

REPLY TO PRE BID QUERIES DATED: 21.08.2023

SUPPLY OF 400/450SCMH BOOSTER COMPRESSOR AT AMBALA-KURUKSHETRA & KOLHAPUR GA

Tender No.: HOGPL/2023-24/C&P/004 Date: 04.08.2023

Sl. No.	Ref Clause No.	Ref Clause Description	Bidders Query	HOGPL Reply
<b>COMMERCIAL VOLUME</b>				
1	Clause No. 8.1 of Section I (IFB)	The bidder shall be a manufacturer/Supplier of 400 SCMH or higher capacity Electric Motor Driven Hydraulic variable suction CNG Booster Compressor and shall have the single point responsibility for manufacturing, packaging, supplying, installing, and commissioning of 400 SCMH or higher capacity Electric Motor Driven Hydraulic variable suction CNG Booster Compressor units. Note: Any Compressor OEM fulfilling the criteria above may also authorize their sales & service dealer OR Packager to quote on their behalf subject to fulfilling the above-mentioned conditions. "Bidder should have successfully completed design, engineering, manufacture, testing, supply, installation, and commissioning of 400 SCMH or higher capacity Electric Motor Driven Hydraulic variable suction CNG Booster Compressor in at least 02 (two) work orders during last 05 years to any CGD entity reckoned from the date of submission of tender documents".	We have conceptualized, supplied and operated VIP - online CNG compressor which is a Identical to the Booster package as per customer requirement to Gail Gas Bengaluru, Gail India Noida, Sabarmati gas limited and Green Gas.  So far we have supplied 30 VIP - Online CNG compressor packages, which run on suction pressure from 19 Kg/cm2G to 200 Kg/cm2G much lesser than Hydraulic Booster Compressor Package.  Above experience been considered in all booster compressor tenders based on which we have provided our best competitive bid and become L1.  "Bidder should have successfully completed design, engineering, manufacture, testing, supply, installation, and commissioning of 400 SCMH or higher capacity Electric Motor Driven Hydraulic variable suction CNG Booster Compressor/VIP (Variable Inlet Pressure) CNG Compressor Package in at least 02 (two) work orders during last 05 years to any CGD entity reckoned from the date of submission of tender documents".  Hence we request M/s.HOGPL to modify BEC clause as above in order to consider us to participate and to provide most competitive Bid.  Some of the CGD companies like M/s.Avantika , M/s.GOA Natural Gas and M/s.Haridward natural gas chaged their qualification criteria during bidding stage corrigedums are attached for ready reference.	Bidder understanding is correct with all other Standard , T& C as per tender.  Bidder to refer Corrigendum 2
2	Clause No. 3.0 of Section I (IFB)	Brief Scope of Work	Please clarify about average flow in SCMH and electric Motor capacity. With our 22KW Motor CNG Booster compressor we can deliver average flow of 400 SCMH	Bidder shall consider average flow 400 SCMH
3	Clause No. 8.1 of Section I (IFB)	Bidder Evaluation Criteria (BEC) Technical	Please clarify about 2 work orders OR 2 compressors for similar work experience	As per Technical BEC bidder to provide 2 nos work orders of similar work.
4	Clause No. 9.1	Tender Fee	Kindly Conform Tender Fee. It contradicts with IFB Clause no 7.3 and 7.4	Bidder to pay charges against 7.3 & 7.4 to M/s ITI Limited. There is no separate Tender Fee
5	Clause No. 16 of Section IV	Contract Performance Bank Guarranty for CAMC	We request you to release 10% of amount without submission of BG.Please confirm.	Bidder to refer Corrigendum 2
6	Clause No. 16 of Section IV	Contract Performance Bank Guarranty for Supply	We request you to keep clause as per following.  FOR SUPPLY: The successful bidder shall furnish the Contract Performance Bank Guarantee (CPBG) equivalent to 10 (Ten) % of the total FOT order value exclusive of taxes & duties within a period of Thirty ( 30 ) Days from the date of issue of LOI/ Purchase Order. The CPBG should initially be kept valid for 90 days beyond the guarantee / warranty/ defect liability period. The claim period shall be 30 days more than the validity of the CPBG.	Tender condition Prevails
7	Clause No. 16 of Section IV	Contract Performance Bank Guarranty for CAMC	FOR CAMC: The successful bidder shall furnish the Contract Performance Bank Guarantee (CPBG) equivalent to 10% of the Annualized Operation & Comprehensive AMC value (excluding all taxes and duties) shall be submitted within Thirty ( 30 ) Days of start of each comprehensive AMC. The CPBG should be valid for 90 days beyond the expiry of Annual Comprehensive AMC period of one (01) year post guarantee / warranty period/defect liability period.	Tender condition Prevails
8	Clause No. 4.0 of Section I (IFB)	Contract Validity & Delivery Schedule	We request you to share us Lot quantity for Ambala-Kurukshetra GA and Kolhapur GA.	Delivery lot detail will be provided after issuance of PO. Further Bidder to refer clause number 4 of IFB commercial volume 1.
9	Clause No. 4.0 of Section I (IFB)	Delivery Location	We request you to share us exact location for optimise transportation Charges.	Exact delivery location will be provided along with distpach clearance, for calculation purpose bidder to consider Kolhapur GA (Maharashtra) and Ambala -kurukshetra GA (Haryana)
10	General query		We understand that state wages shall be consier for operation.Kindly confirm.	Bider to consider either state or central wages whichever is higher as per minimum wages Act 1948
11	Clause No. 2.0 of Section IV	Price Reduction Schedule	Please note as the order is released on the Lot basis, the reduction should be on undelivered portion of the individual delivery order value and not on the total order value. Also, please note this is applicable to only supply price. In case the delivery order is for both supply and AMC service then only for supply of package should be applicable and AMC service value shall not be considered for reduction.	Tender condition Prevails
12	Clause No. 11.0 of Section IV	Repeat Order	Repeat Order is acceptable on the basis of mutual consent between client and bidder.	Tender condition Prevails
13	Clause No. 15 of Section III	Transportation	We understand that our responsibility shall be limited to delivery upto either site or store. If there is a case of re-transportation from one site to another or from store to site after the receipt, then retransportation charges along with applicable loading/unloading charges shall be borne by purchaser. Kindly confirm	Bidder understanding is correct
14	Clause No. 5 of Section IV	Payment Terms	We request you to kindly consider our request as under:  In case the erection/commissioning/Performance test are delayed beyond 90 days of material receipt at site due to reasons attributed to purchaser then the balance 10% payment should be reimbursed to the Seller/Vendor against undertaking to mobilize their team for erection/commissioning within 7 days of receiving intimation from the Purchaser. In this case no BG should be asked as all vendors are of sufficient repute and do not need to submit BG's for balance payments specially in comprehensive contracts	Bidder to refer Corrigendum 2
<b>TECHNICAL VOLUME</b>				
15	Clause No. 10.0	Guaranteed Parameters	Request to clarify whether Tender Requirement of 400 SCMH Booster Compressor as per the Guaranteed Parameters (Clause no.10)	Bidder shall consider average flow 400 SCMH

16	Clause No. 10.0	Guaranteed Parameters	<p>As per Guaranteed Parameters, you have informed for Power Loading as per lowest Power Consumption. However, in Compressor Capacity it is mentioned that no advantage shall be given below 20 KWH. Considering the executed packages by the Bidder, we bring to your notice that Power Consumption is a major OPEX cost for long term. As such, we request to remove the lower limit of 20 KWH for Power Loading as it will give the End user the advantage for low power consumption and thus saving substantial amount in energy consumption over the complete Operation and Maintenance Period and reducing carbon emission for green environment.</p> <p>Also Major CGD Clients such as GGL, MGL, Avantika Gas, etc have included Power Loading for Bid Evaluation and suitable benefits are giving to the Packager for their energy efficient Packages. Request to clarify the above.</p>	Tender condition Prevails
17	Clause No.1.1	suction and discharge filters	<p>The gas available at the Booster Compressor Package is already filtered in the Online Compressor Package at its Suction and Discharge and also filtered at the Suction Filter of the Booster Compressor Package. As such, Bidder shall provide suitable Gas Filter at the Suction for filtration of the Gas and is enough for the operation of the system.</p> <p>Bidder has supplied substantial packages with similar configuration and they are in continuous operation successfully running to the complete client satisfaction. Request to confirm the same.</p>	Tender condition Prevails
18	Clause No.1.0	Instrumentation and control system as specified on data sheets, P&ID including Local panel, Console/Local gauge boards, PLC.	<p>Field Mounted Instruments are provided with easy visibility as per OEM design, as such no gauge panel is required. The readings from the transmitters mounted along with indicators shall show the necessary readings on HMI without opening package. Request to confirm the same.</p>	Tender condition Prevails
19	Clause No.1.5	Tubing and valves from LCV cascade and stationary cascade to compressor shall be % SS 316 OD.	<p>As per OEM recommendations and pressure drop calculation of the Package, 1/2" OD tubing are suitable for the Discharge Tubing after 2nd Stage. Bidder has supplied substantial packages with similar configuration and they are in continuous operation successfully running to the complete client satisfaction. Request to confirm the same.</p>	Tender condition Prevails
20	Clause No.1.0	Block and bleed valves to be provided for Pressure gauges and pressure Transmitters.	<p>Hydraulic Booster Compressor Package is compact in size with limited tubing as compared to the online compressor package. Therefore, no separate Block and Bleed Valve shall be required for Pressure Gauges and Pressure Transmitters as Venting Provision is provided in case of maintenance purpose. Also using the Block Valves with Pressure Transmitter will put the entire system at higher risk considering Automatic Package Operation, as human interference is involved. Request to confirm the same.</p>	Tender condition Prevails
21	Clause No.1.0	One no. relief valve at each stage discharge, first (1st) stage suction and Blow down Vessel.	<p>We will provide 2 nos of SRV at 1st stage &amp; 2nd stage discharge respectively. Our compressor's standard design comes with Relief valve at discharge of each stage. i.e. we provide 2 Relief Valves. However, Booster compressor will have 2 source of supply of CNG, 1 from LCV cascade &amp; 1 from Stationary cascade and both the cascades are having 3 SRVs in each banks. i.e. total 6 SRVs are there on supply of CNG. SRV at the suction is not necessary as at suction pressure do not cross 210 bar and is always reducing and if it does, the compressor will not start due to start permissive logic. Request to confirm the same.</p>	Bidder understanding is correct
22	Clause No.2.0	The field trial run of the Variable Suction Compressor will be for continuous run of minimum of 04 hours in which satisfactory performance of the package together with all accessories auxiliaries and controls shall be established for satisfactory performance for specified operating conditions.	<p>For Field trial run, only 2 no's LCV 3000WL/4500WL (Water Capacity) provided by Owner will be decanted on continuous basis. Request to confirm the same.</p>	Bidder understanding is correct
23	Clause No.4 of Section III: DATA SHEET OF CNG BOOSTER COMPRESSOR (400 SCMH)	API – 618/API 11 P  standard code- API-11P, Second edition, API 618	<p>The API 618 compression systems are engineered and offered directly by GE's Oil &amp; Gas business, while high-speed API 11P units are available through a network of authorized packagers and distributors that provide complete cost-effective compression packages including a driver. As such, Booster Packages Compressor are hydraulically driven Intensifiers and same shall be designed as per Manufacturer's Standard. Request to confirm the same.</p>	Tender condition Prevails
24	Clause No.4	API – 661: Specifications for Air cooled exchangers	<p>API-661 Code is applicable for Air Cooled Heat Exchanger for Online Compressor and Process Gas Packages. Considering the compact nature of the Booster Package and Variable Inlet Pressure design, Air Cooled Heat Exchangers shall be as per Manufacturer's Standard. Air Cooled Exchangers manufactured as per API-661 will not be able to be assembled within Package Footprint size as mentioned in the Tender. Bidder has supplied substantial package with similar configuration to major CGD Clients and has been in successful operation to complete satisfaction of the End users. Request IGL to confirm the same.</p>	Approved on the basis of submission of respective documents.
25	Clause No.4	SAE J 514-Standard for CNG hydraulic tube fittings and O-ring	<p>SAE J 514 Standard shall only be applicable for Flange and O-ring design of Hydraulic Intensifier and Hydraulic Pump. Other Hydraulic Instruments shall be as Manufacturer's Standard for Safety and Operation of the Package as per OEM Design. Bidder has supplied substantial package with similar configuration to major CGD Clients and has been in successful operation to complete satisfaction of the End users. Request to confirm the same.</p>	Tender condition Prevails
26	Clause No.4	ASME Section – VIII Div. – 1/2 Design codes for pressure vessels	<p>Air Compressor receiver shall be of 100 litres capacity and 3mm thickness considering operating Pressure of only 7-8 kg/cm2 and as such shall be made as per Manufacturer Standard. Request to confirm the same.</p>	Tender condition Prevails

27	Clause No.5.1.1	Pressure switch and pressure gauge shall have isolation valve.	Isolation valve is provided with pressure transmitter and gauges will put the entire system under great risk, as human interference is involved, therefore the will not be provided. System vent is provided in case maintenance required. Bidder has supplied substantial package with similar configuration to major CGD Clients and has been in successful operation to complete satisfaction of the End users. Please confirm the same.	Bidder understanding is correct Bidder shall ensure B&B valve for pressure gauge.
28	Clause No.5.1.2	All customer interface connections, gas Inlet shall be brought out to the package edge and terminated with ¾ —OD SS-Tube	As the outlet of the package in priority panel is divided into 6 lines, line size of 1/2" is enough to maintain the required gas velocity and flow. Also same is suggested by the Intensifier OEM with the second stage outlet connection port. So, Bidder suggests to provide package termination of 1/2" full flow Ball Valves with 1/2" x 3/4" end connectors for each cascade line. Request to confirm the same.	Tender condition Prevails
29	Clause No.9	Two nos. Modular type DCP fire extinguisher capacity 10 Kg, shall be provided with each Compressor in the enclosure.	CO2 Flooding System is provided along with Booster Compressor Package for the safety of the Package considering emergency conditions which is operated automatically as per PLC logic. As such, no separate Modular DCP fire extinguisher shall be supplied as it requires manual intervention. Request to confirm the same	Bidder understanding is correct
30	Section V: DATA SHEET OF LV INDUCTION MOTOR	Anti-condensation Heaters (Power , Voltage)	Anti-Condensation is not required as Booster Compressor is intermittently operating Package and as per OEM design suitable Air Flow is maintained inside the Acoustic Enclosure avoiding the need for Anti-Condensation Heater for Motor. Request to confirm the same.	Bidder understanding is correct, Bidder shall ensure thermistor protection for motor as per clause 9.03 Section V of technical volume II of II.
31	Section Vi: TECHNICAL SPECIFICATION	The CNG gas shall be totally oil free, hence the membranes are inserted for positive separation.	The gas available at the Booster Compressor Package is already filtered in the Online Compressor Package at its Suction and Discharge and also filtered at the Suction Filter of the Booster Compressor Package. As such, Bidder shall provide suitable Gas Filter at the Suction for filtration of the Gas and is enough for the operation of the system for removal of the Oil and no separate membranes are required for separation. Bidder has supplied substantial packages with similar configuration and they are in continuous operation successfully running to the complete client satisfaction. Request to confirm the same	Tender condition Prevails
32	Clause No.1.5	End connections shall be 3/4" size pipe OD.	As per OEM recommendations and pressure drop calculation 1/2" OD tubes are suitable for the Priority Panel. However, we can provide expander at the package edge so as connect 3/4" OD SS tube. Request to confirm the same.	Tender condition Prevails
33	Technical Volume Clause No.1.4	Compressor package shall be provided with min following instruments; 1. All tripping shall be with lamp indication and annunciation. 2. Temperature indication: each stage discharge and after- after cooler 3.Pressure indication: each stage discharge, high & med bank; Pressure switch final stage discharge, high & med bank 4. Hydraulic oil tank: Level switch, temp indication & switch; Pump Pressure indication. 5. Coolant: Temp & pressure indication & switch and temp indication after cooler. 7. One no. Pressure Switch/Transmitter shall be installed in the inlet line to compressor.	1. Complied 2. Temperature Transmitter is provided for After-Cooler Discharge with suitable alarms and trips with HMI display, as no additional Temperature Indication is required in the Package. For inter stage Temperature, Temperature Transmitter is provided in Hydraulic Line as Hydraulic is used to compress the Gas in single intensifier. 3. Pressure indicator shall be provided for each stage discharge. In high Bank and Medium Bank, only Pressure Transmitter shall be provided with HMI display. 4. Temperature Indication and Switch shall not be provided on Hydraulic Oil tank but instead Temperature Transmitter shall be provided with suitable alarm and Trip and HMI display. 5. Coolant Instruments - Not applicable for Air Cooled System.  Bidder has supplied substantial packages with similar configuration and they are in continuous operation successfully running to the complete client satisfaction. Request to confirm the same	2. Temperature Transmitter is provided for After-Cooler Discharge with suitable alarms and trips with HMI display, as no additional Temperature Indication is required in the Package. : Bidder understanding is correct For inter stage Temperature, Temperature Transmitter is provided in Hydraulic Line as Hydraulic is used to compress the Gas in single intensifier.Agreed 3. Pressure Indicator shall be provided for each stage discharge. In high Bank and Medium Bank, only Pressure Transmitter shall be provided with HMI display.Agreed 4. Temperature Indication and Switch shall not be provided on Hydraulic Oil tank but instead Temperature Transmitter shall be provided with suitable alarm and Trip and HMI display. Tender condition prevail 5. Coolant Instruments - Not applicable for Air Cooled System.: Agreed
34	Clause No. 10.0 Section II Sl. No. 5	The Enclosure to restrict maximum noise level to 70 DB(A) at 1 meter from the enclosure.	As per OEM design, Enclosures shall be engineered to give a noise level of maximum 75 dBA measured at 1 meter from compressor at site. Same configuration has been supplied in substantial package across all CGD Industries.	Bidder to refer corrirengdum 2
35	1.8 PRESSURE VESSELS:	All pressure vessels shall be designed as per ASME VIII Div 1 or equivalent with 3 mm corrosion allowance and shall be fully (100%) radio-graphed as per ASME VIII-UW (a) or equivalent.	Air Compressor receiver shall be of 100 litres capacity and 3mm thickness considering operating Pressure of only 7-8 kg/cm2 and as such shall be made as per Manufacturer Standard. Request to confirm the same	Tender condition Prevails
36	Section VII: QUALITY ASSURANCE PLAN		Bidder understands that the Tender QAP is for reference only. Detailed QAP shall be submitted during DDE and same shall be followed for Production and testing Activities. Request to confirm the same.	Tender condition Prevails
37	Section XV: LIST OF SUPPLIERS OF MAJOR BOUGHT-OUT ITEMS NO. 8	FLP Motors	Request to accept HEM Make of FLP Motors having PESO Certification. We have supplied substantial package with same make and same is acceptable across all CGD Industries.	Approval will be processed on Submission of satisfactory PTR.
38	Section XV: LIST OF SUPPLIERS OF MAJOR BOUGHT-OUT ITEMS NO18	Fittings	Bidder understands that OEM is approved. As such, Bidder requests to consider Hylok in its approved make for SS Fittings . Bidder has supplied substantial packages with similar make to major CGD Industries and they are in continuous operation successfully running to the complete client satisfaction.	Approval will be processed on Submission of satisfactory PTR.
39	Section XV: LIST OF SUPPLIERS OF MAJOR BOUGHT-OUT ITEMS NO.20	On Off ball/needle valve for CNG application	Bidder understands that OEM is approved. As such, Bidder requests to consider Hylok in its approved make for SS Valves . Bidder has supplied substantial packages with similar make to major CGD Industries and they are in continuous operation successfully running to the complete client satisfaction.	Approval will be processed on Submission of satisfactory PTR.
40	Section XV: LIST OF SUPPLIERS OF MAJOR BOUGHT-OUT ITEMS NO. 23	Air exchanger a. GEI Hamon Ind Ltd. b. GEA India c. Patel Air temp	We have our own designed & manufactured proprietary Gas/oil coolers ( Heat Exchangers) under KAL energy considering the Variable Booster Condition. The mentioned makes are for Process Gas Coolers and not for Booster Compressor. Hence we request you to add KAL Energy/OEM Make as approved vendor. We have supplied substantial package with same make and same is acceptable across all CGD Industries.	Approval will be processed on Submission of satisfactory PTR.
41	Clause No.1.9.1	All Inspection and testing shall be witnessed by Third Party Inspection Agency at the bidder's cost. Approved Third Party Inspection Agencies are Bureau Veritas Industrial Services (BVIS), Lloyds Register of Shipping (LRIS), SGS or DNV.	We suggest addition of GLIS (Gulf Lloyds Industrial Services (INDIA) Pvt. Ltd), as these third party agencies are currently doing good volume with CGD companies with HPCL, BPCL and IOCL Pipeline division. Request you to confirm the same.	Approval will be processed on Submission of satisfactory PTR.
42	Clause No. 1.0 Section II	Scope of Supply: One no. relief valve at each stage discharge, first (1st) stage suction and Blow Down Vessel.	In our design, there are no Blow down Vessel. We provide 2 SRV. 1 at 1st stage and 2nd at 2nd stage.	Bidder understanding is correct
43	Clause No. 1.0 Section II	Scope of Supply: Common CO2 extinguishing system consisting of two cylinders, piping, valves and control systems, Also one CO2 cylinder will be extinguish at the time successful commissioning of compressor and that will be refilling by bidder.	We Request you to consider refilling cost in Owner scope	Tender condition Prevails

44	Clause No. 1.0 Section II	<b>Scope of Supply:</b> Arranging 02 days onsite training program for operators and Client engineers by bidder	We Request you to consider in Owner scope	Tender condition Prevails
45	Clause No. 1.0 Section II	<b>Scope of Supply:</b> Separate junction boxes for different type of signals like analog, digital signals, alarm, shutdowns, and thermocouples, RTDs etc. for interfacing to local panel as per requirement.	In our design there is no need of separate junction box	Ensure separation between Signal & power cable termination
46	Clause No. 1.0 Section II	<b>Scope of Supply:</b> Main incoming cable from owners PDB to main control panel of the compressor (a distance of 50 meter is to be considered) through GI conduit/trenches, Cable from owner's electronic earth pit (EE) for electronic circuit in control panel, cable from owner's main earthing ring to control panel body earth and all inter connecting cables including complete erection accessories like double compression cable gland, cable tags, lugs etc. as required.	We Request you to consider in Owner scope	Tender condition Prevails
47	Clause No. 1.0 Section II	<b>Scope of Work:</b> Piping from air compressor and CO2 cylinders up to enclosures in the scope of bidder. One CO2 cylinder will be used at the time of Commissioning of compressor the refilling of extinguish cylinder in the scope of contractor.	We Request you to consider refilling cost in Owner scope	Tender condition Prevails
48	Clause No. 2.0 Section II	<b>Scope of Work:</b> Bidder will make sitting arrangements to operators in process area to observe machine continuously, make a small shed for operators to seat.	We Request you to consider in Owner scope	Tender condition Prevails
49	Clause No. 2.0 Section II	<b>Scope of Work:</b> All parts replaced by the bidder during the above contract period shall be properly packed and handed over to OWNER, on replacement.	Bidder ownership in CAMC	Bidder understanding is correct
50	Clause No. 2.0 Section II	<b>Scope of Work:</b> The bidder shall carryout calibration of gas detectors and flame detectors every six months or earlier as per requirement or instruction of EIC of OWNER. Also, yearly calibration of all instruments such as pressure gauges, transmitters, switches, mass flow meters etc. shall be in the scope of the bidder. In addition to the above all safety relief valves shall also be tested and calibrated every year.	We Request you to consider calibration of gas detectors and flame detectors Frequency on yearly basis or earlier as per requirement	Tender condition Prevails
51	Clause No. 2.0 Section II	<b>Scope of Work:</b> The bidder shall carry out retesting of pressure vessels periodically i.e. every year or earlier as per Gas Cylinder rules 2016 / Static & Mobile Pressure Vessels Rules.	in our design, Pressure Vessel is not available	Bidder understanding is correct
52	Clause No. 5.1.2 Section II	<b>Battery Limits:</b> As and where specified on the data sheets all vents (i.e. Relief valve, distance piece and packing) shall be Mani folded and terminated at skid edge outside the enclosure and vented to safe height of 2.5m at package roof with proper support.	Not applicable in motor driven hydraulic booster compressor	Bidder understanding is correct
53	Clause No. 5.1.2 Section II	<b>Battery Limits:</b> All drains from different process equipment, distance piece and packing shall be Mani folded and terminated as single point for customer interface duly flanged with isolation valve.	We will provide separate drains for oil, gas and water circuits and flange connections are not required.	Bidder understanding is correct
54	Clause No. 4 Section II	<b>CODES &amp; STANDARDS</b> Following codes, standards, and regulations to be considered: OISD 142: IS 5572 OISD 179, .....	These codes & standards are for process gas compressor for API 618 service applicable for refinery services. These are not applicable to Hydraulic booster compressor for City Gas Distribution which are manufacturer's standard hydraulic booster compressor However Related BIS, Gas Cylinder Rules, Gas Cylinder Rules, Specifications/Recommendations of IEC, Indian Electricity Rules, Indian Explosives Act, State Factory Rules etc. will be followed	Tender condition Prevails
55	Clause No. 1.2 Section VI	<b>Cooling System</b> Each compressor package shall be complete with its own cooling system. The cooler shall be air cooled heat exchanger.	In Our design Inter stage HE are shell and tube type water cooled Heat exchanger used. But final cooling done through Air fin cooler	Bidder understanding is correct
56	Clause No. 1.4 Section VI	<b>Instrumentation &amp; Controls:</b> Emergency shutdown (ESD) System is also in scope of vendor.....	We request to consider mushroom type emergency push button	Tender condition Prevails
57	Clause No. 1.4 Section VI	<b>Instrumentation &amp; Controls:</b> Hydraulic oil tank: Level switch, temp indication & switch; Pump Pressure indication.	in our design, in Hydraulic Oil circuit we monitor temperature through RTD in PLC. And We request to consider with out switch	Tender condition Prevails
58	Clause No. 1.4 Section VI	<b>Instrumentation &amp; Controls:</b> Coolant: Temp & pressure indication & switch and temp indication after cooler.	We request to consider with out switch	Tender condition Prevails
59	Clause No. 1.4 Section VI	<b>Instrumentation &amp; Controls:</b> Hour meter.	We request to consider with Hour meter.	Tender condition Prevails
60	Clause No. 1.4 Section VI	<b>Instrumentation &amp; Controls:</b> One no. Pressure Switch/Transmitter shall be installed in the inlet line to compressor.	in our design, We have Pressure Transmitter. And We request to consider with out switch	Tender condition Prevails
61	Clause No. 1.8 Section VI	<b>PRESSURE VESSELS:</b> All pressure vessels shall be designed as per ASME VIII Div 1 or equivalent with 3 mm corrosion allowance and shall be fully (100%) radio-graphed as per ASME VIII-UW (a) or equivalent.	in our design, Pressure Vessel is not available	Bidder understanding is correct
62	General Query	-	Please Clarify the scope of supply of LCV Fill Post	Supply of LCV filling post is not in bidder scope.
63	Clause No. 1.0 Section II	<b>Scope of supply:</b> Block and bleed valves to be provided for Pressure gauges and pressure Transmitters.	* Block & Bleed valve will be provided for PG, * Block & bleed valve if used with PT it will cause problem with controls if the instrument is isolated from the process line.	Tender condition Prevails
64	Clause No. 1.0 Section II	<b>Scope of supply:</b> One no. relief valve at each stage discharge, first (1st) stage suction and Blow Down Vessel.	* There is no requirement of relief valve at suction because suction is always variable * Both the stages of intensifier are designed for 250 Bar, and there is no isolation between the stages, therefore one relief valves at final stage discharge serves the purpose * this clause is applicable for online reciprocating compressor	Tender condition Prevails
65	Clause No. 10.0 Section II	<b>Checklist:</b> Minimum flow capacity corresponding to suction Pressure of 50 kg/cm2; required min 400 Sm3/hr	* The required Avg flow rate is 400 SCMH, for suction pressure range of 210-30 kg/cm2 * It is not possible to deliver 400 SCMH at 50 kg/cm2 suction pressure. Please confirm.	<b>Bidder to refer corrigendum 2</b>
66	Section VI: TECHNICAL SPECIFICATION	Sound level of enclosure (required Max 70DBA)	We request you to permit 75+- 3 dBA at 1 meter	Bidder to refer Clause no. 09 Sr. no 15 of scope of supply in technical volume II of II
68	Section VII: QUALITY ASSURANCE PLAN	CANOPY STRUCTURE PAINTING INSPECTION AT WORKS. SURFACE PREPARATION TO BE INSPECTED AFTER CLEANING AND BEFORE APPLICATION OF FIRST COAT OF PRIMER.	The canopy will be powder coated, and the final finished canopy will be offered for inspection, inspection at intermediate stage of painting is not possible. Please Confirm.	Tender condition Prevails
69	Section VII: QUALITY ASSURANCE PLAN	FUNCTIONAL / HV / CONTINUITY TEST FOR CONTROL PANEL ( AT SUB VENDOR'S WORKS)	Only the final functional test will be offered during MRT of the compressor. Kindly confirm.	Bidder understanding is correct, Submission of TPAI certification for FUNCTIONAL / HV / CONTINUITY TEST FOR CONTROL PANEL
70	Section VII: QUALITY ASSURANCE PLAN	HYDROTEST OF - CYLINDER, PRESSURE VESSELS, HEAT EXCHANGER	Hydrotest report will be offer for review to TPIA during MRT inspection. Kindly confirm.	Bidder understanding is correct, Submission of TPAI certification for hydrotesting of CYLINDER, PRESSURE VESSELS, HEAT EXCHANGER
71	Section VII: QUALITY ASSURANCE PLAN	HYDROTEST OF - CYLINDER HEADS	Hydrotest report will be offer for review to TPIA during MRT inspection. Kindly confirm.	Bidder understanding is correct however bidder to submit approved & certified copy of hydrotest report.
72	Section VII: QUALITY ASSURANCE PLAN	ELECTRIC MOTOR PERFORMANCE TEST- AT SUB-VENDOR'S WORKS PER ISO STD.	Only the functional test will be offer to TPIA during MRT inspection. Kindly confirm.	Bidder understanding is correct however bidder to submit TPAI certification for ELECTRIC MOTOR PERFORMANCE TEST.
73	Section XV: LIST OF SUPPLIERS OF MAJOR BOUGHT-OUT ITEMS	FLP Switchgear	Kindly approve Shyam Switch gear, Saai Electrica	Approval will be processed on Submission of satisfactory PTR.

74	Section XV: LIST OF SUPPLIERS OF MAJOR BOUGHT-OUT ITEMS	SS Tubes for CNG application	Kindly approve Ratnamani tube	Approval will be processed on Submission of satisfactory PTR.
75	Section XV: LIST OF SUPPLIERS OF MAJOR BOUGHT-OUT ITEMS	On Off ball/needle valve for CNG application	Kindly approve Baumer make needle valve for instruments.	Approval will be processed on Submission of satisfactory PTR.
77	Clause No. 1.0 of Section II	<b>Scope of Supply:</b> Separate junction boxes for different type of signals like analog, digital signals, alarm, shutdowns, and thermocouples, RTDs etc. for interfacing to local panel as per requirement.	Local control panel (With PLC) is mounted on the package itself hence junction boxes are not required. Instruments will be directly wired to the Local control panel.	Ensure separation between Signal & power cable termination
78	Clause No. 1.0 of Section II	<b>Scope of Supply:</b> Common CO2 extinguishing system consisting of two cylinders, piping, valves and control systems, Also one CO2 cylinder will be extinguish at the time successful commissioning of compressor and that will be refilling by bidder.	We do not envisaged to extinguish one CO2 flooding cylinder as working of GD and FD can be check through loop or through individual testing of instruments , we have supplied more than 1000 compressors and above is acceptable by all CGD companies .	Tender condition Prevails
79	Clause No. 11.1.1.Section II	Bidder shall guarantee average capacity of 400 SCMH from suction pressure of 30 to 200 kg/cm2 and discharge pressure of 255 Kg/cm2 at discharge temperature of 52 degrees centigrade with no negative tolerance for errors in instruments and measurements.	1 ) Please note maximum allowable temperature within the enclosure shall be 10° C above ambient temperature which is accepted by many CGD companies hence guaranteed flow shall be based on 52° C discharge temperture only when ambient temp is 42° C. 2) Please note guaranteed flow of 400 SCMH shall be from suction pressure of 30 to 210 kg/cm2 as given in the gauranteed parameters table.	1 ) Bidder understanding is correct. 2) Tender condition Prevails
80	Clause No. 1.6 Section VI	<b>ENCLOSURE OF HYDRAULIC DRIVEN CNG COMPRESSOR PACKAGE:</b> For handling of all heavy parts for maintenance purpose lifting arrangement i.e. beam fitted with chain hoist shall be provide inside enclosure.	We will provide suitable arrangement such as plate for sliding the compressor motor out of the Canopy for maintenance purpose. No other equipment requires lifting arrangement considering their weight and therefore chain pulley arrangement is not required.	Tender condition Prevails
81	Section II: SCOPE OF WORK		Please provided distances of below : a) Cables from compressor to hooter and upto ESD push button in control room b) Cables from compressor to ESD push button near dispenser. c) Cables form PDB to air compressor d) Power and signal communication cables from compressor to mass flow meter during PG test. e) Cables from purchaser's terminating points to compressor package's components. f) Termination of cables in compressor control panel and in electrical panel including cable lugs and cable glands are in bidder's scope. g) All cable shall be laid through GI cable.	Approximate Distances for cables b. 70-80 mtr d. NA f. BIDDER UNDERSTANDING IS CORRECT through cable tray/GI pipe/ flexible pipe as per site conditions & where cable conduit is unavailable. a. 50-60 mtr c. 20-30 mtr e. 70-80 mtr g. Bidder to lay cable
82	Clause No. 5.1.2 Section II	<b>Battery Limit:</b> All customer interface connections, gas Inlet shall be brought out to the package edge and terminated with ¾ —OD SS-Tube.	Please note connectors of 3/4" will be provided at priority panel edge/ Package outlet.	Tender condition Prevails
83	Clause No. 1.7 of Section VI	<b>Piping &amp; Tubing:</b> All gas piping/ tubing, valves, fittings etc. from Suction of the 1st stage (right from interface) through final discharge from the compressor (up to interface) shall be SS-316 material with double compression ferrule fittings	As per our engineering the CS tubing is suitable for the pressure and temperature rating under service. Further we wish to confirm it is our proprietary design hence we would like to adhere to our design. Attached P&ID for ready reference.	Tender condition Prevails
84	Clause No. 1.0 of Section II	<b>Scope of Supply:</b> For metering of natural gas, 1 No. Coriolis type Mass Flow meter shall be provided at the inlet of Compressor Package.	We request M/s.HOGPL to consider readings of suction mass flow meter available in inlet of compressor during performance guaarantee test which will provide the total gas decanted from LCV during test and based on it performance can be measured/witnessed.	Prover meter will be provide by HOGPL
85	Clause No. 1.9.3 Section VI	<b>Package Performance Test:</b> Bidder shall arrange a Mass flow meter at Discharge of Compressor package to measure the flow for Performance Guarantee test. Duration of test shall be approximately 4 hours which may be in steps in consultation with purchaser.		
87	General query		Please confirm 3 shifts for operations to be considered ?	Tender condition Prevails
88	General query		Attached QAP for ready reference same is approved in all CGD as our booster compressor packages are comes in standard products range.	Bidder to consider QAP as provided in tender document section VII. However any other upgradation will be reviewed after issuance of LOI or PO.
89	Clause No. 1.0 of Section II	<b>Scope of Supply:</b> Y- type strainers, valves, sight flow indicators, check valves, auto & manual drain traps etc. as required for various auxiliary systems i.e. frame lube oil, cylinder lubrication system, cooling water systems etc.	Y-Type Strainers, Blow Down Vessels not applicable for hydraulic Booster	Bidder to refer revised clause as below :- One no. relief valve at each stage discharge, first (1st) stage suction Y- type strainers, valves, sight flow indicators, check valves, auto & manual drain traps etc. as required for various auxiliary systems i.e. frame lube oil, cylinder lubrication system, cooling water systems etc

Signature & Stamp of Bidder