the banks are having their individual rules with respect to issue of solvency certificate.**
11	Solvency certificate	Bank solvency should not be removed. It should be as per CVC norms	
12	The price should include of running and operation of CSSD equipment for a period of five years excluding consumables.	Kindly remove the operation part from the tender as we are designing, manufacturing, installation, commissioning and maintenance company. Operation part should not bein our scope.	The operation and maintenance for initial period of 05 years is a mandatory requirement for CSSD, MGPS tenders. Hence, may not be removed.
13	Office to be opened by foreign manufacturer in India if they get the order	Allow only those bidders who has relevant operations and establishment in lndia previously.	Being a global tender, additional preference to Indian Bidders/ bidders with previous experience in India is not possible. Hence, may not be considered. The requirement of Indian experience for executing this contract was deemed insignificant by the Apex committee earlier as well.
14		Work experience in India should also be made mandatory as atleast 10% should be there, as the bidder or manufacturer should be familiar with Indian work environment.	

Sl.No	Tender Specification	Representation	Decision by the committee
15	Minimum Work of Similar Nature: Eligible bidders should have successfully executed globally in last **five years** from the date of tender opening, similar turnkey project of value, equivalent to exceeding 50% of the estimated tender value.	As per CVC and CPWD norms, minimum experience of 07 years should be considered	After detailed discussion and deliberation committee decided that in the present case it is not only civil component , however the major portion of it is medical equipment supply, hence considering five years to meet the qualification requirement seems reasonable.
16	Manufacturer's Authorization form	It should be removed as the bidders lose ability to negotiate better prices from manufacturers and ultimately end up with one manufacturer.	Bidder must in his bid clearly spell out what product and technical configuration he is quoting against the tender requirement. The manufacturer of the quoted product should also be binding legally to perform against the said contract including warranty and CMC terms.
17	A self-declaration on Rs 10/ Non-judicial Stamp Paper that the rates quoted in the tender are the lowest and not quoted less than this to any Government Institution (State / Central / other Institute in India).	It should be removed as each project are different in scope, terms, location, foreign currency fluctuation etc.	This is as per the government tender norms that the supplier is not quoting a higher price than what he has quoted earlier. Committee decided to keep the same as it is.
18	Along with Price bid recent purchase order copies for the **same model** and technical configuration issued by institute of National importance/reputed central/state government hospitals should be uploaded in pdf form for price reasonability	Please read as recent purchase order copies for the **same model or equivalent.** Being a project it include lots of product/component hence not possible to provide price reasonability for the same. Also add International orders along with National importance/reputed central/state government hospitals	For price justification, the equivalent part does not help and hence the requirement for the same model. It may be clarified that the supplier shall justify the present rate quotes based on previous purchase orders for similar project executed either in India or Globally. If they quote any new model or upgraded version of earlier model they may mention the same in their tender.
19		Kindly delete this clause as it is project and not a medical equipment.	

Sl.No	Tender Specification	Representation	Decision by the committee
20	The bidder shall furnish Satisfactory Performance Certificate in respect of above (i.e. Section IX, Qualification Criteria of TED) in case not from India, duly translated in English and duly endorsed by country's Embassy present in India, along with the tender.	We request you to please allow counter authorization from the principle company.	After lot of discussion and deliberation Apex Committee decided that being global tender, global performances may be verified by that countries embassy present in India. Committee decided not to change the conditions.
21	Performance Security period initially valid for a period of minimum 66 months from the date of Notification of Award	Enhance PBG from minimum 66 months to 10 years from the date of Notification of award. It will eliminate the non serious bidders.	Committee is of the opinion 10 years PBG will only increase the cost as bidders will load the PBG cost to the tender. Committee also decided that after warranty there will be a performance bank guarantee of 2.5 % of the contract cost during CMC period which is sufficient to take care of the CMC performances like other tenders.
22	Proforma for Performance Statement	Performance certificate varies from one country to other , hence any format should be allowed for international performance certificate.	Bidder may submit performance certificate duly linked mentioning order number, date of delivery, installation, commissioning and value by the end user.
23	Experience of the bidder is evaluated irrespective of principal	Experience/past performance to be with the same principal products which are being quoted in the present tender	After detailed discussion and deliberation it was decided by the apex committee that the same manufacturer condition may be removed so the bidders may quote any manufacturer product meeting the tender technical specification.

Sl.No	Tender Specification	Representation	Decision by the committee
24	Qualification criteria i) Eligible Bidders should have an average annual turnover of 30% in the consecutive past three financial years applicable cumulative for two sites or more ii)Eligible bidders should have successfully executed globally in last five years from the date of tender opening, similar turnkey project of value ,equivalent to exceeding 50% of the estimated tender value. Out of total 50 % value ,atleast one single order similar work of minimum 10% value should have been excecuted globally.	Qualification criteria as per CVC guidelines for civil works should be there Experience of having successfully completed similar works during last 7 years e should be either of the following: - a. Three similar completed works costing not less than the amount equal to 40% of the estimated cost. or b. Two similar completed works costing not less than the amount equal to 50% of the estimated cost. or c. One similar completed work costing not less than the amount equal to 80% of the estimated cost.	The present qualification criteria has been derived after due deliberations by the 23 member committee and Apex committee so the maximum number of bidders who are in the field of CSSD, MGPS and MOT may get qualified in the tender. Committee recommended no change.
25	The bidders have to quote for all the six schedules while quoting. The purchaser will have the right to award the work to any site as per the eligibility and to the best benefit of the exchequer.	In case a single bidder qualifies for all six sites, awarding them the contract for all the six sites would lead to complications and performance insecurities.	If the bidder is able to justify his qualification as per present qualification criteria, it is expected that, the bidder would also be able to complete the work in as many sites. Hence, may not be changed.
26	Delivery period: Although the complete delivery, installation and commissioning has to be completed within 300 days however part delivery, installation and commissioning need to be completed within first 200 days for each AIIMS (except AIIMS Bhopal) as mentioned in the BOQ.	200 days to be 300 days and next 100 days to be 150 days after approval of drawings.	The present delivery, installation and commissioning terms are finalized after detailed discussion and deliberation in the committee including Directors of respective AIIMS, Representative of AIIMS New Delhi and PGIMER Chandigarh. Committee felt that there is no need to change the delivery period as floated in the TED.

Sl.No	Tender Specification	Representation	Decision by the committee
27	AMC/CMC charges in evaluation of Price Bid	AMC/CMC charges should be fixed on percentage basis(say 5%) by the Department to be considered for actual price evaluation.(One such example is, State Government Procurement Policy of Maharashtra/Rajasthan). We understand that many bidder do not put any price in the AMC/CMC charges which is applicable for 5 years period as they add the charges in main price bid	The apprehensions by the likely bidders with respect to CMC and AMC charges are basically for new players. They submitted that in case a bidder quotes to low CMC like 1% of the equipment cost and after taking the contract subsequently they may not provide services for CMC and purchaser may not be in a position to do anything after warranty as there is no much provision for penalty during CMC period except 2.5% PBG. After detailed discussion and deliberation committee decided that since the CMC charges are taken at NPV for the purpose of evaluation and comparison purpose i.e. since the ranking was done after taking the Net Present Value only accordingly whether the bidder charges high CMC or frontloading was done along with the equipment price by converting to NPV the same was neutralized. Hence the committee felt that there is no need to change the present tender conditions.
28	Payment for Domestic Goods or Foreign Origin Located within India. On delivery of goods 70%, payment on delivered goods 20% against installation and commissioning and balance 10% on acceptance of goods	80% payment should be released on delivery of goods and 15% payment should be released on installation of goods and balance 5% on Final Acceptance Certificate . The reason is in most of the projects, the handover of delivered goods takes lot of time to finally handover and because of this the balance payment gets stuck for longer time.	The present payment terms has been derived after due deliberations by the earlier committees . Hence may not be changed at this stage.

Sl.No	Tender Specification	Representation	Decision by the committee
29	Payment for Foreign Goods Seventy (70)% of the net CIP price (CIP price less Indian Agency commission) of the goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC)	By opening L/C you are restricting a bidder for execution of the work based on actual site conditions. As mentioned above the quantities of items may increase or decrease because this is a Turnkey Based Project and Items/Equipments/Material are required on frequent or on delay basis. To overcome this situation we suggest, that kindly allow the Indian bidder to freely buy the Items/Equipments/Material based on the actual site conditions in Indian Rupees	May not be changed
30	Inspection for foreign items Prinicipal/Foreign supplier shall also have the equipment inspected by recognised/reputed agency like SGS,Lloyd, Bureau Veritas, TUV prior to despatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim	kindly delete or inspection after material delivered on site.	May not be changed as 70% payment will be released against shipping document and hence third party inspection for negotiation of LC is a mandatory document.
31	Running, operation and maintenance is part of the main tender for CSSD, MGPS	Cost of running, maintenance and operation should be separated for MGPS tenders	May not be considered, as running and operation are significant part of the main tender. Since the selected L1 bidder has to provide for running operation and maintenance , The L1 bidder need to be considered after taking into account the entire cost and hence need not be changed.
32	The bidder should not quote in Indian Rupees any foreign products, which are not already imported at the time of submitting the tender. Price bid in INR, if the product is not imported in India will not be considered and will be ignored.	Allow quoting for items to be imported in INR as well for allowing of participation of Indian Subsidiaries directly.	May not be considered, as the bidders are free to quote in freely trading currency and hence quoting in INR may not be accepted. By quoting in INR bidders have to pay full custom duty and will also charge sales tax over and above the price. They may also load interest for paying upfront to the principal manufacturer and bear exchange rate risk hence quoting in INR by the Indian distributors should be

Sl.No	Tender Specification	Representation	Decision by the committee
			avoided. Committee decided not to change the tender conditions.