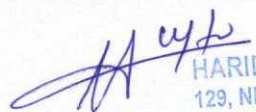


REFERENCE OF BIDDING DOCUMENT				Bidders Queries	HNGPL Replies
Sr No.	Section/Tender Page No.	Clause No	Subject		
Query raised by M/s Kal Energy					
1	295 of 349	Technical Volume Clause No.14.1	If bidder quotes less than 29 KWH. No advantage will be given for quoting less than 29 KWH.	Considering the 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 limit of 29 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. Major CGD Players are considering Power Loading for Bid Evaluation considering long term Package Efficiency. Request to consider the same.	Tender Conditions shall prevail
2	276 of 349	Clause No. 9.4	suction and discharge filters	The gas available at the Booster Compressor Package is already filtered in the Online Compressor Package and also filtered at the Suction Filter of the Booster Compressor Package. Filter at suction point of booster shall only be provided as per OEM standard design. Request to confirm the same.	Tender Conditions shall prevail
3	265 of 349	Clause No. 4.5	PLC based control system with HMI. PLC shall be provided with mounting rack, CPU, Input output cards, Power supply card, communication card. PLC CPU shall be redundant (1W+1S) with auto switch over without manual intervene. Failure alarm of CPU shall be provided in HMI. A dedicated modbus (RS 485) slave communication port shall be provided for Remote terminal unit (RTU) interface. A separate communication ports shall be provided for GPRS modem for communication with SCADA system	Redundant PLC is required only for Continuous operation Online and Process gas Packages to avoid Plant Hamper. However, as Booster Compressor Package is intermittently operated and the changing of PLC hardware is just a 10-15 mins process, Redundancy in PLC is not required. However, as per Tender requirement redundancy for Power Supply for PLC shall be provided. Request to confirm the same	Tender Conditions shall prevail
4	266 of 349	Clause No. 4.9	Block & bleed valves/Two valve SS316 Manifold to be provided for Pressure gauges and pressure Transmitters	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. Please confirm.	Tender Conditions shall prevail
5	267 of 349	Clause No. 4.30	Hose crimp should be of SS and have protection Sleeve.	Hose Crimp shall be CS with necessary coating, as when SS is used the same is too soft for crimping as per OEM recommendation and is also used across all CGD industries in CNG Dispensers. Request to confirm the same.	Tender Conditions shall prevail
6			Hose will be installed with a 1/2" or 3/4" Three Way Ball Valve	Considering non availability of 1/2" SS Three way Ball valve as per the Tender Approved Makes, Bidder proposes to provide 1/4" Valve with 3/4" OD End Connector as a standard OEM design acceptable across all CGD Industries.	Tender Conditions shall prevail
7	267 of 349	Clause No.8.1 i)	One Blinking aviation lamp shall be provided at the top of compressor canopy suitable for hazardous area for fire indication.	Hooter is provided in case of any GD-FD or ESD signal. As the height of the Package is less than 3 mtrs, we suggest to avoid Aviation Lamp. Request to confirm the same.	Tender Conditions shall prevail
8	274 of 349	Clause No.8.1 p)	Piping of CO2 flooding system shall be seamless high pressure pipe of Schedule 40 of 50 mm dia of appropriate length with a minimum safe distance of 4 Meter from CNG Compressor. The fittings like elbows, Tees, Union, sockets should be of same schedule and capacity for installation in a high pressure system as per NFPA-12.	Considering the velocity and Pressure of CO2 Gas, we propose 25-NB Sch- 40 pipe which shall suit the application as per OEM design. Please note that we supplied all the packages to all the major CGD companies with 25- NB ERW pipe Sch- 10 adequate for this application. Even the regular and approved CO2 Vendor are using 25NB Sch 40 pipe for this application. Request to Confirm the same.	Tender Conditions shall prevail
9	304 of 349	ANNEXURE – II: COMPRESSOR DATA SHEET FOR 450 SM3/HR	71) Local gauge boards.	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.	Tender Conditions shall prevail
10	274 of 349	Clause No.8.1 i)	Aviation lamp shall be provided on outside of enclosure.	Hooter is provided in case of any GD-FD or ESD signal. As the height of the Package is less than 3 mtrs, we suggest to avoid Aviation Lamp. Request to confirm the same.	Tender Conditions shall prevail
11	263 of 349	Clause No.3.2	TEMA – C - Water cooled heat exchangers	In our design, Oil & Gas coolers are Shell and tube type with water cooling system. However, final & ultimate cooling is done through air in air fin cooler	Tender Conditions shall prevail
12	272 of 349	Clause No.8.0 h)	Relief valves shall be provided at suction and discharge and each inter stages of compressor with setting as per cl.7.20.4 of API-618 with R.V. venting as per cl. 7.20.4 of API-618. All vented to common relief valve header.	We will provide 2 nos of SRV at 1st stage & 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 & 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 200 bar and if it does, the compressor will not start due to start permissive logic. Request to confirm the same.	Tender Conditions shall prevail
13	265 of 349	Clause No. 4.4	2 nos. mass flow meters to measure the Natural Gas consumption at packages inlet and package discharge (both Coriolis type) with online test arrangement. Both mass flow meters should be of same make and should have local integral display and should be Ex proof & weatherproof. The flowmeters should be enabled with MODBUS/RS 485 communications port. Accordingly additional LCV panel mass flow meter will not be installed.	2 Nox. Mass Flow Meter is required to be installed in Online Compressor to calculate package gas loss. Since there is no package gas loss in Booster Compressor being compact in size and reduced tubing, we feel that additional flow meter at discharge line is not required as per OEM Design. It will just add a considerable cost of compressor's package and O&M cost. Request to confirm the same	Tender Conditions shall prevail
14	262 of 349	Clause No.3.2	API – 618/API 11 P	The API 618 compression systems are engineered and offered directly by GE's Oil & 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.	Tender Conditions shall prevail
15	263 of 349	Clause No.3.2	API – 661: Specifications for Air cooled exchangers	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. Request to confirm the same.	Tender Conditions shall prevail
16	263 of 349	Clause No.3.2	SAE J 514-Standard for CNG hydraulic tube fittings and O-ring	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	Tender Conditions shall prevail

Handwritten signature and date:
 3/8/23
 H. C. Gupta

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Sr No.	REFERENCE OF BIDDING DOCUMENT			Bidders Queries	HNGPL Replies
	Section/Tender Page No.	Clause No	Subject		
17	268 of 349	Clause No. 5.1	All customer interface connections (i.e. Gas inlet & gas outlet) shall be brought out to the package edge. Gas inlet shall be terminated in nozzles with isolation valves having flange connections and gas outlet (priority panel outlet connection) shall be terminated through high pressure 3/4" full flow ball valves with 3/4" end connectors.	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. So, we are requesting you to package termination of 1/2" pipe OD. Request to confirm the same.	Tender Conditions shall prevail
18	282 of 347	Clause No. 10.3	PG shall be Direct-mounting type having element of bourdon tube and dial size of 150 mm. It shall have shatterproof glass. Connection shall be 1/2" NPT (M) from bottom. Enclosure shall be weatherproof to IP65. Protection shall be 130% over range. Accuracy shall be ±1% of FSD. PG shall have blown out disc facility. For higher pressure applications (above 60 Barg), it shall be solid front type. Pressure gauge dial shall be white, non-rusting plastic with black figures. The dial face shall be marked with pressure element material. Pointers shall have micrometer adjustment. Pressure gauge sensing element shall be of SS 316 and moving elements of SS 304, as a minimum	The standard port size for Pressure Gauge as per JIS and European Design Standard for Hydraulic Valves used in the Booster Compressor Package is 1/4" BSP. Please note that 1/4" connection is even allowed for pressure upto 400 bar, whereas for CNG application the pressure is limited to 250 bar. Moreover the instrument manifold is standardized by us which is compatible to 1/4" BSP. We propose to provide 63mm dial size with 1/4" BSP threaded Pressure Gauge. Moreover it is standardized in all booster packages and also having better availability. Please confirm.	Tender Conditions shall prevail
19	282 of 349	Clause No.10.4	The gauge shall have an accuracy of +1% FSD and 100mm dial size. The range shall be 1.5 times of operating temperature.	Bidder requests to clear the ambiguity as 63mm dial size is more than sufficient for easy visibility and access considering compact size of the Booster Package. Also the Bidder has standardized 63mm dial size Pressure Gauges and has supplied substantial packages with similar configuration to major CGD industries and they are in continuous operation successfully running to the complete client satisfaction. Request to clarify the same.	Tender Conditions shall prevail
20	283 of 349	Clause No.10.6	RTDs are 4 wire type and element shall be Pt100 as per DIN 43760 & accuracy class A and thermo well's immersion length shall be suitable for the line size. All RTDs shall have duplex elements. RTDs sheath OD shall be 8 mm and material SS 316. Cable entry shall be 1/2" NPT (F). Enclosure shall be WP to IP-65. All RTD shall be supplied with flange or socket welded type thermowell. Thermowell shall be SS316, drilled bar stock type. 50% insertion inside the pipe from top shall be considered for calculating wake frequency calculation. This calculation shall be submitted along with data sheet	We propose Temperature Transmitter with 3 wire configuration - PT100 having Class A accuracy as compared to 4 wire RTD. We request to consider Temperature Transmitter with RTD 3 wire as it standardized in all booster packages and also having better availability. 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.	Tender Conditions shall prevail
21	284 of 349	Clause No.10.11.2	PLC shall be of modular in construction, rack for mounting cards, CPU, Input output cards, Power supply card, communication card. PLC CPU shall be redundant (1 W+1S) with auto switch over without manual intervene. Failure alarm of CPU shall be provided in HMI and same shall be repeated in PLC for remote monitoring	Redundant PLC CPU is not required as auto switch-over is possible with normal PLC. It will also increase the cost, installation space & availability from supplier. Please confirm the same	Tender Conditions shall prevail
22	284 of 349	Clause No.10.11.8	Configurator software licenses shall be preferred in software (software key) form instead of hardware (dongle). Multiuser software licenses shall be provided.	License version of software can be provided common for one number of GA instead of each package.	Tender Conditions shall prevail
23	312 of 349	Clause No. Datasheet of FLAME DETECTOR	Must be inbuilt or else calibration device must be supplied along with FD at free of cost.	Calibration of FD is required only in 6 months or 1 year and same shall be complied by Bidder and no additional Calibration equipment shall be supplied along with equipment as it is not for regular or daily use. Same is also acceptable and followed across all CGD industries. Request to confirm the same	Tender Conditions shall prevail
24	268 of 349	Clause No.4.41	All piping beyond battery limits except from air compressor & air piping for air and piping from CO2 cylinders up to the enclosure.	Request to share the distance between Air Compressor & Package for estimation purpose.	Tender Conditions shall prevail
25	263 of 349	Clause No.3.2	ASME Section - VIII Div. - 1/2 Design codes for pressure vessels.	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 Conditions shall prevail
26	269 of 349	Clause No.6.1	Bidder to provide Instrument air with an electric motor driven air compressor with a suitably sized receiver & Refrigerant type air drier system.	Desiccant dryers use ultra-absorbent materials to remove moisture, soaking up the water within the system, however Refrigerant dryers only cool the air. As such, Desiccant type also known as heatless type dryer shall be supplied. Bidder has supplied substantial package with same configuration and is acceptable across all CGD Industries. Request to confirm the same.	Tender Conditions shall prevail
27			Distance from Electrical items and instruments	Request to share tentative distance between Electrical Room and Booster Compressor for estimation purpose.	Tender Conditions shall prevail
28	270 of 349	Clause No.6.15	Surge protection devices of Schneider/MTL/Phoenix make shall be provided in the control panel.	SMPS considered are enabled with inbuilt surge protection of Make Omron. Bidder has supplied substantial package with same configuration and is acceptable across all CGD Industries. Request to confirm the same.	Tender Conditions shall prevail
29	315 of 349	SPECIFICATIONS FOR DISCHARGE FILTER	CE mark in accordance with European Directive for Pressure Equipment, PED (97 / 23 / EC) Are designed to meet the ATEX European Directive for Explosion Protection, (94 / 9 / EC) All natural gas filters in accordance to CE Exx 2GD IIB T6.	Discharge Filter shall be in accordance with Manufacturer Standard as it is proprietary design to meet the safety and operating conditions of the Package. Request to confirm the same	Tender Conditions shall prevail
30	277 of 349	Clause No.9.13	Due to space constraint, we will be installing the stationary cascade (capacity 3000 WL) of 7.0 tons (7000 kgs) on the top of the canopy of compressor. the bidder will therefore design the canopy to take the load of a stationary cascade of 7.0 tons. The bidder shall also provide 2 nos. stair case/ladders (in line with the gas cylinder rules) for safe climbing on the top of the canopy along with hand railing on the top for ease maintenance and operation. Provision should be made such that, the cascade can be placed anywhere above the canopy. The bidder shall ensure that adequate space (minimum 2 feet width) walk way in front side of cascades (i.e valve mounting side) is available for carrying out routine checking/ Maintenance.	Bidder understands that Cascade Mounting Structure for 3000WL cascade shall be provided with walkway on front side of Cascade for valves operation of 400mm and Guage Panel side of Cascade for operation shall be provided of width 600mm with adequate hand safety grills across the platform and 1 nos ladders with handrails on opposite side. Bidder has supplied substantial Package with similar configuration with complete client satisfaction. Please confirm the same.	Tender Conditions shall prevail
31	281 of 347	Clause No.9.28	The power factor (PF) of the whole electrical system should not be below 0.95	As the Booster Compressor Package is having Inductive Load, Power Factor can be in the range of 0.8-0.9 which can be corrected to better than 0.95 using Automatic Power Factor Corrector (APFC) Panel. Request to confirm the the scope of any equipment required for maintaining PF at 0.95 such as APFC Panel in Client scope.	Tender Conditions shall prevail
32	284 of 349	Clause No.10.11.6	PLC shall be 20% spare each type of input output channels for future use. All these Ios shall be wired upto the spare terminal block inside the PLC cabinet. Diagnosis feature shall be available in CPU and I/O used in PLC.	PLC shall be 10% spare provided for each type of inputs and outputs	Tender Conditions shall prevail
33	103 of 259	Clause No.7.41	Configurator software licenses shall be preferred in software (software key) form instead of hardware (dongle). Multiuser software licenses	We provided laptop with suitable licences at our Resident Service Engineer Offices and shall be available at site. Request to confirm the same.	Tender Conditions shall prevail
34	102 of 259	Clause No.7.31	PLC shall be of modular in construction, rack for mounting cards, CPU, Input output cards, Power supply card, communication card. PLC CPU shall be redundant (1 W+1S) with auto switch over without manual intervene. Failure alarm of CPU shall be provided in HMI and same shall be repeated in PLC for remote monitoring.	Process gas Packages to avoid Plant Operation Hamper. However, as Booster Compressor Package is intermittently operated and the changing of PLC hardware is just a 10-15 mins process, Redundancy in PLC is not required. However, as per Tender requirement redundancy for Power Supply for PLC shall be provided.	Tender Conditions shall prevail


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Sr No.	REFERENCE OF BIDDING DOCUMENT			Bidders Queries	HNGPL Replies
	Section/Tender Page No.	Clause No	Subject		
35	286 of 349	Clause No.10.11.15 a)	Pressure transmitter and pressure gauge at suction, discharge, cascade bank distribution header.	We provide pressure transmitters in suction line. Also a Pressure Gauge is available at the LCV post in suction of the package. So gauge is not recommended at the suction of the package, as the same readings are also available in the HMI as Pressure Transmitter is provided at the Suction with suitable alarm and trip. Please confirm.	Tender Conditions shall prevail
36	286 of 349	Clause No.10.11.15 a)	b) Pressure switch at final discharge.	Bidder already provided Pressure Transmitter with suitable interlock and Pressure Gauge for manual visibility at final discharge. Also Safety Relief Valve is provided for the safety of Package. As such, Pressure Switch is not required at final discharge and Bidder has supplied substantial Package with similar configuration with complete client satisfaction.	Tender Conditions shall prevail
37	286 of 349	Clause No.10.11.15 a)	d) Pressure gauge & temperature gauge at each stage of compressor.	Temperature Transmitter is provided at the second stage final discharge of the package to monitor the outlet temperature with suitable interlocks. Our system being compact, it won't be easily accessible. The Pressure gauge & Temperature gauge is not recommended at each stage as it increase maintenance of the instruments with no additional value to the package performance. Please	Tender Conditions shall prevail
38	286 of 349	Clause No.10.11.15 a)	c) Temperature transmitter at each discharge stage.	Temperature Transmitter is provided only at the final discharge of Booster Compressor Package to monitor the outlet temperature of the Package to maintain outlet tender parameters. Any rise in temperature in Gas interstages is detected by Temperature Transmitter in Oil reservoir as single cylinder is used for Oil and Gas. Please confirm the same.	Tender Conditions shall prevail
39	286 of 349	Clause No.10.11.15 a)	Hydraulic oil cooler inlet & outlet temperature gauge.	As per Bidder's Design, Temperature Transmitter is provided at the final discharge of the Gas Circuit. Any rise in intermediate stage of compressor can be monitored by temperature transmitter provided in Hydraulic Circuit. As such, no temperature gauge is required for Oil Cooler. Bidder has supplied substantial packages with similar configurations across all CGD industries and successful operation. Request to confirm the same	Tender Conditions shall prevail
40	286 of 349	Clause No.10.11.15 a)	Hydraulic oil pressures each stage on local gauge panel.	As per Bidder's Design, Temperature Transmitter is provided at the final discharge of the Gas Circuit. Any rise in intermediate stage of compressor can be monitored by temperature transmitter provided in Hydraulic Circuit. As such, no temperature gauge is required for Oil Cooler. Bidder has supplied substantial packages with similar configurations across all CGD industries and successful operation. Request to confirm the same	Tender Conditions shall prevail
41	286 of 349	Clause No.10.11.15 a)	Air compressor discharge pressure transmitter.	The Pressure Switch is provided to control the operation of Air Compressor as per the OEM design. Bidder has supplied substantial packages with similar configuration to major CGD industries and they are in continuous operation successfully running to the complete client satisfaction.	Tender Conditions shall prevail
42	286 of 349	Clause No.10.11.15 a)	Oil level transmitter	Oil level switch is provided at oil tank for oil level indication. Bidder has supplied substantial packages with similar configuration to major CGD industries and they are in continuous operation successfully running to the complete client satisfaction. Please confirm.	Tender Conditions shall prevail
43	287 of 349	Clause No: 10.13	Fire resistance type for Fire detection fire detection system, ESD service, instruments used for ESD purpose, and ESD push buttons.	As per standard CGD practice, we shall provide FRLS cable for FD, GD and ESD. Bidder has supplied substantial packages with similar cables to major CGD industries and they are in continuous operation successfully running to	Tender Conditions shall prevail
45	291 of 349	Clause No: 12.0	All the pressure, temperature, oil level, lube oil pressure, coolant temperature, coolant level indicators shall be visible from outside of enclosures and shall be mounted on gauge panel visible from outside.	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.	Tender Conditions shall prevail
46	293 of 349	Clause No: 13.5	Performance Acceptance Test (PAT) Compressor Package Performance test at sites shall be carried out as per ASME PTC9.	Please note that PTC9 is to establish rules for conducting tests of displacement compressors, vacuum pumps and blowers, however relevant standard shall be followed	Tender Conditions shall prevail
ANNEXURE – VI: RECOMMENDED VENDOR LIST					
47			SUCTION & DISCHARGE FILTER	we supplied all the packages with Filters considering OEM Proprietary design for Maximum flow and Minimum Pressure Drop with long life more than one year, for the Filter Element. Also it is also complies with the Intensifier OEM suitability. Request to consider the same for easy availability of components and spares. Request to confirm the same	Tender Conditions shall prevail
48	316 of 349		GAS DETECTOR SYSTEM	Request you to consider PESO approved Ambtronics make for GD, having necessary PESO approvals. 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	Tender Conditions shall prevail
49			FLAME DETECTOR/ SURGE PROTECTORS	Request you to consider PESO approved Ambtronics make for FD, having necessary PESO approvals. 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	Tender Conditions shall prevail
50			SS FITTINGS & VALVES	Request you to consider Hyllok fittings. 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	Tender Conditions shall prevail
51	252 of 349	Note : 4	Third Party Inspection agency like Lloyds, ABS, SGS, TUV, DNV, BV, Engineers India Limited, or any other Third Party Inspection agency approved by PNGRB only with prior approval of Owner shall be engaged.	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.	We confirm the GLIS (Gulf Lloyds Industrial Services (INDIA) Pvt. Ltd. as Third Party Inspection Agency
Query raised by M/s Ideate Informatics LLP					
52	256	4.0 SCOPE OF SUPPLY FOR EACH COMPRESSOR PACKAGE	4.5 PLC based control system with HMI. PLC shall be provided with mounting rack, CPU, Input output cards, Power supply card, communication card. PLC CPU shall be redundant (1W+1S) with auto switch over without manual intervene.	> Bidder think, there is no any requirement of redundancy in PLC. Because this is required in the process plant/company where the machine operate continuously 24 hours and there is no any manpower. But in our case operators shall be available to take care of machine and also this will impact the cost of the machine. So bidder is request there is no need for redundancy in PLC. kindly	Tender Conditions shall prevail
53	272	8.1. CO2 FLOODING SYSTEM	p) Piping of CO2 flooding system shall be seamless high pressure pipe of Schedule 40 of 50 mm dia of appropriate length with a minimum safe distance of 4 Meter from CNG Compressor, The fittings like elbows, Tees, Union, sockets should be of same schedule and capacity for installation in a high pressure system as per NFPA-12.	> Bidder shall supply 12 mm seamless tube and same has supplied with more than 300 compressor which is sufficient as per our compressor design. Kindly confirm.	Tender Conditions shall prevail

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Sr No.	REFERENCE OF BIDDING DOCUMENT		Bidders Queries	HNGPL Replies	
	Section/Tender Page No.	Clause No			Subject
54	282	10.0 INSTRUMENTATION & CONTROLS	10.4 The temperature gauge shall be generally gas field in steel field type /bimetallic type. Capillary tubing shall be min. SS304 with SS flexible armouring. The gauge shall have an accuracy of +1% FSD and 100mm dial size. The range shall be 1.5 times of operating temperature. Skin type temperature gauges shall not be used	> Bidder has applied more than 300 compressor with 63mm dial size of temperature gauge and due to the less space on the local gauge panel. Bidder request to accept the temperature gauge with 63 mm dial. Kindly confirm.	Tender Conditions shall prevail
55			10.3 PG shall be Direct-mounting type having element of bourdon tube and dial size of 150 mm	> Bidder has applied more than 300 compressor with 63mm dial size of pressure gauge and due to the less space on the local gauge panel. Bidder request to accept the pressure gauge with 63 mm dial. Kindly confirm.	Tender Conditions shall prevail
56	287	10.13 CABLE SPECIFICATION	Cables shall be Flame retardant low smoke (FRLS) type shall be used for all field instruments except ESD device. Voltage Grade of cables shall be 650/1100 V	> Bidder think the instruments operates with less amount of current and voltage and the voltage grade for instruments cable shall be 300/500 V. Kindly confirm.	Tender Conditions shall prevail
57	318	ANNEXURE – VI: RECOMMENDED VENDOR LIST	SUCTION & DISCHARGE FILTER: BEKO FILTER, ULTRA FILTER, PARKER, FILTRATION TECHNIQUE	> Bidder is requested for approval of oem make filter and same has been supplied in various CCGDs. Performance of the same are satisfactory. Kindly	Tender Conditions shall prevail
58	320		TWO WAY / THREE WAY VALVES/ 2-WAY DRAIN VALVES: SWAGelok, PARKER, COMPAC, HAMLET, HYLOCK, SEALEXCEL, OSASIS, STAUFF, SSP	> Bidder is requested for approval of DK lok make valve and same has been approved in various CCGDs. Kindly confirm.	Tender Conditions shall prevail
59	322		SS TUBING: SANDVIK, FAE, TUBACEX, PARKER, RATNAMANI	> Bidder is requested for approval of "Jindal" make SS Tube and same has been approved in various CCGDs. Kindly confirm.	Tender Conditions shall prevail
60	322		FLP SWITCH: BALIGA, FCG, FPE, FLEXPRO	> Bidder is requested for approval of SUDHIR/SHYAAM/KAYSONS/SAIEX make and same has been approved in various CCGDs. Kindly confirm.	Tender Conditions shall prevail
61	324		ON OFF BALL/NEEDLE VALVE : PARKER, SWAGelok, ABAC, SPIRAX SARCO, WORCESTER, WAREE, BAUMER, STAUFF, SSP, L&T, SANKEY CONTROLS, ROTEX, AUDCO	> Bidder is requested for approval of DK lok make valve and same has been approved in various CCGDs. Kindly confirm.	Tender Conditions shall prevail
62	297	14.2 Loading against Energy Consumption:	Penalty for Non-Performance during Period of Operation & Maintenance Details of Penalty for non performance of equipments a. On normal day (i.e. the day other than the schedule maintenance day): i. The party has to ensure that the equipments are available for operation for minimum 20 hours per day and on an average the equipment availability has to be 98% in a month. ii. If the equipment is down for more than 4 hours on any day or availability is less than 98% in a month. Penalty would be applicable as follows: upto 12 hours : Rs. 20,000/- Beyond 12 hours: Rs. 40,000/- per day. In case of daily availability is 20 hrs. but monthly average availability is below 98%. Then penalty @ of 10,000 per % or part thereof shall be applicable. b. On schedule maintenance day: i. The party would be required to carry out the recommended schedule/preventive maintenance of the equipments for which the party has to indicate the time required for each type of schedule maintenance. ii. If the equipment is down for more than 4 hours & upto 12 hours beyond the time indicated for the agreed schedule maintenance, the party would be penalized Rs. 20,000/- and for more than 12 hours Rs. 40,000/- per day. iii. In any case, the maximum penalty imposed in a month for non performance of the equipment turns out to be 50% or more of the amount of O&M charges to be paid to the party per month per compressor (a complete cost break up of O&M charges need to be furnished by the bidder during bid), OWNER will take necessary	Bidder request to confirm the clause "Penalty on nonavailability of compressor package due to breakdown. Break-down time-up to 12 hours in a month-No Penalty. Break-down beyond 12 hours till 16 hours in a month Rs 5,000/- Break-down beyond 16 hrs till 24 hours in a month Rs 10,000/- Break-down beyond 24 hrs in a month Rs 10,000/- per day In any case/ any situation, total penalty will be limited to 50% of monthly invoice value of concerned package."	Tender Conditions shall prevail

Query raised by M/s Kirloskar Pneumatic

63	14	Section 1.1- BEC, Clause No. A.1.II Page No. 14	The bidder in the last 07 years reckoned from bid due date, should have designed, engineered, manufactured/ packaged, tested and supplied to customers from the proposed facility of manufacturing / packaging, at least 1 nos. of CNG hydraulic booster compressor of capacity 400 SCMH (avg.) and above driven by 22 KW (min.) or 450 SCMH (avg.) and above driven by 37 KW (min.) electric motor with discharge pressure 250 kg/cm2 and same should have been successfully commissioned and under satisfactory	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. " The bidder in the last 07 years reckoned from bid due date, should have designed, engineered, manufactured/ packaged, tested and supplied to customers from the proposed facility of manufacturing / packaging, at least 1 nos. of CNG hydraulic/VIP (Variable Inlet Pressure) CNG Compressor Package of capacity 400 SCMH (avg.) and above driven by 22 KW (min.) or 450 SCMH (avg.) and above driven by 37 KW or more with discharge pressure 250 kg/cm2 and same should have been successfully commissioned and under satisfactory operation for at least 6 months without any major breakdown as on the bid due date." Hence we request M/s. Haridwar Natural gas Pvt. Ltd. to modify BEC clause as above in order to consider us to participate and to provide most competitive Bid. Attaching herewith Queries reply of M/s. Avantika gas and M/s. Goa Natural Gas where they have accepted our request and changed BQC clause . for reference attaching HPCL , IOCL and BPCL BEC Qualification documents where same clause had been incorporated.	Please refer Corrigendum#1
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Query raised by M/s Sopan O&M

64	14/349	Section 1.1: Bid Evaluation Criteria	A.1.Packaging/Manufacturing Criteria	Commercial We request you to kindly allow authorised dealer/distributor of indian manufacturer to bid for the tender. In this case also confirm that technical criteria can be matched by indian manufacturer. Similar model was allowed in recently floated tender by M/s BPCL copy of the same is attached for your reference.	Tender Conditions shall prevail
65	14/350	Section 1.1: Bid Evaluation Criteria	A.1 II) The bidder in the last 07 years reckoned from bid due date, should have designed, engineered, manufactured/ packaged, tested and supplied to customers from the proposed facility of manufacturing / packaging, at least 1 nos. of CNG hydraulic booster compressor of capacity 400 SCMH (avg.) and above driven by 22 KW (min.) or 450SCMH (avg.) and above driven by 37 KW (min.) electric motor with discharge pressure 250 kg/cm2 and same should have been successfully commissioned and under satisfactory operation for at least 6 months without any major breakdown as on the bid due date.	We request you to kindly change this criteria to " The bidder in the last 07 years reckoned from bid due date, should have designed, engineered, manufactured/ packaged, tested and supplied to customers from the proposed facility of manufacturing / packaging, at least 1 nos. of CNG hydraulic booster compressor of capacity 400 SCMH (avg.) and above driven by 22 KW (min.) or 250 SCMH (avg.) and above driven by 22 KW (min.) electric motor with discharge pressure 250 kg/cm2 and same should have been successfully commissioned and under satisfactory operation for at least 6 months without any major breakdown as on the bid due date."	Tender Conditions shall prevail

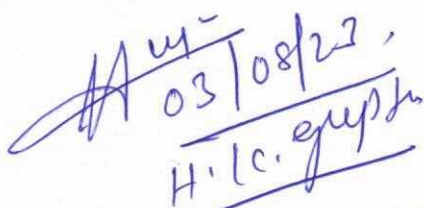
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HARIDWAR NATURAL GAS PVT. LTD.
129, NEW HARIDWAR COLONY
BEHIND MATRI CHAYA MEDICAL CENTRE
RANIPUR MODE, HARIDWAR - 249401 (U.K.)

Sr No.	REFERENCE OF BIDDING DOCUMENT			Bidders Queries	HNGPL Replies
	Section/Tender Page No.	Clause No	Subject		
66	252/349	Part [A] Material Requisition	The AMC shall be extendable for another 2 years as per owners requirement at the same rate as quoted by the bidder under sl. No. 3.4 of Schedule of Rates (SOR).	It is mentioned that AMC shall be extendable for another 2 years at the same price as in 4th year. We presume that the difference due to incremental change in minimum wages for the extended period of contract will be reimbursed by HNGPL at actual plus 10 percent. Please confirm. Note that for first four years, tender mentions about incremental percentage and for another 2 year it mentions same rate as per fourth year which is not correct. Please confirm that Extension of AMC will be done on mutual consent of client and supplier/ service provide.	Tender Conditions shall prevails
67	252/349	Part [A] Material Requisition	The AMC shall be extendable for another 2 years as per owners requirement at the same rate as quoted by the bidder under sl. No. 3.4 of Schedule of Rates (SOR).		Tender Conditions shall prevails
68			General	We request you to share us Exact location to optimize transportation Charges.	1. M/s IOCL OMC RO i.e. M/s Sanskriti Filling Station Located Near Patanjali Food and Herbal Park Village, Mustafabad-Laksar Road, Haridwar 2. M/s HPCL OMC RO i.e. NH-34, Village Gaidikhata, Haridwar-Najibabad Road, Haridwar
Technical					
69	266/349	4.9	4.9 Block & bleed valves/Two valve SS316 Manifold to be provided for Pressure gauges and pressure Transmitters.	* Any isolation for pressure transmitter is not advisable, as it may risk the safety if the valve is closed * Kindly permit usgae of needle valves for pressure gauge. Please Confirm.	Tender Conditions shall prevails
70	266/349	4.16	4.16 Air-cooled heat exchanger for inter stage and discharge gas.	Water cooler heat exchanger will be provided. Please Confirm.	Tender Conditions shall prevails
71	267/349	4.21 d	Vendor shall provide all the RS 485 configuration details to RTU vendors/client/consultant required for configuration. Vendor shall also provide their support during configuration.	MODBUS TCP/IP protocol will be made available for firther remote monitoring system integration	Tender Conditions shall prevails
72	267/349	4.24	4.24 One no. relief valve after each stage shall be provided.	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. Please Confirm.	Tender Conditions shall prevails
73	267/349	4.3	Hose will be installed with a 1/2" or 3/4" Three Way Ball Valve	Instead of Three valve we suggest using 2 no 2 way valves, as thre way valves have lesser Cv value	Tender Conditions shall prevails
74	270/349	6.15	6.15 All cabling (supply & laying) from electrical room to booster compressor shall be in bidder's scope.	Kindly mention maximum distance for cable laying between electrical room & compressor	Please refer Corrigendum#1
75	281/349	9.28	The power factor (PF) of the whole electrical system should not be below 0.95	Kindly include PF correction in bidder scope.	Tender Conditions shall prevails
76	282/349	10.3	10.3 PG shall be Direct-mounting type having element of bourdon tube and dial size of 150 mm. It shall have shatterproof glass. Connection shall be 1/2" NPT (M) from bottom.	Panel munted PG & TG of 4" will be provided, with process connection of 1/4" NPT & direct back connection. Please Confirm.	Tender Conditions shall prevails
77	283/349	10.5	10.5 Pressure Transmitter and Temperature Transmitters shall be used for CNG Gas application with 4-20 mA output signals to PLC. Ex proof enclosure.	PT used will be intensic safe type to be used along with IS barrier. Please Confirm.	Tender Conditions shall prevails
78	283/349	10.10.3	10.10.3 Redundant 230 V AC to 24 V DC power supply unit shall be provided with diode circuit for auto switch over.	Non redundant power supply is sufficient for the system, kindly permit	Tender Conditions shall prevails
79	284/349	10.11.2	10.11.2 PLC shall be of modular in construction, rack for mounting cards, CPU, Input output cards, Power supply card, communication card. PLC CPU shall be redundant (1 W+1S) with auto switch over without manual intervene. Failure alarm of CPU shall be provided in HMI and same shall be repeated in PLC for remote monitoring.	Spare pre programmed CPU will be provided in case of failure it can be installed immediately. Non redundant CPU will do the job. Kindly permit	Tender Conditions shall prevails
80	284/349	10.11.4	10.11.4 A dedicated Modbus (RS 485) slave communication port shall be provided for Remote terminal unit (RTU) interface. A separate Modbus TCP/IP communication ports shall be provided for GPRS modem for communication with SCADA system.	* We will provide MODBUS TCI/IP port for both RTU and GPRS modem for communication with SCADA system. * GPRS modem/ any hardware required is in the scope of client	Tender Conditions shall prevails
81	314/349		SPECIFICATION SHEET FOR GAS DETECTORS Calibration Kit Required	Calibration of Gas & flame detectors will be done as per schedule by the approved calibration agency. Calibration Kit can not be provided with each instruments.	Tender Conditions shall prevails
82	322/350		FLP SWITCH / enclosure	Kindly approve M/s Shyaam Switch gear, M/s Sudhir switch gear, M/s Saai electrica	Tender Conditions shall prevails

Note:

- Bidder to submit reply to bidder's queries along with techno-commercial bid documents duly signed and stamped.
- All other terms and conditions shall remain unchanged as per tender document.



 03/08/23,

 H.L.C. Gupta

HARIDWAR NATURAL GAS PVT. LTD.
 129, NEW HARIDWAR COLONY
 BEHIND MATRI CHAYA MEDICAL CENTRE
 RANIPUR MODE, HARIDWAR - 249401 (U.K.)

REPLY TO BIDDER'S PRE BID QUERIES

Supply, Installation, Testing, Commissioning, Operation and Comprehensive Maintenance of 450 SCM/H Electric Motor Driven CNG Booster (Hydraulic) Compressor Package For Haridwar GA
Tender No.- HNGPL/HARIDWAR/CNGBSTCOMP/23-24/01

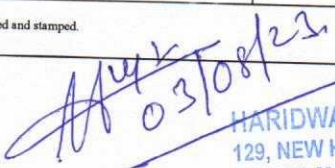
Date - 03.08.2023



Queries raised by M/s Gascomp

SI NO	REFERENCE OF BIDDING			Subject	Bidder Query (03-08-2023)	HNGPL REPLY
	Sec No.	Page No.	Clause No.			
1	4	252	1	Amount towards transportation shall be payable based on quantities actually transported to various locations and the rate quoted.	We request to provide locations where to be transported	1. M/s IOCL OMC RO i.e. M/s Sanskriti Filling Station Located Near Patanjali Food and Herbal Park Village, Mustafabad-Laksar Road, Haridwar 2. M/s HPCL OMC RO i.e. NH-34, Village Gaidikhata, Haridwar-Najibabad Road, Haridwar
2	4	262	3.2.1	The following National & International Codes & Standards of Latest editions shall be applicable. - OISD 142: - IS 5572 OISD 179, NFPA-52: 2006, NFP-496, NFPA-68, NFPA-70 or equivalent	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 conditions shall prevail
3	4	265	4.2	Hydraulic booster with lube oil system and cooling system as required.	This is a hydraulic booster compressor and no separate lube oil system is required like in case of standard reciprocating compressor.	Tender conditions shall prevail
4	4	265	4.5	PLC based control system with HMI. PLC shall be provided with mounting rack, CPU, Input output cards, Power supply card, communication card. PLC CPU shall be redundant (1W+1S) with auto switch over without manual intervene. Failure alarm of CPU shall be provided in HMI. A dedicated modbus (RS 485) slave communication port shall be provided for Remote terminal unit (RTU) interface. A separate communication ports shall be provided for GPRS modem for communication with SCADA system.	We request to consider non redundant CPU	Tender conditions shall prevail
5	4	266	4.12	3 no. Emergency stop button (push type) along with one hooter in office/customer interface room. Emergency stop button shall be provided at below locations. Hazardous area push buttons shall be mounted in ex proof enclosure with break glass & hammer. Push button shall be push to lock type. Unlock will be done by operator after ensuring the safe & normal situation.	We request to consider mushroom type emergency push button without the glass enclosure and hammer.	Tender conditions shall prevail
6	4	266	4.16	Air-cooled heat exchanger for inter stage and discharge gas.	We request to consider Shell and tube type water cooled heat exchanger for each stage	Tender conditions shall prevail
7	4	267	4.25	Mechanical Float to be provided in Water tank for provision of Automatic water filling.	In our design, there is no need for make up water tank as and it is closed loop water circuit and there is no evaporation loss. The make up water of a litre or so will be required in a couple of years.	Tender conditions shall prevail
8	4	268	4.35	Closed circuit cooling water system (console type)/Air cooled as required including heat exchangers, coolant circulation system, fan operated radiator, etc. for inter stage and final cooling of compressed gas, lubrication oil and hydraulic oil.	This is a hydraulic booster compressor and no separate lube oil system is required like in case of standard reciprocating compressor.	Tender conditions shall prevail
9	4	268	5.2	"As and where specified on the data sheets all vents (i.e. Relief valve, distance piece, packing and starting air) shall be manifold and terminated at skid edge outside the enclosure and vented to safe height 3Mtrs at package roof. Silencer has to be provided in the starting air vent line."	Not applicable in motor driven hydraulic booster compressor	Tender conditions shall prevail
10	4	269	5.3	All drains from different process equipment's, distance piece and packing shall be manifolded and terminated as single point for customer interface duly flanged with isolation valve. Drains should be through a common header and discharge to be allowed in a pit to avoid spillage around compressor package.	We will provide separate drains for oil, gas and water circuits and flange connections are not required.	Tender conditions shall prevail
11	4	270	6.15	All cabling (supply & laying) from electrical room to booster compressor shall be in bidder's scope. Bidder shall indicate power Feeder (KW/Amp) requirement in the offer. Surge protection devices of schneider/MTL/Phoenix make shall be provided in the control panel.	Please clarify distance between electrical room to compressor	All cabling (supply & laying) from electrical room to booster compressor shall be in HNGPL's scope.
12	4	280	9.26	If required, the Contractor shall provide gas recovery system with gas recovery vessel. The gas recovery vessel shall be provided with pressure relief valve and necessary instrumentation to avoid cold flaring of gas. Gas recovery vessel shall be ASME/IBR code designed.	In our design, there are no recovery vessel	Tender conditions shall prevail
13		285	10.11.8	Configurator software licenses shall be preferred in software (software key) form instead of hardware (dongle). Multiuser software licenses shall be provided.	We request you to consider without software because our compressor package come with optimal configuration and there no necessity of re configuration	Tender conditions shall prevail
14	4	286	10.11.15 Bullet pt. 6	Oil pressure indicator on each pressure lubrication system	This is a hydraulic booster compressor and no separate lube oil system is required like in case of standard reciprocating compressor.	Tender conditions shall prevail
15	4	286	10.11.15 Bullet pt. 10	Hydraulic oil cooler inlet & outlet temperature gauge	In our design, in Hydraulic Oil circuit we monitor temperature through RTD in PLC	Tender conditions shall prevail
16	4	286	10.11.15 Bullet pt. 12	Air compressor discharge pressure transmitter	In our design, we provide pressure switch and safety relief valve. We provide safe area air compressor	Tender conditions shall prevail
17	4	287	10.12	ESD button (3 Nos.) shall be provided (Control Room, Process Area, one side of compressor). A separate hooter for customer interface room shall be provided with annunciation window alarm of individual protection device. The emergency shut down (ESD) system is also in scope of vendor. A fail-safe system shall be designed and incorporated to isolate cascades storage from dispensers, stop compressor isolate the compressor suction storage line and cut off power supply on activation of ESD switch. This ESD switch shall have to be manually reset to restart the compressor package again. Red ESD button.	We request to consider mushroom type emergency push button without the glass enclosure and hammer. And hooter will mounted on compressor canopy there is no requirement of another hooter.	Tender conditions shall prevail
18	4	291	12	Adequate ventilation fans shall be provided to meet the above and also to account for heat dissipation of the coolers.	In our design, additional ventilation fan is not required. The radiator fulfills the purpose as there will be induced draft which will dissipate the heat.	Tender conditions shall prevail
19	4	291	12Various important parameters such as Inlet Gas suction pressure, Discharge Gas Pressure, Outlet Gas temp., Oil Pressure, Water inlet temp., Water outlet temp. shall be mounted on gauge panel visible from outside.....	In our design, we provide Gauge panel for Gas Pressures and Discharge Mass flow meter	Tender conditions shall prevail
20	4	292	13.0 (i)	Pressure retaining parts including auxiliaries shall be hydrostatically tested with water at following minimum test pressure for a minimum period of 1 hour: - Cylinder cooling jacket & packing case 1 - 1/2 times coolant pressure but not less than 8 barg effective	In our design, there are no cylinder cooling jackets.	Tender conditions shall prevail

Note:
1. Bidder to submit reply to bidder's queries along with techno-commercial bid documents duly signed and stamped.
2. All other terms and conditions shall remain unchanged as per tender document.


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