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## TENDER NO: IGL/ET2/CP/CC18620

## SUPPLY, INSTALLATION, TESTING, COMMISSIONING, OPERATION AND COMPREHENSIVE MAINTENANCE OF 350 SCMH ELECTRIC MOTOR DRIVEN CNG COMPRESSOR PACKAGES

## REPLY TO PRE-BID QUERIES

Sl. No.	Volume/ Section/ Clause No.	Page No.	Clause No.	Clause	Bidder's Query	IGL Reply
1	Commercial Volume I IFB	10	7	7.1 Technical BEC: a. The bidder shall be a regular manufacturer/ packager and supplier of reciprocating Electric Motor Driven compressor packages of 350 SCMH or higher capacity handling hydrocarbon gas with single point responsibility. b. The bidder shall have engineered, manufactured/ packaged, tested and supplied to customer(s) at least 8 nos. of CNG Electric Motor Driven compressor packages of 350 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.  OR  The bidder shall have engineered, manufactured/ packaged, tested and supplied to customer(s) at least 8 nos. of CNG Electric Motor Driven compressor packages of 350 SCMH or higher capacity, with discharge pressure of 250 kg/cm2, from the proposed facility of manufacturing/ packaging in multiple orders including at least one order of 5 nos. of CNG Electric Motor Driven compressor packages of 350 SCMH or higher capacity during any 1 year in the previous seven (07) years reckoned from the tender issue/publish date.  c. At least 1 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 7 years) reckoned from the tender issue/publish date.  d. The offered Compressor model shall be from the existing regular manufacturing range of the Compressor manufacturer. At least 1 No. compressors identical or validly similar to the proposed offered compressor model in terms of number of stages, type of compressor and process gas (i.e. natural gas) must have been manufactured tested and supplied to customers from the proposed offered compressor model in terms of number of stages, type of compressors and process gas (i.e. natural gas) must have been manufactured tested and supplied to customers from the proposed offered compressor model in terms of number of stages, type of compressor and process gas (i.e. natural gas) mu	We understand that all the points of BEC pertain to Online reciprocating Electric Motor Driven CNG Compressor Packages and PTR w.r.t. only Online reciprocating Electric Motor Driven CNG Compressor Packages shall be acceptable.  Please confirm if our understanding is correct	Tender conditions shall prevail.
2	Commercial Volume I SCC	59	10.3	10.3 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.	We understand that 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.	Bidder understanding is correct.  Tender conditions shall prevail.
3	Commercial Volume I SCC	83/84	10	Minimum wage components (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus etc.) for sems skilled labour per day (in Rupees) category B for Haryana state shall be payable to workmen engaged for operations on actual basis. 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. Special Allowance component in IGL offered rate will remain firm and fixed throughout the duration of contract.	.  We request purchaser to confirm applicable wages i.e. Central or respective  State Wages.	Minimum wages offered by IGL as defined in SOR, shall be payable to machine operator.

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4	Technical Volume II	40	13.6	Contractor shall ensure that all formalities like obtaining all permissions and licenses not limited to but including the contract labour license etc The Contractor shall ensure that he does not violate any of the laws of land and shall ensure that he respect and follow the contents of purchaser Values Charter which will be given to successful bidder. The Bidder has to ensure payment of wages shall be as per minimum wage of Central Govt.		Tender conditions shall prevail.
5	Technical Volume II	45 & 46	14	14.2 Guaranteed Parameters at Suction pressure of 16 KG/CM2(g); Compressor Capacity required = 350SCMH  Serial no. 1. Of table Compressor capacity in SCMH at suction pressure of 14kg/cm2(g), discharge pressure of 250 kg/cm2(g) and gas inlet temp 300 C (No -ve tolerance):	We understand that under Guaranteed parameters table at Sr. No. 1, at Suction pressure mentioned as 14 KG/CM2(g); whereas the suction pressure to be read as 16 KG/CM2(g)  We request purchaser to confirm if our understanding is correct.	Bidder understanding is correct.  Tender consitions shall prevail.
6	Technical Volume II	46	14.3	14.3 Parameters at Suction pressure of 19 Kg / Cm2 (g); Compressor capacity by Bidder:  Serial no. 1. Of table Compressor capacity in SCMH at suction pressure of 14kg/cm2(g), discharge pressure of 250 kg/cm2(g) and gas inlet temp 300 C (No -ve tolerance):	We understand that under Guaranteed parameters table at Sr. No. 1, at Suction pressure mentioned as 14 KG/CM2(g); whereas the suction pressure to be read as 19 KG/CM2(g).  We request purchaser to confirm if our understanding is correct.	Bidder understanding is correct.  Tender consitions shall prevail.
7	Technical Volume II	42	13.12	The operation and maintenance services shall be provided in terms of shift pattern on the round the clock basis as mentioned in the tender document.	We request purchaser to provide at least 30 days advance notice for change in shift of operations.	Tender conditions shall prevail.
8	Commercial Volume	78	SOR	Rs. 830 per shift		
9	Commercial Volume	83	SOR	Please note: For Operation Charges of 1st Year, 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 first year. IGL offered operation charges per shift includes minimum wage components (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus etc.) plus Special Allowance. Minimum wage components (Basic+VDA, EPF, EDLI, Medical insurance, Leave, Bonus etc.) for semi-skilled labour per day (in Rupees) category B for Haryana state shall be payable to workmen engaged for operations on actual basis. 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. Special Allowance component in IGL offered rate will remain firm and fixed throughout the duration of contract.	We request purchaser to share the breakup of Rs. 830 per shift which includes (Basic + VDA, EPF, EDLI, Medical insurance, Leave, Bonus etc.) plus Special Allowance	Financial implication for hiring of machine operator for compressor packages in Haryana  Description Operator (Semi Skilled category B)  Minimum Wages Per Day (in NR) ₹ 477.34  Statutory Compliance Charges (PF, ESI, Boms & Leave) ₹ 152.65  Special Allowance offered ₹ 200.00  Revised Minimum wage offered in SOR per shift ₹ 829.99

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10	Technical Volume II	30	Note- 1	Note-1: For Energy Consumption quoted by the bidder under guaranteed parameters, no benefit will be given below 36 KWH.	We draw reference from IGL tenders w.r.t. 600 SCMH Electric Motor Driven CNG Compressor packages wherein the minimum power consumption is mentioned as 72 KWH. This translates to 0.16 kwh / kg of energy consumption when the efficiency of IE3 motor of 90 kw is +95%.  Carrying forward the logic the power consumption of 350 SCMH / 250 Kg per hour translates to 250 x .16 kwh / kg = 40 kwh.  Since the motor efficiency of electric motor of approximately 50 kw is lower when 95%, the power consumption of 350 SCMH should be higher than even 40 kwh. Accordingly, we request you to mandate the minimum power consumption at 41 kwh below which no benefit will be given.  We request purchaser to accord acceptance towards the above as in the absence of above a bidder may end up quoting unrealistic low energy leading to loading of the other bids.	Plesae refer corrigendum - II
11	Technical Volume II	46	7.3.3	Note: Bidder shall indicate realistic power consumption. The guaranteed value of power consumption including all losses such as mechanical, transmission, power absorbed by compressor driven auxiliaries like Air exchanger fans, auxiliary lube oil pump etc. but excluding air compressor motor at guaranteed parameters with zero percent positive tolerance	The total of power consumed by compressor block drive motor + air exchanger fan motor is to be quoted at point 7 of Guaranteed Parameters.  Please also confirm how total of power consumption will be arrived at for the purpose of loading & penalty imposition.	The total of power consumed by compressor block drive motor + air exchanger fan motor & other auxiliaries is to be quoted at point 7 of Guaranteed Parameters.  Tender conditions shall prevail
12	Technical Volume II	117	1.2	Variable Frequency Drive (VFD) shall be provided as starter panel for the Electric motor.	We request purchaser to also permit soft starter as the starter panel for electric motor.	Tender conditions shall prevail
13	Technical Volume II	11	1.6	1.6 SCOPE OF SUPPLY FOR EACH COMPRESSOR PACKAGE	I. Kindly permit non lubricated type comprssor, which has several advantages over lubricated one, as listed below:  1. There will not be any oil-carry over into the gas hence, the contamination of gas with lube oil is totaly eliminated.  2. It does not required divider block and plunger pump arrangement for cylinder lubrication.  3. As there is no oil-carry over hence there will not be any condensation of oil after cooling the compressed gas. Hence Separator vessels not required.  4. Similar machines are working successfully across the world including India.  II. Our Compressor design is V type compressor. Kindly confirm acceptance.	Tender conditions shall prevail
14	Technical Volume II	70	22.0	Preferred makes SS tube Fittings/ On Off SS ball/ needle/ non-return valve for CNG application	Kindly Approve: M/s. Dawson	Tender conditions shall prevail
15	Technical Volume II	70	22.0	Preferred makes Pressure Transmitter	Kindly Approve: M/s.Huba Control	Tender conditions shall prevail
16	Technical Volume II	69	22.0	Preferred Makes: IR Gas Detectors	Kindly Approve: M/s. Pollution Protection Systems Mumbai Pvt. Ltd.	Tender conditions shall prevail
17	Technical Volume II	69	22.0	Preferred Makes: UV Flame Detectors	Kindly Approve: M/S. Pollution Protection Systems Mumbai Pvt. Ltd.	Tender conditions shall prevail
18	Technical Volume II	70	22.0	Preferred Makes: Pressure Safety Valve	Kindly Approve: M/S. Nirmal.	Tender conditions shall prevail

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19	Technical Volume II	72	22.0	Preferred Makes: On Off ball/ needle valve for CNG application	Kindly Approve: M/s. Dawson M/s. Dk- Lok	Tender conditions shall prevail
20	Technical Volume II	71	22.0	Air/Heat Exchanger	Kindly Approve: OEM Standard	Tender conditions shall prevail
21	Technical Volume II	70	22.0	SS Tubes for CNG application	Kindly Approve: M/S Jindal saw.	Tender conditions shall prevail
22	SECTION I NOTICE FOR INVITATION FOR BIDS (IFB)	7	3.1	Duration of Contract: The duration of contract shall be for one (01) year from the date of issuance of LOA/ Notification of Award for supply, installation, testing and commissioning of compressors from the date of award 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 atlease 3 years firm contract for O & M.	Tender conditions shall prevail
23	SECTION I NOTICE FOR INVITATION FOR BIDS (IFB)	7	3.2	3.2 Delivery Schedule a. Supply: The material is to be delivered in lots as per IGL requirement. 1st lot of 8 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.	We request tyou to consider 12 weeks from the date of drawing approval.	Tender conditions shall prevail
24	SECTION I NOTICE FOR INVITATION FOR BIDS (IFB)	7	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	Bidder understanding is correct.  Tender conditions shall prevail
25	SECTION I NOTICE FOR INVITATION FOR BIDS (IFB)	7	3.9	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 5th Year (4 years). To derive rates of Comprehensive Maintenance & additional charges for Operation (payable over and above IGL offered rate) from 2nd to 5th Year, 5% escalation Year on Year basis shall be considered on quoted/ negotiated rates of 1st Year.	We request to have atlease 3 years firm contract for O & M.	Tender conditions shall prevail
26	SECTION I NOTICE FOR INVITATION FOR BIDS (IFB)	7	3.1	Further, after expiry of Operations and Comprehensive Maintenance period (2nd to 5th year), IGL may extend the contract for the period of 6th to 10th Year at its sole discretion and accordingly separate contract will be awarded for providing the Operation and Comprehensive Maintenance (including major overhaul) services for another five years i.e. 6th to 10th year.	Only a thickness check will be carried out every year.  Please note, hydro testing will be in scope of the Client Same is followed in all the CNG packages and with all the CGD companies.  The vessels are part of a process equipment and are to be designed as per ASME Sec VIII. The process vessels have not been covered under Gas Cylinder Rules 2016 / Static and Mobile Pressure Vessels Rules.  In case to do the resteing, we ahve remvoe all the vessels form the package and take it to the authorised center and do the testing whihe leads to shutdonw of the package and also loss of the sale due to this activity.  Kindly allow to do thickenss testing only.  Please note above clause is applicable for motor and GED packages.	Tender conditions shall prevail
27	SECTION I NOTICE FOR INVITATION FOR BIDS (IFB)	14	6	For Energy Consumption quoted by the bidder under guaranteed parameters, no benefit will be given below 36 KWH.	Please note, The power consition should be 40 KWH for the ginve process conditons.  Request you to change to enable us to participate in the tender.	Please refer corrigendum - II

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28	SCC	58		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 total 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.	We kindly request you to accept the submission of a CPBG (Contract Performance Bank Guarantee) for individual release orders.  This request is being made as the total quantity has been issued by the company for supply and services, and there is currently no assurance from the company regarding the Operation & Maintenance (O&M) contract beyond the first year  We will provide CPBG for service yearly basis.	Tender conditions shall prevail
29	SCC	60	12	REASONABILITY OF RATES	We request to have atlease 3 years firm contract for O & M.	Tender conditions shall prevail
30	SCC	61	14	ii. 10% (Ten Percent) Payment shall be released after successful completion of Installation, Testing and Commissioning of each compressor package at the site & successful Performance Acceptance Test at site and acceptance of the same by OWNER for each compressor. In case Installation, Testing, Commissioning and Performance Acceptance Test could not be executed within 120 days from the date of receipt of compressors at site/ store due to reasons attributable to Purchaser, above 10% payment shall be released.	Please note, in case of commissioing is complete and performance test at site is not conducted within 30 days, Company to release 10% payement within 15 days.	Tender conditions shall prevail
31	Technoial volume	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 non attributable to the bidders, then company to relase " ready to use " and PT completed by either running for 30 minutes or filling the casacde for one cycle.	Tender conditions shall prevail
32	Techncial volume	30	7.2	Note-1: For Energy Consumption quoted by the bidder under guaranteed parameters, no benefit will be given below 36 KWH.	Please note, The power consition should be 40 KWH for the ginve process conditions.  Request you to change to enable us to participate in the tender.	Please refer corrigendum - II
33	Techncial volume	31	7.3.4	7.3.4 Penalty for Non-Performance during Period of Operation & Maintenance	Please note we request you to add " Maximum penalty will not exceed 50% of the monthyl Mainteance charges on all accounts i.e. Gas loss, power consumption, etc. and shall not be carry formad to next month".	Tender conditions shall prevail
34	Techneial volume	117	1.1	a) The compressor motor shall be selected such that at the greatest BKW (Brake Horsepower) required by compressor, other auxiliaries and the losses under any of the compressor operating conditions, motor rating shall be minimum 110% of the greatest BKW required by the compressor in normal range of operation.	We understand that motor is slected for the minimum 110% of the greatest BKW required by the compressor in normal range of operation. i.e. at 19kg/cm2 G suction pressure having the greatest flow and greates BKW and not at the 16 kg/cm2 suciton pressure.  Kindly confirm the same.	Motor rating shall be minimum 110% of the greatest BKW required by the compressor in normal range of operation i.e flow of 350 SCMH at designed suction pressure (14 to 19 kg/cm^2)