

Tender No IGL/ET2/CP/CC19005
SUPPLY, INSTALLATION, TESTING, COMMISSIONING, OPERATION AND COMPREHENSIVE MAINTENANCE OF 600 SCMH ELECTRIC MOTOR DRIVEN CNG COMPRESSOR PACKAGES

REPLY TO PRE-BID QUERIES

Sl. No.	Volume/Section/	Page No.	Clause No.	Clause	Bidder's Query	IGL Reply
1	Commercial Volume I (IFB)	7	3.2	a. Supply: The material is to be delivered in lots as per IGL requirement. 1st lot of 7 nos. is to be delivered at IGL site/ stores within 12 weeks & subsequent lots is to be delivered at IGL site/ stores within 10 weeks from the date of purchase order. Time period between subsequent lots shall be minimum 15 days.	Delivery of critical components such as PLC Panels, Flow Meters etc. is currently between 14–16 weeks ex-works. We request the purchaser to revise the delivery schedule as 1st Lot of 07 nos. within 14 Weeks from the date of issuance of LOA/Notification of Award (up to maximum quantity of 07 nos.) and subsequent Lots within 12 Weeks from the date of issuance of LOA/Notification of Award. Kindly accord your acceptance.	Tender Conditions shall prevail
2	Commercial Volume I (IFB)	16	11.0	11.1 All bids must be accompanied by a bid security of amount of Rs. 20,00,000/- (Rupees Twenty Lakh only). 11.2 Bid security/EMD against e-tender can be submitted either through online e-payment mode available on e tender portal or in the form of Letter of Credit / Demand Draft / Banker's Cheque in favour of Indraprastha Gas Ltd, payable at Delhi or in the form of Bank Guarantee from any Nationalized/ Scheduled Indian Bank or by the branch of a reputable international bank located in India, as per proforma attached in the Tender document. Bid security in the form of Bank Guarantee shall be valid for sixty (60) days beyond the validity of the bid i.e. 150 days from scheduled date of bid submission.	We request the purchaser to allow the Bid Security/ EMD in the form of Insurance Surety Bond in favour of Indraprastha Gas Ltd.	Tender Conditions shall prevail
3	Commercial Volume I (SCC)	65-66	8.0	8.1 Within 21 Days of receipt of the respective Contract/Purchase Order, the successful bidder shall furnish to the Purchaser the Contract-Cum-Equipment Performance Bank Guarantee (CPBG) equivalent to 2.5% of annualized contract value to be submitted against awarded Contract and @2.5% of total order value of individual release/purchase order to be submitted against purchase order inclusive of GST. If the material supplied by contractor does not meet the guaranteed parameters and other requirement as per technical specification of contract consistently during operation at site, IGL will revoke the Contract Cum Equipment Bank Guarantee, at its sole discretion.	We request the purchaser to accept the Contract Performance Bank Guarantee (CPBG) in the form of Insurance Surety Bond in favour of Indraprastha Gas Ltd. Kindly confirm your acceptance.	Tender Conditions shall prevail
4	Commercial Volume I (SCC)	68	13.1	13.0 TERMS OF PAYMENTS (FURTHER TO CORRESPONDING CLAUSE OF GCC) 13.1 Payment towards Supply (Compressor Package) Through direct payment within 45 days from date of receipt of invoice. i) 90% (Ninety Percent) Payment shall be released against receipt of materials at site on submission of dispatch documents, manufacturer's certificates, invoice, packing list, insurance policy, guarantee/warranty certificate, inspection release note, Goods Receipt Voucher (GRV) & dispatch clearance issued by the Owner. ii) 10% (Ten Percent) Payment shall be released after successful completion of installation, Testing and Commissioning of each compressor package at the site & acceptance thereof by the OWNER and after successful Performance Acceptance Test at site and acceptance by owner for each compressor.	We request Purchaser to consider payment towards Supply (Compressor Package) within 30 days from date of receipt of invoice.	Tender Conditions shall prevail
5	Commercial Volume I (IFB)	7 & 8	3.1 & 3.11	Duration of Contract: The duration of contract shall be for Eighteen (18) months from the date of issuance of LOA/ Notification of Award for supply, installation, testing and commissioning of compressors along with Operation and Comprehensive Maintenance of 1st year during warranty period, further extendable for 9 years from 2nd to 10th year. Further, after expiry of 1st year Operations and Comprehensive Maintenance period (during warranty), IGL reserves the right to extend the contract and separate work order on OEM basis for each year will be awarded for the services of Operations & Comprehensive Maintenance for the period of 2nd to 10th Year (9 years) after approval from competent authority.	We request IGL to reconsider the proposed contract tenure and reduce the Operation & Maintenance (O&M) contract period from 10 years to 5 years. A 10-year contract involves significant commercial uncertainties that cannot be accurately assessed at the bidding stage. Over such a long duration, costs related to statutory wages, labour, spare parts, consumables, logistics, transportation, inflation, and supply chain disruptions may vary substantially. A 5-year contract tenure would enable competitive pricing and ensure sustainable service delivery. We therefore request IGL to consider revising the O&M contract period from 10 years to 5 years.	Tender Conditions shall prevail

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6	Commercial Volume I (SOR)	89	11.0	Value towards Operations for 10 Years for all the locations Note: Bidder shall be quoting additional charges (which shall include but not limited to – Uniform charges, conveyance, PPE, Mobile, ID card & Profit of margin of bidder etc.) over and above offered IGL operation charges. For Delhi & Haryana: IGL offered operation charges per shift includes minimum wage components (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus etc.). For UP and Rajasthan: IGL offered operation charges per shift includes minimum wage components (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus etc.) plus Special Allowance. In the event that the minimum wages in Uttar Pradesh and Rajasthan increase by a higher amount than those in Haryana, the Special Allowance applicable to these states shall be adjusted against the increase in minimum wages so as to maintain uniformity in the overall wage structure across all three states (Haryana, UP & Rajasthan). The Bidder shall be responsible for necessary contributions towards PF, Family Pension, ESIC, Bonus etc. or any other statutory payments to Government Agencies as applicable under the laws. Minimum wage components (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus etc.) for semi-skilled labour per day shall be payable to workmen engaged for operations on actual basis.	1. We request purchaser to share the breakup of following :- (a) For Delhi & Haryana: Rs. 1073.2 for Delhi and Rs. 842.91 for Haryana per shift which includes (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus). (b) For UP and Rajasthan: Rs. 842.91 per shift which includes (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus) plus Special Allowance. 2. We understand that any variation, revision, or addition in the applicable minimum wages and statutory compliances beyond those considered by IGL in the SOR, shall be reimbursed by IGL to the Contractor i.e. (Basic + VDA, EPF, Gratuity, EDLI, Medical insurance, Leave, Bonus). Please confirm if our understanding is correct.	<table><tr><th colspan="6">Financial implication for hiring of machine operator for compressor packages</th></tr><tr><th>Description</th><th>Operator (Semi Skilled) in Delhi</th><th>Operator (Semi Skilled) in Haryana</th><th>Operator (Semi Skilled) in UP (Ghaziabad & GB Nagar)</th><th>Operator (Semi Skilled) in UP (Other Cities)</th><th>Operator (Semi Skilled) in Rajasthan</th></tr><tr><td>Minimum Wages (A)</td><td>₹ 838.96</td><td>₹ 645.41</td><td>₹ 579.19</td><td>₹ 522.69</td><td>₹ 297.00</td></tr><tr><td>Statutory Compliance Charges (PF, ES, Bonus)</td><td>₹ 234.23</td><td>₹ 197.50</td><td>₹ 185.23</td><td>₹ 167.16</td><td>₹ 94.98</td></tr><tr><td>Special Allowance</td><td>Nil</td><td>Nil</td><td>₹ 78.49</td><td>₹ 153.06</td><td>₹ 450.93</td></tr><tr><td>Offered Minimum wages in SOR per shift</td><td>₹ 1,073.20</td><td>₹ 842.91</td><td>₹ 842.91</td><td>₹ 842.91</td><td>₹ 842.91</td></tr></table> Please refer point no. 7 of Notes of Material Requirement of Technical Volume II on pg. no. 05. Rest tender conditions shall prevail	Financial implication for hiring of machine operator for compressor packages						Description	Operator (Semi Skilled) in Delhi	Operator (Semi Skilled) in Haryana	Operator (Semi Skilled) in UP (Ghaziabad & GB Nagar)	Operator (Semi Skilled) in UP (Other Cities)	Operator (Semi Skilled) in Rajasthan	Minimum Wages (A)	₹ 838.96	₹ 645.41	₹ 579.19	₹ 522.69	₹ 297.00	Statutory Compliance Charges (PF, ES, Bonus)	₹ 234.23	₹ 197.50	₹ 185.23	₹ 167.16	₹ 94.98	Special Allowance	Nil	Nil	₹ 78.49	₹ 153.06	₹ 450.93	Offered Minimum wages in SOR per shift	₹ 1,073.20	₹ 842.91	₹ 842.91	₹ 842.91	₹ 842.91											
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7	Commercial Volume I (SOR)	81	3.1	<table><tr><th>3.1 (D1)</th><th>ITEMS FOR OPERATIONS (per shift of 8hrs)</th><th>Unit</th><th>IGL Offered Rate (₹) (7)</th></tr><tr><td>3.1.1</td><td>Operation charges for 1st year for (HARYANA, UP & RAJASTHAN STATE) i.e., during Warranty period per shift of 8hrs (18 packages X 3 shifts X 365 days = 19710 shifts)</td><td>Nos. of shifts</td><td>842.91</td></tr></table> INDRAPRASTHA GAS LTD. <table><tr><td>Operation charges for 4th year for (DELHI) i.e., per shift of 8hrs (10 packages X 3 shifts X 365 days = 10950 shifts)</td><td>Nos. of shifts</td><td>1073.2</td></tr></table>	3.1 (D1)	ITEMS FOR OPERATIONS (per shift of 8hrs)	Unit	IGL Offered Rate (₹) (7)	3.1.1	Operation charges for 1st year for (HARYANA, UP & RAJASTHAN STATE) i.e., during Warranty period per shift of 8hrs (18 packages X 3 shifts X 365 days = 19710 shifts)	Nos. of shifts	842.91	Operation charges for 4th year for (DELHI) i.e., per shift of 8hrs (10 packages X 3 shifts X 365 days = 10950 shifts)	Nos. of shifts	1073.2	Operation charges for HARYANA, UP & RAJASTHAN STATE is Rs. 842.91 per shift. We request purchaser to share the calculation to derive Rs. 842.91 per shift including special allowance. Operation charges for DELHI STATE is Rs. 1073.20 per shift. We request purchaser to share the calculation to derive Rs. 1073.20 per shift.	<table><tr><th colspan="6">Financial implication for hiring of machine operator for compressor packages</th></tr><tr><th>Description</th><th>Operator (Semi Skilled) in Delhi</th><th>Operator (Semi Skilled) in Haryana</th><th>Operator (Semi Skilled) in UP (Ghaziabad & GB Nagar)</th><th>Operator (Semi Skilled) in UP (Other Cities)</th><th>Operator (Semi Skilled) in Rajasthan</th></tr><tr><td>Minimum Wages (A)</td><td>₹ 838.96</td><td>₹ 645.41</td><td>₹ 579.19</td><td>₹ 522.69</td><td>₹ 297.00</td></tr><tr><td>Statutory Compliance Charges (PF, ES, Bonus)</td><td>₹ 234.23</td><td>₹ 197.50</td><td>₹ 185.23</td><td>₹ 167.16</td><td>₹ 94.98</td></tr><tr><td>Special Allowance</td><td>Nil</td><td>Nil</td><td>₹ 78.49</td><td>₹ 153.06</td><td>₹ 450.93</td></tr><tr><td>Offered Minimum wages in SOR per shift</td><td>₹ 1,073.20</td><td>₹ 842.91</td><td>₹ 842.91</td><td>₹ 842.91</td><td>₹ 842.91</td></tr></table>	Financial implication for hiring of machine operator for compressor packages						Description	Operator (Semi Skilled) in Delhi	Operator (Semi Skilled) in Haryana	Operator (Semi Skilled) in UP (Ghaziabad & GB Nagar)	Operator (Semi Skilled) in UP (Other Cities)	Operator (Semi Skilled) in Rajasthan	Minimum Wages (A)	₹ 838.96	₹ 645.41	₹ 579.19	₹ 522.69	₹ 297.00	Statutory Compliance Charges (PF, ES, Bonus)	₹ 234.23	₹ 197.50	₹ 185.23	₹ 167.16	₹ 94.98	Special Allowance	Nil	Nil	₹ 78.49	₹ 153.06	₹ 450.93	Offered Minimum wages in SOR per shift	₹ 1,073.20	₹ 842.91	₹ 842.91	₹ 842.91	₹ 842.91
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8	Commercial Volume I (SOR)	89	NOTE 11	The Bidder shall be responsible for necessary contributions towards PF, Family Pension, ESIC, Bonus etc. or any other statutory payments to Government Agencies as applicable under the laws. Minimum wage components (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus etc.) for semi-skilled labour per day shall be payable to workmen engaged for operations on actual basis.	We draw reference to the Ministry of Labour & Employment FAQs on the Labour Codes dated 30.12.2025 and the provisions of the Code on Social Security, 2020, which have been made effective from 21.11.2025. Please Refer serial no. 19 of https://www.labour.gov.in/static/uploads/2026/03/a4ccf4c6d97c4f1f36a6d83f8c64213d.pdf?v=20260620082854&utm Additional FAQs on Labour Codes (As on 16.03.2026) <table><tr><th>Sl. No.</th><th>Query</th><th>Reply</th></tr><tr><td>19</td><td>Is a fixed-term employee engaged for 11 months eligible for gratuity upon contract expiry? Is gratuity payable where a fixed-term employee exits before completion of the contracted tenure?</td><td>Fixed Term Employee (FTE) will be eligible for gratuity if he/she renders service under the contract for a period of one year (from start of contract).</td></tr></table> We understand that, wherever gratuity becomes statutorily payable under the applicable provisions, the corresponding gratuity cost shall be reimbursed by the Purchaser over and above the minimum wage components, including Basic + VDA, EPF, EDLI, Medical Insurance, Leave, Bonus, etc., specified in the tender. We understand that the statutory gratuity liability arising during execution of the contract shall be treated as an additional statutory cost and reimbursed separately on actual basis.	Sl. No.	Query	Reply	19	Is a fixed-term employee engaged for 11 months eligible for gratuity upon contract expiry? Is gratuity payable where a fixed-term employee exits before completion of the contracted tenure?	Fixed Term Employee (FTE) will be eligible for gratuity if he/she renders service under the contract for a period of one year (from start of contract).	The payment of gratuity shall be in the Bidder's scope as per the applicable statutory provisions. Rest tender conditions shall prevail.																																									
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9	Commercial Volume I (IFB)	7	3.1	The duration of contract shall be for Eighteen (18) months from the date of issuance of LOA/ Notification of Award for supply, installation, testing and commissioning of compressors along with Operation and Comprehensive Maintenance of 1st year during warranty period, further extendable for 9 years from 2nd to 10th year.	We request to have atleast 3 years firm contract for O & M.	Tender Conditions shall prevail																																															
10	Commercial Volume I (IFB)	7	3.2 a	The material is to be delivered in lots as per IGL requirement. 1st lot of 7 nos. is to be delivered at IGL site/ stores within 16 weeks & subsequent lots is to be delivered at IGL site/ stores within 14 weeks from the date of purchase order.	Delivery of critical components such as Air cooler, PLC Panels, Flow Meters, Electric Motor etc is currently between 16-18 weeks ex-works. We request the purchaser to revise the delivery schedule as 1st Lot of 07 nos within 18 Weeks from the date of issuance of LOA/ Notification of Award and subsequent Lot within 16 Weeks from the date of issuance of LOA/Notification of Award. Kindly accord your acceptance.	Tender Conditions shall prevail																																															
				11	Commercial Volume I (IFB)	8	3.3	Basis of Delivery: The basis of delivery shall be FOT (Free on Terminal) IGL Site/Store in all GAs at NCT of Delhi, Uttar Pradesh, Haryana and Rajasthan.	Freight Charges shall be Up to Site/Store Delivery location will be either directly at site or store designated by Owner. One time unloading either at site or store will be in bidder's scope. However in case package is delivered to the store then re-transportation, loading and unloading of the package from store to site Shall be in Owner's Scope	Tender Conditions shall prevail																																											
12	Commercial Volume I (IFB)	8	3.1.1	Further, after expiry of 1st year Operations and Comprehensive Maintenance period (during warranty), IGL reserves the right to extend the contract and separate work order on OEM basis for each year will be awarded for the services of Operations & Comprehensive Maintenance for the period of 2nd to 10th Year (9 years) after approval from competent authority.	We request to have atleast 3 years firm contract for O & M.	Tender Conditions shall prevail																																															
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14	Commercial Volume I (SCC)	68	11.5	For Comprehensive maintenance services: To derive rate for 2nd to 10th year, 10% escalation Year on Year basis on quoted rate of 1st Year shall be considered.	We would like to inform you that due to uncertainties of the wages, steel price etc we will not be able to predict exact variation. Also, we cannot load more than 10% due to higher cap in the maintenance. Hence, we request a 10% escalation factor upto 5th year & the rates from 6th to 10th year will be decided and mutually agreed before the closure of 5th year.. Kindly confirm your acceptance of this structure	Tender Conditions shall prevail
15	Commercial Volume I (SCC)	68	11.5	To derive rate for sixth and subsequent years (6th to 10th year), 10% annual escalation Year on Year basis on derived rate (excluding wage components, variation of which is payable on actual basis) of 5th Year shall be considered. It will be responsibility of bidder to ensure the payment of defined minimum wages to workmen engaged for operations.		
16	Commercial Volume I (SCC)	68	13.1	Payment towards Supply (Compressor Package) Through direct payment within 45 days from date of receipt of invoice.	We kindly request the Purchaser to consider releasing payment for the Compressor Package supply within 30 days of receiving the invoice.	Tender Conditions shall prevail
17	Commercial Volume I (SCC)	68	ii of 13.1	10% (Ten Percent) Payment shall be released after successful completion of installation, Testing and Commissioning of each compressor package at the site & acceptance thereof by the OWNER and after successful Performance Acceptance Test at site and acceptance by owner for each compressor. In case Installation, Testing & Commissioning and Performance Acceptance Test could not be executed within 90 days from the date of receipt of compressors at site/ store due to reasons attributable to Purchaser, the 10% payment shall be released	Please note, in case of commissioning is complete and performance test at site is not conducted within 30 days, purchaser to release 10% payment within 15 days.	Tender Conditions shall prevail
18	Commercial Volume I (SOR)	88	SOR Note 10	For Installation, Testing and Commissioning (ITC) & Field Performance Test, service charges shall be minimum 01% of supply cost of Compressor package.	We understand that the value to be filled in cell G15 of the SOR Excel sheet must be a minimum of 1% of the supply price. Could you kindly clarify/confirm which specific cell in the SOR Excel sheet should be considered as the base 'Supply Price' for this calculation?	G8 cell of the SOR Excel sheet is considered as supply price
19	Commercial Volume I (SOR)	88	SOR Note 10	For Comprehensive Annual Maintenance Contract (CAMC), fixed charges for 1st year to be considered within the range of 6% to 10% of unit price for supply, Installation, Testing and Commissioning & Field Performance Test and Transportation Charges.	We understand that the value to be filled in cell G41 of the SOR Excel sheet must be within the range of 6% to 10% of unit price for supply, Installation, Testing and Commissioning & Field Performance Test and Transportation Charges. Could you kindly clarify/confirm which specific cell or cells in the SOR Excel sheet should be considered for this calculation?	G8 + G15 should be considered as supply, Installation, Testing and Commissioning & Field Performance Test and Transportation Charges. Formula for the same is as mentioned below: $(((G8 + G15) / 12) \times 10\%) \geq G41 \geq (((G8 + G15) / 12) \times 6\%)$
20	Technical Volume II	12	1.60	Separate flameproof junction boxes for different type of signals like analog, digital signals, alarm, shutdowns, and thermocouples, RTDs etc. for interfacing to FLP local panel. Same is not applicable for direct run cable up to PLC panel.	Please note that Local control panel (With PLC) is mounted on package itself hence junction boxes are not required. Instruments will be directly wired to Local control panel. This system is available in all our packages and accepted by al the CGD companies and 400+ CNG compressor are running successfully.	Tender Conditions shall prevail
21	Technical Volume II	12	1.6	Inlet twin suction gas filter / Duplex suction filter of filtration level upto 5 micron with oil drain valve, differential pressure gauge and temporary suction line strainer at the package inlet and at other stage (if required). A conical/ Y-type strainer for filtration level upto 50 micron shall be installed in the inlet pipe after the isolation valve by the contractor at the battery limit.	Please note that Duplex suction gas filter & basket strainer is provided and placed outside the compressor enclosure	Tender Conditions shall prevail
22	Technical Volume II	12	1.6	Separator/ Knockout drums/volume bottles with drains operated by solenoid valves, as required. Bypass valves for automatic drain system with manual drain shall be as per manufacturer's recommendation and proprietary design. All drain lines shall be provided with level operated / time based auto drain valves and NRVs. Test certificates for coalescent filters to be submitted.	The proposed CNG package has suction volume bottle at each stage and discharge volume bottle at final stage discharge only. The volume bottles at suction are connected to condensate drain system through auto-drain & Manual drain system. These volume bottles shall act as scrubbers/ condensate removal system. No separate KODs shall be supplied. Isolation valve is mounted in upstream of auto drain valve. This is our standard design offered in all our CNG packages. Please confirm your acceptance.	Tender Conditions shall prevail
23	Technical Volume II	12	1.6	Y- type strainers, valves, sight flow indicators, check valves with check valves protector, manual drain/ traps etc. as required for various auxiliary systems i.e. frame lube oil, cylinder lubrication system, cooling water systems, fuel supply/conditioning system etc.	Please note that as per Manufacturer's standard practice the lubricator will be divider block type. Y type strainers, Sight flow indicators, check valve etc are applicable for Single Plunger per point lubricator, thus not applicable. This is our preproietory desing and installed in almost 600 + CNG compressor all over india and are running successfully.	Tender Conditions shall prevail
24	Technical Volume II	12	1.6	Block and bleed valves to be provided for Pressure gauges (including DPG) and pressure Transmitters.	Please note that As per our standard Manufacturing Practice we provide Needle valves for Pressure gauges and pressure Transmitters.	Tender Conditions shall prevail
25	Technical Volume II	16	Safety	Relief Valves shall be provided at suction and discharge and in between inter stages of compressor with setting as per cl. 11.18.5 of ISO 13631: 2009 with R.V. venting as per cl. 11.18.6 of ISO 13631: 2009. All vented lines to be connected to common relief valve header.	Please note that as per Manufacturer's standard practice, Relief valve will be provided on BDV and each stage discharge. Please confirm your acceptance.	Noted. Rest Tender Condition Shall Prevail
26	Technical Volume II	18	2.1.1	Bidder shall make his own provision for Instrument air with the flame proof electric motor driven air compressor, receiver and refrigerant type air dryer system	Please note, flameproof refrigerant type air dryer is not available. Only motor shall be flame proof.	Tender Conditions shall prevail
27	Technical Volume II	18	2.1.2	The air compressor motor& air dryer shall be flameproof and will be kept in CNG area	In case of requirement of flame proof air dryer, we can provide heatless type dryer. Kindly confirm the same.	
28	Technical Volume II	18	2.1.2	Manual drains and automatic moisture traps/moisture separator cum regulator shall be provided in the system.	Manual Drains will be provided at air reciever and vessel tank.	Tender Conditions shall prevail
29	Technical Volume II	19	2.2.4	As and where specified on the data sheets all vents (i.e. Relief valve, distance piece and packing) shall be manifolded and terminated at skid edge outside the enclosure and vented to safe height of 3 m at package roof	Please Note that Vent shall be terminated at height of 2m from compressor package roof	Tender Conditions shall prevail
30	Technical Volume II	22	4.8.2	Bidder shall submit cooler sizing calculation for review/ records.	Please Note The cooler sizing calculations cannot be submitted, being a proprietary design	Tender Conditions shall prevail
31	Technical Volume II	22	4.8.2	Cooler design shall be on the basis of 20% excess capacity than required corresponding to suction pressure of 19 kg/cm2	We shall design the interstage and final stage discharge cooler for outlet temperature of 52degC. considering ambient temperature of 42degC. The cooler design shall be on the basis of 10% safety based on thermal duty at design suction pressure condition and the suitability of this area shall be checked for the most severe condition corresponding to suction pressure. This is our standard design practice and we follow this for all our CNG packages. Kindly confirm your acceptance.	Tender Conditions shall prevail
32	Technical Volume II	23	4.9.6	A gas recovery vessel of suitable capacity shall be provided to collect the gas of 1st, 2nd & 3rd stage of compression. The operating pressure of gas recovery vessel shall be 25 kg/cm2g maximum. In the event of sudden stoppage or otherwise during operation / idling, the blow down vessel shall not vent gas into the atmosphere.	As per our standard design, maximum operating pressure is 35 kg/cm2 g. If BDV pressure is to be maintained below 25 kg/cm2 g, BDV size will increase unnecessarily and thereby increaing compressor package size Please Confirm your Acceptance	Tender Conditions shall prevail
33	Technical Volume II	23	4.9.6	One vent line from gas recovery vessel with double isolation valves shall be provided	Please note that we provide both automatic drain system & manual valve but for manual valve we provide single isolation valve instead of double isolation valve(ball valve type). Please confirm your acceptance	Tender Conditions shall prevail
34	Technical Volume II	23	4.9.8	Oil recovery pot of suitable capacity shall be provided with double isolation manual valve and level gauge.	As per our standard design, We have provided single isolation valve at the drain line of oil recovery pot/vessel Please confirm your Acceptance	Tender Conditions shall prevail
35	Technical Volume II	23	4	Pulsation, Vibration Control and Analog Study	Please note that Pulsation suppressor devices for CNG compressors are standardized in design. Order specific pulsation study is not carried out.	Noted. Rest Tender Condition Shall Prevail
36	Technical Volume II	24	4.12.1	The Maximum allowed temperatue within the enclosure shall be 5 degree above ambient temperature.	Please accept the maximum allowed temperature within the enclosure to 10 degrees, same is accepted by CGD companies	Tender Conditions shall prevail
37	Technical Volume II	24	4.12.2	Bidders to provide ventilation / exhaust fans to vent out any entrapped gases in the enclosure before starting the main compressor. Necessary interlocking to be provided by the bidder for the same	Please note, as the cooler is of forced draft, the entrapped gases in the enclosure will be Vent out before starting the main compressor. Hence, ventilation fan is not envisaged.	Tender Conditions shall prevail
38	Technical Volume II	24	4.12.6	The enclosures shall have doors for normal access and removable wall panels for ease of maintenance of all the components	The enclosure shall have hinged doors instead of removable panels. Please confirm your acceptance.	Noted. However, proper space and access for the maintenance of all the components shall be ensured
39	Technical Volume II	25	4.12.11	One vent line with double isolation valve shall be provided to emptying the package at 3rd stage separator	Please note that we provide both automatic drain system & manual valve but for manual valve we provide single isolation valve instead of double isolation valve(ball valve type). Please confirm your acceptance	Tender Conditions shall prevail
40	Technical Volume II	28	6.4.1	The PT shall be conducted only after 30 days' running of the machine after successful commissioning or after 30 days from the date of commercial operation, but not later than 90 days from the date of commercial operation of the machine. The delay in conducting PT beyond 90 days shall be liable for PRS unless such delays are solely attributable to the owner (i.e. due to inadequate load, non-availability of CNG vehicles for conducting PT).	Please note, in case the PT is not conducted within 30 days due to reasons non attributable to the bidders, then purchaser to release " ready to use " and PT completed by either running for 30 minutes or filling the cascade for one cycle.	Tender Conditions shall prevail

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41	Technical Volume II	32	7.3.4	Penalty for Non-Performance during Period of Operation & Maintenance	Please note In any case/ any situation, total penalty will be limited to 50% of monthly invoice value of concerned package including all penalty clauses i.e Clause 7.3.1 Penalty towards Excess Package Gas Loss , Clause 7.3.2 Penalty towards Excess Engine Fuel Consumption: , Clause 7.3.3 Penalty towards Package Efficiency Loss and Clause 7.3.4 Penalty for Non-Performance during Period of Operation & Maintenance Request you to include this clause to enable us to participate in the tender.	Tender Conditions shall prevail
42	Technical Volume II	45	13.13.3 ix. Of	Calibration shall be done from government-approved laboratories and shall be carried out at least 15 days prior to the calibration due date.	For massflowmeter, field calibrations shall be carried out. FCRI calibration shall be in client scope	Tender Conditions shall prevail
43	Technical Volume II	66	192 of 18.1	ACCOUSTIC ENCLOSURE WITH FORCED VENTILATION FAN	Please note, as the cooler is of forced draft, the entrapped gases in the enclosure will be Vent out before starting the main compressor. Hence, ventilation fan is not envisaged.	Tender Conditions shall prevail
44	Technical Volume II	76	22.0	PREFERRED MAKES	Kindly Approve the following 1) PLC: Schneider 2) IR Gas Detector: Pollution Protection Systems Mumbai Pvt.Ltd 3) UV Flame detectors: Pollution Protection Sustems Mumbai Pvt.Ltd 4) Pressure Gauges & Temperatures Gauges: Thermal Instrument 5) RTDs: Thermal Instrument 6) SS Tubes for CNG application: JINDAL SAW LTD 7) SS tube Fittings: ASTEC, Fluid Control, Dawsons 8) Cables: Thermocable, Suyog Cables 9) Suction And Discharge Filter: KPCL 10) Variable Frequency drive (VFD): Rockwell 11) ON OFF BALL/NEEDLE VALVE: Intervale 12) Air compressor: KPCL, BAC, FRANK 13) VFD: Rockwell Automation	Please refer Note-1 of Point No. 22.0 Rest tender conditions shall prevail
45	Technical Volume II	88	1	Along with communication cable with adapters to connect Laptop with PLC and Programming, configuring software of PLC with license.	Request you to please confirm if laptop needs to be provided by bidder. If needed to be provided also please provide separte line item in SOR along with the quantities for Laptop GA wise	Tender Conditions shall prevail
46	Technical Volume II	93	1.9.14	Bidder shall provide 1 set of licensed software along with relevant interfacing adaptors and cables in each GA where compressor package will be installed and commissioned.	Request you to please confirm if the application software for PLC & HMI is required per compressor or along with complete set of compressors.	Please refer point no. 5.6.4 of technical volume-II on page number 96.
47	Technical Volume II	94	1.9.16	Vendor has to calibrate all instruments including mass flow meter and perform pressure vessel testing within 1 month of compressor commissioning. Vendor has to provide calibration certificates to respective Control room Incharge within 1 week from the calibration date.	For massflowmeter, field calibrations shall be carried out. FCRI calibration shall be in client scope	Tender Conditions shall prevail
48	Technical Volume II	95	1.9.18	Pressure indicator each stage suction and discharge	We have provided pressure indicator at each stage suction & last stage discharge only	Tender Conditions shall prevail
49	Commercial Volume I (IFB)	7	3.1	Operation and Comprehensive Maintenance of 1st year during warranty period, further extendable for 9 years from 2nd to 10th year.	We request IGL to reconsider the proposed contract tenure and reduce the Operation & Maintenance (O&M) contract period from 10 years to 5 years. A 10-year contract involves significant commercial uncertainties that cannot be accurately assessed at the bidding stage. Over such a long duration, costs related to statutory wages, labor, spare parts, consumables, logistics, transportation, inflation, and supply chain disruptions may vary substantially. A 5-year contract tenure would enable competitive pricing and ensure sustainable service delivery. We therefore request IGL to consider revising the O&M contract period from 10 years to 5 years.	Tender Conditions shall prevail
50	Commercial Volume I (IFB)	7	3.2	The material is to be delivered in lots as per IGL requirement. 1st lot of 7 nos. is to be delivered at IGL site/ stores within 12 weeks & subsequent lots is to be delivered at IGL site/ stores within 10 weeks from the date of purchase order.	Request you to please consider the delivery for First lot as 16 weeks and for further lots 14 weeks from date of PO release.	Tender Conditions shall prevail
51	Commercial Volume I (IFB)	8	3.1	For Operation Charges of 1st Year, Bidder has to quote only additional charges per-shift (which shall include but not limited to – Uniform charges, conveyance, PPE, Mobile, ID card & Profit of margin of bidder etc.) over and above offered IGL operation charges. For Delhi & Haryana: IGL offered operation charges per shift includes minimum wage components (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus etc.). For UP and Rajasthan: IGL offered operation charges per shift includes minimum wage components (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus etc.) plus Special Allowance. In the event that the minimum wages in Uttar Pradesh and Rajasthan increase by a higher amount than those in Haryana, the Special Allowance applicable to these states shall be adjusted against the increase in minimum wages so as to maintain uniformity in the overall wage structure across all three states (Haryana, UP & Rajasthan). The Bidder shall be responsible for necessary contributions towards PF, Family Pension, ESIC, Bonus etc. or any other statutory payments to Government Agencies as applicable under the laws. Minimum wage components (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus etc.) for semi-skilled labour per day shall be payable to workmen engaged for operations on actual basis.	Operation charges should be clearly defined in the Tender/SOR to ensure compliance with all applicable statutory requirements, including Minimum Wages, EPF, ESI, Bonus, Insurance, Leave provisions, gratuity and other labour law obligations. The rates offered by IGL towards operation charges should specifically identify the statutory components and the bidder's scope of responsibility. Further, any additional statutory compliance requirements, revisions in statutory liabilities, or changes introduced by the Central Government, State Government, or any regulatory authority during the contract period, which are not covered under the quoted operation charges, should be reimbursed by IGL. Additionally, in the event of any abnormal increase in minimum wages or other statutory cost components beyond 5% in a year, the operation charges should be reviewed jointly and revised through mutual discussion to ensure continued statutory compliance and sustainability of operations throughout the contract period.	Tender Conditions shall prevail
52	Commercial Volume I (IFB)	8	3.11	Further, after expiry of 1st year Operations and Comprehensive Maintenance period (during warranty), IGL reserves the right to extend the contract and separate work order on OEM basis for each year will be awarded for the services of Operations & Comprehensive Maintenance for the period of 2nd to 10th Year (9 years) after approval from competent authority. For Operations: To derive additional charges (excluding wage components, variation of which is payable on actual basis) for Operation from 2nd to 5th Year, 5% escalation Year on Year basis shall be considered on quoted/ negotiated rates of 1st Year. To derive rate for sixth and subsequent years (6th to 10th year), 10% annual escalation Year on Year basis on derived rate (excluding wage components, variation of which is payable on actual basis) of 5th Year shall be considered. It will be responsibility of bidder to ensure the payment of defined minimum wages to workmen engaged for operations. For Comprehensive maintenance services: To derive rate for 2nd to 10th year, 10% escalation Year on Year basis on quoted rate of 1st Year shall be considered.	We request IGL to reconsider the proposed contract tenure and reduce the Operation & Maintenance (O&M) contract period from 10 years to 5 years. A 10-year contract involves significant commercial uncertainties that cannot be accurately assessed at the bidding stage. Over such a long duration, costs related to statutory wages, labor, spare parts, consumables, logistics, transportation, inflation, and supply chain disruptions may vary substantially. A 5-year contract tenure would enable competitive pricing and ensure sustainable service delivery. We therefore request IGL to consider revising the O&M contract period from 10 years to 5 years.	Tender Conditions shall prevail
53	Commercial Volume I (IFB)	8	3.70	For Installation, Testing and Commissioning (ITC) & Field Performance Test, service charges shall be minimum 01% of supply cost of Compressor package.	In case sufficient load is not available at site for conducting the Field Performance Test, or the delay in conducting the FPT is not attributable to the vendor, we request that the payment towards Installation, Testing & Commissioning and Field Performance Test charges be released after two (02) months from the date of Commercial Operation of the compressor. This will ensure timely payment to the vendor where the completion of FPT is delayed due to reasons beyond the vendor's control.	Tender Conditions shall prevail
54	Commercial Volume I (IFB)	14	6.0	For Energy Consumption quoted by the bidder under guaranteed parameters, no benefit will be given below 72 KWH for 600 SCMH Electric Motor Driven Compressor.	We request you to define the Min - Max limit for power consumption.	Tender Conditions shall prevail
55	Commercial Volume I (IFB)	14	8.0	IGL intends to split the quantities of compressor packages and its associated items as per schedule of rates among two bidders (L1: L2/ L3/L4...) in the ratio of 70:30 on L-1 price, i.e. 20 nos. and 08 nos.	We kindly request amending the distribution ratio from 70:30 to 60:40 as all qualified bidders meet the same stringent technical and field provenness criteria and are equal in capability. This balanced distribution ensures fair opportunity, optimizes manufacturing capacities, and enhances overall project execution security for IGL.	Tender Conditions shall prevail
56	Commercial Volume I (IFB)	10	7	Technical BEC: b. The bidder shall have engineered, manufactured/ packaged, tested and supplied to customer(s) at least 05 nos. of CNG Electric Motor Driven compressor packages of 600 SCMH or higher capacity, with discharge pressure of 250 kg/cm2, from the proposed facility of manufacturing/ packaging in a single order in the previous seven (07) years reckoned from the tender issue/publish date. c. At least 01 No. of the above mentioned compressor packages should have been operating satisfactorily in the field for a period of minimum 4000 running hours (in last 07 years) reckoned from the tender issue/publish date.	b. Since the total project volume for this tender is quite large at 28 nos., we kindly request increasing this qualification threshold to 07 nos. to ensure that only bidders with robust, high-volume execution experience are shortlisted. c. We kindly request increasing the requirement to at least 05 nos. of compressor packages operating satisfactorily for a minimum of 8,000 running hours each. Given the large total project volume of 28 packages, raising this threshold ensures the selection of a highly reliable partner with extensive long-term operational experience.	Tender Conditions shall prevail
57	Technical Volume	30	7.3.1	Penalty towards Excess Package Gas Loss:	We request that instrument measurement error be considered while calculating gas loss penalties, as recommended by the Mass Flow Meter OEM. Gas loss penalties should be applicable only for losses exceeding the permissible instrument error limit quoted by the bidder in the Guaranteed Parameters (GP) sheet. This will ensure a fair and technically justified assessment of performance.	Tender Conditions shall prevail
58	Technical Volume	39	13.0	The date of successful field performance test (FPT) at site (which shall be conducted within 90 days from the date of successful commissioning of the machine). However, bidder shall be paid only 50% of O&M charge for operation and maintenance of the compressor from the date of commercial operation up to the date of performance test as part payment against O&M till the capacity and other guaranteed parameters of the package is established through FPT. The balance 50% of O&M charge (from the date of commercial operation up to the date of PG test) shall be	We request IGL to release 100% O&M payments from the date of Commercial Operation. The bidder is required to make timely payments to O&M subcontractors/vendors from the commencement of operations, and withholding a portion of the O&M payment until PAT completion will create financial strain and may lead to deterioration in service delivery at site. The bidder can provide an undertaking to complete the Performance Acceptance Test (PAT) within the schedule and timelines agreed with IGL as sometimes due to low load / other issues machine PAT gets delayed at site. In view of the above, we request IGL to release 100% O&M payments from the date of Commercial Operation.	Tender Conditions shall prevail
59	Technical Volume	30	7.3.2	Penalty towards Excess Energy Consumption:	If sufficient load is not available at the site or the compressor is subjected to frequent auto start/stop operations due to demand fluctuations and operational conditions not attributable to the supplier, any resultant increase in fuel consumption shall be excluded from fuel consumption penalty calculations	Tender Conditions shall prevail

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60	Technical Volume	21	4.7.3	Digital no flow timer shall be provided to stop the compressor in case of loss of cylinder lubrication.	OEM standard, Common Digital No Flow Switch (time based) will be provided. - When there is no - pulse (from cylinder lubrication - divider block) for certain time interval, the switch toggles & the compressor is tripped on lubrication fault.	Noted. Rest Tender Condition Shall Prevail
61	Technical Volume	27	6.2	Mechanical Run Test (MRT)	MRT will be carried out as per OEM std. following shall not be feasible during FAT • Bearing temperature- Not applicable for Flp. motors • Oil cooler inlet outlet temperature not considered. • Sound level- Not feasible to unavailability of free field. Strip test-As it is not possible to disassemble any part pf the compressor Package after assembly & Testing	Tender Conditions shall prevail
62	Technical Volume	27	6.3	Mechanical String Test	Test will be limited to witness of Performance Parameters as per Factory Acceptance Test (FAT) at full load on CNG fuel. However The test will not comprise of disassembly of any of component of Package for witness.	Tender Conditions shall prevail
63	Technical Volume	12	1.6	Separate flameproof junction boxes for different type of signals like analog, digital signals, alarm, shutdowns, and thermocouples, RTDs etc. for interfacing to FLP local panel. Same is not applicable for direct run cable up to PLC panel.	LCP (With PLC) is mounted on package itself hence separate JB's are not required.LCP (With PLC) is mounted on package itself & also separate gauge box will be used for intrinsically safe signals.	Tender Conditions shall prevail
64	Technical Volume	13	1.6	Each stage outlet temperature before cooler & after cooler to be displayed on PLC.	Each stage temp before cooler & after cooler will be displayed on Gauge panel. In addition to this Temperature Transmitter provided at for PLC display to monitor temp at each stage. 1) Compressor suction 2) 1st stage discharge 3) 2nd stage discharge 4) 3rd stage discharge 5) Aftercooler outlet	Tender Conditions shall prevail
65	Technical Volume	19	2.2.4	As and where specified on the data sheets all vents (i.e. Relief valve, distance piece and packing) shall be manifolded and terminated at skid edge outside the enclosure and vented to safe height of 3 m at package roof.	Distance piece will be as per OEM standard. Venting is not applicable due to pressurised crankcase.	Noted. Rest Tender Condition Shall Prevail
66	Technical Volume	19	2.2.5	All drains from different process equipment, distance piece and packing shall be manifolded and terminated at single point for customer interface duly flanged with isolation valve	We shall provide oil recovery vessel (oil drain pot) of 20 liters to ensure uninterrupted operation of machine. ORV shall be mounted inside the package. All drains terminated at single point for customer interface duly tapped with isolation valve	Noted. Rest Tender Condition Shall Prevail
67	Technical Volume	22	4.9.1	Carbon Steel separators / KOD volume bottles with auto and manual drain system shall be provided for the capacity as required.	All the separators with auto drain system over manual drain system considered for safety reasons, only ORV with manual drain considered. Drain system will be time bases as per OEM standard offering.	Tender Conditions shall prevail
68	Technical Volume	23	4.9.9	Coalescent super fine filters (preferably two stage) Third Party approved, for removal of liquid (e.g. water & oil)and solid particles down to 0.1 microns out of compressed natural gas shall be provided. Residual Oil Contents shall be less than 1 PPM. Automatic drains with On-off valve connected to Gas recovery vessel shall be provided. The filters shall be sized to flow min. 200% of the flow at suction pressure of 19 kg/cm2(g)and discharge pressure of 255 Kg/cm2 (g). However mechanical design shall be based on safety set pressure	OEM approved two stage discharge filter with timer base automatic oil drain as per standard design will be provided.	Tender Conditions shall prevail
69	Technical Volume	24	4.12.7	All the pressure, temperature, gas flow meter, oil level, lube oil pressure, coolant temperature, coolant level indicators shall be visible from outside of enclosures. enclosures as per the design of the manufacturer through gauge panel. However if due to space constraint some of the Instruments not visible from outside of enclosure then proper accessibility has to be provided for reading the parameters from the Instruments. The Flow meters shall be installed in such a way that if required reading can be taken safely on running of compressor during performance testing.	All the indicators for pressure, temperature of gas shall be visible from outside of enclosures. For rest of the parameters same can be viewed from PLC/locally.	Tender Conditions shall prevail
70	Technical Volume	25	4.12.11	One vent line with double isolation valve shall be provided to emptying the package at 3rd stage separator.	Due to safety reason vent line not provided at 3rd stage separator, venting prvision is provided at BDV with double isolation valve	Tender Conditions shall prevail
71	Technical Volume	25	4.12	Piping	Gas piping/ tubing at 3rd stage diacharge will only be in SS-316, with SS fittings, Rest all piping /tubing will be Combination of Flanged & screwed connections with CS material (pipes, Fittings & Flanges) as per application requirement & standard design. This is as per manufacturing standard design.	Tender Conditions shall prevail
72	Technical Volume	25	4.12.10	External drain & vent piping shall be Carbon Steel and not less than 1" nominal size. However, all the internal drains shall be SS 316 tube as per ASTM A269. However all the internal drains shall be SS 300 series material.	Package oil drain will be of 1/2" as per manufacturer standard	Tender Conditions shall prevail
73	Technical Volume	33 34	8.2 & 8.4	PAINTING AND PROTECTION	Painting shall be as per manufacturer's standrad procedures. Package enclosure shall be Powder Coated ensuring longer durability in all weather out door installation conditions. The headers of air cooled exchangers shall be heat resistant epoxy painted	Tender Conditions shall prevail
74	Technical Volume	69	21.0	QUALITY ASSURANCE PLAN	Inspection & Testing will be as per final approved QAP	Tender Conditions shall prevail
75	Technical Volume	70	22.0	Preferred makes GD & FD Ball Valve Check Valves Instrument SS fittings/valves SUCTION FILTER & Discharge Filter	Shall be as per final approved vendor list. Kindly approve below makes : PPS (pollution protection systems) PHBB Parker Baumer OEM Approved	Please refer Note-1 of Point No. 22.0 Rest tender conditions shall prevail
76	Technical Volume	86	1.2.7.3	Graphics, Data acquisition, Real time monitoring & logging, modifying set point and range of critical process parameters (Digital and analogue) as defined in Instrument schedule through PT, RTD, switches, etc. installed in compressors.	Graphics, Data acquisition, Real time monitoring , modifying set point and range of critical process parameters (Digital and analogue) as defined in Instrument schedule through PT, RTD, switches, etc. installed in compressors.	Tender Conditions shall prevail
77	Technical Volume	92	1.9.4. 1.9.17.	CERTIFICATION - Electrical instrumentation shall be certified by a recognized authority such as BASEEFA,PTB, LCIE, CESI, INIEX, CSIR ,CEA or any agency approved by Indian Government	CCOE or its equivalent certificate (FM, CSA , ATEX, UL, CMRI) whichever applicable & available will be provided. All Test certificates will be as per approved QAP	All electrically operated Instruments shall have mandatorily PESO certification; Rest tender Conditions Prevails
78	Technical Volume	96	1.9.18.	Compressor package shall be provided with the following indicators: i. Pressure indicator each stage suction and discharge. ii. Temperature indicator each stage suction and discharge iii. Oil pressure indicator on each pressure lubrication system iv. Oil levels indicator, field mounted v. Air pressure low indicator vi. Hour meter vii. Non- resettable electromechanical hour meter on local control panel. viii. Hydraulic oil cooler inlet & outlet temperature on local gauge panel (if required) ix.Low oil level protection devices xv. RPM indicator shall be in gauge panel	All instrument will be provided as per finalised approved P&ID. Approved by IGL.	Tender Conditions shall prevail
79	Technical Volume	96	1.9.18.	The compressor package shall be furnished with the following trip logic (but not limited to) that shall stop the compressor and suction of compressor shall be isolated: xii. Low fuel pressure xiii. Flow through the vent line	xii. Low fuel pressure - Not applicable xiii. Flow through the vent line trip logic not considered.	Tender Conditions shall prevail
80	Technical Volume	95	ANNEX URE -1	Compressor Instrumentation	We shall provide instruments as per P&ID submitted and Instrument schedule for approval. Following not considered : 1. Frame Oil Sump/Reservoir Level : Switch not considered. 23. Coolant main pump disch. Pr.-NA as compressor is air cooled. 28. Coolant cooler Outlet Temp.-NA as compressor is air cooled. 29. Coolant reservoir Level-NA as compressor is air cooled. 42. Final Disch Pressure after coalescent filter *- Low alarm and trip not considered. 53. Temp before and after Air cooler- Each stage Outlet temp and for after coolet before after will be provided. *Smart type pressure transmitter at suction and discharge shall not be considered, Piezo resistive type will be provided.	Tender Conditions shall prevail
81	Technical Volume	102	ANNEX URE -1	SPECIFICATION OF GAS DETECTOR Infrared Sensor with Transmitter, with Local Display and Indicator	Gas detector with Local Display and Indicator not considered, For safety reasons, GD readings are purposefully shown only on HMI screen, since in event of gas leakage, it is not recommended for any operator to enter the area where leaked gas is already present. Further, visual indication on HMI, alarm & trip are also provided to take necessary actions without exposing person to hazard.	Tender Conditions shall prevail
82	Technical Volume	114	2.0.	a) Air Compressor Motor shall be FLP type 4 pole Induction motor and suitable for hazardous areas shall have protection Ex (d) as per area classification (Class-I, Division I, Group Das per NEC or Zone I, Group II A/ II Bas per IS/ IEC), T5 or better.	We request you to accept T3 insulation class.	Tender Conditions shall prevail

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83	Technical Volume	109	1.1	RTD and BTD shall be provided to monitor the winding and bearing temperature of main motor.	PTC for winding temperature will provide.	Tender Conditions shall prevail