TRACTEBEL						Document No. P.014714 G 11031 R007
			REPLY TO BIDDER'S PRE-BID QUERIES		Owner: Central UP Gas Ltd. (CUGL)	
	engie		MEETING FOR SUPPLY,INSTALLA	ATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FO PACKAGE	R MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR	PMC- Tractebel Engineering Pvt. Ltd.
				(TENDER NO. : P.014714 (	G 11031 R007)	Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC
						Date: 28.06.2021
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL/Tractebel's Reply
COMM	ERCIAL		•			
1	Volume I of II	9 of 113	IFB, 5.1	Delivery Period for 1st tot - Within 16 weeks on FOT Store / Site basis in Kanpur, Unnao, Bareilly & Jhansi cities from date of LOI  Delivery Period for subsequent lots - Within 16 weeks on FOT Store / Site basis in Kanpur, Unnao, Bareilly & Jhansi cities from date of intimation from CUGL	Due to the current restrictions such as lockdown, disruption in supply chain, due to COVID-19, we request you to please revise the delivery schedule as below:  Ist Lot - Within 24 weeks from the date of LOI  Subsequent Lots - Within 24 weeks from the date of intimation from CUGL	Tender Condition Prevails
2	Volume I of II	12 of 113	IFB, 8.5 8.6	Bid submission due date and time on e-tendering portal (https://cugl.abcprocure.com) - 29.05.2021 till 1500 HRS. IST  Bid submission due date and time on e-tendering portal (https://cugl.abcprocure.com) - 29.05.2021 at 1530 HRS. IST	We understand that the bid submission due date is 29.06.2021 and not 29.05.2021.  Please confirm.	Bidder understanding is correct. Please refer Corrigendum#1
3	Volume I of II	13 of 113	IFB, 9	BID SECURITY	With reference to Government of India Office Memorandum No. F.9/4/2020-PPD dated 12th November 2020, in lieu of Earnest Money Deposit, bidders have to submit the Bid Security Declaration, insted of Bid SecurityEMD. Hence, request you to kindly modify/revise the clause accordingly and provide the format for bid security declaration.	Tender Condition Prevails
4	Volume I of II	27 of 113	ITB, 34	PERFORMANCE GUARANTEE	1. Please note that offering CPBG involves exhausting of bank limits for issuing Bank Guarantee, which in turn affects the cash flow.  2. Further, due to the current COVID-19 pandemic, we are facing disruptions in bank operations. Hence, there is a delay in getting the Bank Guarantee from the banks.  Hence, we suggest you to kindly accept an additional mode of submitting Corporate Guarantee of 10% of PO amount as a CPBG.  Kindly note, we are a Public Limited company and all our operations & commitments are guided by Companies Act and Law of Land. Hence, the Corporate Guarantee submitted by us is equivalent to the Bank Guarantee issued by any bank.	Tender Condition Prevails
5	Volume I of II	37 of 113	GCC, 12	PERFORMANCE GUARANTEE	Request you to accept our suggestion as mentioned above.	
6	Volume I of II	57 of 113	SCC,19.4	Contract cum Equipment Performance Bank Guarantee		
7	Volume I of II	38 of 113	GCC, 13	INSPECTION, AND/TESTING & EXPEDITING	Pkase note that the inspection and testing shall be as per bidder's standard QAP and the same shall be discussed during detailed engineering.	Tender Condition prevails.
8	Volume I of II	43 of 113	GCC, 26	PRICE REDUCTION	We understand that the price reduction shall be applicable as per SCC. Please confirm.	Bidder understanding is correct.  Tender Condition prevails.
9	Volume I of II	46 of 113	GCC, 33	TAXES & DUTIES	Please note that consequent to Finance Act 2020, a new provision under Section 206 C (1H), Tax Collected at Source shall be applicable and collected from the buyer. Considering this statutoty provision, 0.1% TCS will be applicable on Basic + GST Amount and will be charged in invoice for the ordered compressors.	ITB clause 11.2 is explicitly clear.  Tender Condition prevails.
10	Volume I of II	54 of 113	SCC, 14	TERMS OF PAYMENTS	Kindly note that in the present crisis situation, maintaining the cash flow is very important for sustainance of business, hence we request the company to have milestone payments for the tender. This will help us to maintain a positive cash flow to an extent. Further, as you are aware, the packages will be performance tested at our factory as if the performance test is carried out at site, with an exception of different gas composition. Hence, we suggest as the bidder delivers the package duly tested at factory so, company can pay 100% payment against the dispatch. Based on this commitment, other CGDs such as BGRL, MGL, SKN, IOAGPL, Adani Gas, Torrent Gas, etc lave accepted our suggestion. Based on above explanation, we now request you to:  1.To add milestone payment before dispatch.  2.100 % payment against dispatch	





						Document No. P.014714 G 11031 R007
TRACI	TRACTEBEL			REPLY TO BIDDER'S PRE-	Owner: Central UP Gas Ltd. (CUGL)	
	engie		PMC- Tractebel Engineering Pvt. Ltd.			
			Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC			
						Date: 28.06.2021
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL/Tractebel's Reply
11	Volume I of II	55 of 113	SCC, 18.1	Sub-Letting of Contract	We understand that sub-letting of O&M services is allowed with the consent of the Owner and submission of PTR of the service provider.  Please confirm your acceptance.	Operation services are not applicable. For Comprehensive maintenance bidder shall be responsible.  Tender Condition prevails.
12	Volume I of II	56 of 113	SCC, 19.1	Warranty Period	We request you to please accept warranty period as 12 months from the date of erection and commissioning of the package at site or 18 months from the date supply of compressor package at site, whichever is earlier.	Tender Condition Prevails
13	Volume I of II	57 of 113	SCC, 20	PRICE REDUCTION SCHEDULE	We understand that the value of order used for the calculation of PRS shall be exclusive of taxes.  Please confirm.	Bidder understanding is correct.
14	Volume I of II	58 of 113	SCC, 21.3	Bidders to ensure that total price quoted for Comprehensive Maintenance services including all taxes and duties for each year, including during warranty period shall be as follows: For 1st year – During Warranty period - 7% For 2nd year- After completion of Warranty period - 10% For 3rd year- After completion of 2nd year - 11.20% For 4th year- After completion of 3rd year - 12.5% For 5th year- After completion of 4th year - 13.9%	We request you to please include operations of the compressor packages in bidder's scope.  Also, request you to please incorporate minimum percentage for quotting operation services also, in order to prevent the bidders from quotting unrealistic/low prices for operations.	Tender Condition Prevails
15	Volume I of II	6 of 109	5.1 Delivery Period	Delivery Period for 1st lot - Within 16 weeks on FOT Store / Site basis in Kanpur, Unnao, Bareilly & Jhamsi cities from date of LOI  1st lot Quantity - 02 Nos.  Delivery Period for subsequent lots - Within 16 weeks on FOT Store / Site basis in Kanpur, Unnao, Bareilly & Jhamsi cities from date of intimation from CUGL  Subsequent Lot (Minimum Qty.) 01 No.	Due to continued COVID-19 Pandemic related disruptions, some of the manufacturing units are closed or working at 50 % capacity. Therefore, delivery of critical components such as Motor, PLC Panels, Flow Meters etc is currently between 16-18 weeks ex-works.  We request purchaser to allow delivery period of 20 weeks for the first lot.  Kindly accord your acceptance.	Tender Condition Prevails
16	Volume I of II	07 of 109, 05 of 109	5.6, IFB Re Transportation 3.5	Relocation of Compressors- CUGL reserves the right to re-locate the compressors received at their store / site to any other locations in the city of Kanpur, Barcilly, Unnao & Jhansi, CUGL will bear the cost of Loading at store / site, Transportation to new location and Unloading at new location under the supervision of supplier.  Relocation of Compressors- Supplier will be responsible for shifting of compressors from one location to other location without any change in Guarantees / Warranty terms if instructed by CUGL	IFB clause 5.6 is explicitly clear.  Tender Condition prevails.	
17	Volume I of II	09 of 109	8.0 Dates	S.2   Tender Document Number	S.2	Bidder understanding is correct. Please refer Corrigendum#1





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TRACTEBEL					Document No. P.014714 G 11031 R007	
				REPLY TO BIDDER'S PRE-	BID QUERIES	Owner: Central UP Gas Ltd. (CUGL)
		ie	MEETING FOR SUPPLY,INSTALLA	TION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR PACKAGE	PMC- Tractebel Engineering Pvt. Ltd.	
				(TENDER NO. : P.014714 G	3 11031 R007)	Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC
						Date: 28.06.2021
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL / Tractebel's Reply
18	Volume I of I	II 10 of 109	9.1 EMD	All bids must be accompanied by a bid security amount of Rs. 11,62,000.00	Allow us to draw reference from Ministry of Finance Notification No. F.9/4/2020-PPD dated 12th Nov 2020. Point 4 is represented as under  "In view of above, it is reiterated that notwithstanding anything contained in Rule 171 of GFRs 2017 or any other Rule or any provision contained in the Procurement Manuals, no provisions regarding Bid Security should be kept in the Bid Documents in future and only provision for Bid Security Declaration should be kept in the Bid Documents."  In view of above we request purchaser to accept bid security declaration in lieu of Bid Security / EMID	Tender condition prevails
19	Volume I of I	II 42 of 109	29 Force Majeure	Shall mean and be limited to the following: a) War/hostilities b) Riot or Civil commotion c) Earthquake, flood, tempest, lightening or other natural physical disaster. d) Restrictions imposed by the Government or other statutory bodies, which prevents or delays the execution of the Contract by the Seller	Please Confirm, if Point (d) of Force Majeure clause (pg-42 of 109 Vol 1) also include Pandemic as a part of Force Majeure.  We request you to also include Pandemic as a part of Force Majeure.  Kindly accord your acceptance.	Bidder understanding is correct.  Tender Condition prevails.
20	Volume I of I	II 50 of 109	20 Price Reduction Schedule	Supply portion: @ ½ % (Half Per Cent) per week of delay or part thereof of the value of the undelivered supply of each lot.  Maximum PRS will be 5% of value of each lot inclusive of Supply, Installation, Testing and Commissioning and Performance Acceptance Test.	We request that the PRS for supply shall be applicable @ ½ % of the value of undelivered compressor unit per complete week exclusive of taxes.  Maximum value of PRS shall be limited to 5% of the basic unit price of the compressor package exclusive of taxes.	Tender condition prevails
21	Volume I of I	II 50 of 109	20 Price Reduction Schedule	Installation, Testing and Commissioning and Performance Acceptance Test @½ % (Half Percent) per week of delay or part thereof the value of work as per SOR.	We understand that PRS towards installation and commissioning would be applicable @ ½ % per complete week of delay of individual incomplete work.	SCC clause 20 is explicitly clear.  Tender Condition prevails.
22	Volume I of I	II 53 of 109	19.1 Warranty Period	The warranty shall remain valid for twelve (12) months from the date of successful performance acceptance test of integrated compressor package at site. However, if performance test doesn't get carried out, within twenty days of commercial operation or 400 hrs of commercial operation or 400 hrs of commercial operation or 400 hrs of commercial operation or warranty period shall start from the date of completion of 20 days or 400 hours of successful commercial operation subject to issue of certificate by CUGL for the commencement of commercial operation. OR  Twenty-Four (24) months from the date of delivery of last compressors of each lot at CUGL store / site. whichever is earlier.	We request CUGL to accept the warranty period for twelve (12) months from the date of commissioning of compressor opackage at site  Or  Eighteen (18) months from the date of delivery of each compressor at CUGL store / site whichever is earlier	SCC clause 19.1 is explicitly clear.  Tender condition prevails
23	Volume I of I	II 54 of 109	19.2 Comprehensive Maintenance Period	Bidder shall provide Comprehensive Maintenance during warranty period. Warranty period shall be as defined in SCC clause 19.1 above. Further bidder shall provide comprehensive maintenance for 08 (Freiv) years from the date of end of warranty period. However maximum duration of contract for operation & comprehensive maintenance during warranty and post warranty period shall be limited to 66 months from the date of receipt of last Compressor of each lot at CUGL store 7 is.  In case a compressor package is commissioned after six months from the receipt of last package of that lot for any reason attributable to Purchaser, the comprehensive maintenance rates for that particular period (year) will be applicable. First year rates of Comprehensive maintenance will be valid for one year from the date of start of warranty period. Rates for subsequent years will be valid for that year from the date of expiry of warranty period.	We understand that:  Bidder shall comprehensive maintenance during warranty period. However maximum duration of contract for comprehensive maintenance during warranty and post warranty period shall be limited to 66 months from the date of receipt of last compressor package at CUGL store / site of that particular lot.  The AMC Charges shall be applicable as follows: First year rates of AMC will be valid for 18 months from the date of supply of package at site or 12 months from the date of start of Commercial sales whichever is earlier.  Second Year AMC rates shall become applicable after completion of 18 months from the date of supply of package at site or 12 months from the date of Start of Commercial sale whichever is earlier.  Third Year AMC rates shall become applicable after completion of 30 months from the date of supply of package at site or 24 months from the date of Start of Commercial sale whichever is earlier.  Fourth Year AMC rates shall become applicable after completion of 42 months from the date of supply of package at site or 36 months from the date of Start of Commercial sale whichever is earlier.  Fifth Year AMC rates shall become applicable after completion of 54 months from the date of supply of package at site or 48 months from the date of Start of Commercial sale whichever is earlier.	SCC clause 19.2 is explicitly clear.  Tender Condition prevails.





						Document No. P.014714 G 11031 R007
TRAC	TEBEL			Owner: Central UP Gas Ltd. (CUGL)		
	engle		MEETING FOR SUPPLY,INSTALLA	PMC- Tractebel Engineering Pvt. Ltd.		
				(TENDER NO. : P.014714 (	3 11031 R007)	Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC
						Date: 28.06.2021
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL / Tractebel's Reply
24	Volume I of II	54 of 109	19.4 CONTRACT CUM EQUIPMENT PERFORMANCE GUARANTEE	For Supply: For an amount equivalent to 3% of the total contract value (exclusive of GST) i.e. Supply, Transportation, Erection, Commissioning & PAT charges against the contract.  For Comprehensive Maintenance Services: Supplier shall submit Bank Guarantee for 3% of annualized value of AMC charges exclusive of GST (Maintenance) before start of AMC period of each year.	We request that:  CPBG For Supply: For an amount equivalent to 3% of the total purchase order value (exclusive of GST) i.e. Supply,  Transportation, Erection, Commissioning & PAT charges against the contract.  Please accord your acceptance	Tender condition prevails
25	Volume I of II	9 of 113	Cl 5.1	Delivery Period for 1st lot - Within 16 weeks on FOT Store / Site basis in Kanpur, Unnao, Bareilly & Jhansi cities from date of LOI	Considering the delivery constraints across the supply chain for all the major components like compressor block, main motors, instruments, safety valves etc. These delivery constraints are higher demand particularly of CGD industry and due to Covid induced pentup demand rise etc. Thus, a delivery for VIP package should be 5 months on FOT store/site basis Subsequent bot's also should 5 months from date of intimation of CUGL	Tender condition prevails.
26	Volume I of II	10 of 113	Cl 6.1.3	The bidder directly or through their authorized agencies, should have provided Operation & Maintenance services to at least 02 nos. Natural Gas Engine / Electric Motor driven Compressor Packages for a period of not less than two years as on the bid due date. The period for trouble free operation & maintenance services shall be in the last seven years reckoned from the bid due date	1. Please note that we shall be tieing up with experienced companies engaged in providing Operation & maintenance services to CGD sector. We are already working with one such company Ms Techsol Engineering suppliers for CNG boosters supplied by us at Kanpur, Pillbhit, We letc. Thus, we would request you to kindly consider experience details/credentials for these experienced operation & maintenance service provider instead. If required, we can submit a signed MOU by us (lead bidder) and our selected operation & maintenance service provider while undertaking complete responsibility of these operation & maintenance service as per tender requirement. We request for your kind confirmation on our request & understanding  2. Please note that our Compressor block OEM. Ms Kwangshin Machine Ind. Co. Ltd., Korea has supplied hundreds of CNG online balanced opposed reciprocating compressors globally including one no. CNG online 1200 SCMH compressor to HPCL, Altmedabad about 10 years back. Global references include in countries like Korea, Indonesia, Thailand, China, Australia, Russia, Qatar etc. However, no where operation & maintenance services are ordered upon the compressor supplier	Tender Condition prevails.
27	Volume I of II	11 of 113	Cl. (v)/Special notes	Mechanical Run Test (MRT) of the compressor block may be witnessed by TPI / Purchaser at the manufacturing facility of compressor block OEM.	There is no MRT of the compressor block requirement. MRT of the complete package will be offered at our Packagers facility in Greater Noida as per tender requirement	Tender Condition prevails.
28	Volume I of II	06 of 109	5.1	SCHEDULE FOR SUPPLY OF STORES / WORKS	First Lot : 24 weeks from date of receipt of code-A approved drawings and manufacturing clearance. Subsequent lots : 24 weeks from date of intimation.	Tender condition prevails.
29	Volume I of II	40 & 54 of 109 (Vol 1)	26.1 & 20	26.0 PRICE REDUCTION 26.1 In case, vendor fail to complete the work within the stipulated period, then unless such failure is due to force majure is a defined in the bid document, total contract price shall be reduced @ 0.5% of the total order value per week of delay or part thereof subject to a maximum of 5% of the total order price. The decision of the Engineer In-Charge in regard to applicability of PRS shall be final and binding on the Vendor. In case of delay on the part of the Vendor the invoice shall be submitted after applicable price reduction.	Kindly consider the invoice value of material getting delayed for PRS of 1/2% per complete week and max 5% of it.	Tender condition prevails



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Reasonability of Rates



Kindly consider atleast 20% per year for the CAMC.

Percentage defined in SCC clause no. 21.3 is minimum requirement. Bidder may quote higher percentage.

Tender Condition prevails.

TD 4 676D61			REPLY TO BIDDER'S PRE-BID QUERIES			Document No. P.014714 G 11031 R007
TRAC	TRACTEBEL					Owner: Central UP Gas Ltd. (CUGL)
engie			MEETING FOR SUPPLY,INSTALI	ATION, TESTING, COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOI PACKAGE	R MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR	PMC- Tractebel Engineering Pvt. Ltd.
				(TENDER NO. : P.014714 G	G 11031 R007)	Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC
						Date: 28.06.2021
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL / Tractebel's Reply
31	Volume I of II	51 of 109	14.1. <del>ii</del> i	14.0 TERMS OF PAYMENTS  14.1 Payment towards Supply  3.90% (Ninty Percent) Payment shall be released on receipt of integrated compressor package at CUGL's store site against submission of dispatch documents, manufacturer's certificates, invoice, packing list, insurance policy, guarantee/warranty certificate, inspection release note & dispatch clearance issued by the Purchaser authorizedagency & material receipt certificate issued by Purchaser.  iii) Balance 10% (Ten Percent) shall be released after successful completion of Installation, Testing, Commissioning and Performance acceptance Test of each integrated compressor package at the site and acceptance by Purchaser for each Integrated compressors.  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, the 10% payment shall be released against submission of BG valid till the Guarantee (Warranty period.  Supply Payment will be released within 30 days from the date of receipt of clear Invoices along with documents.		Tender condition prevails
32	Volume I of II	40 of 109	19.1	19.0 SPECIAL NOTES 19.1 Warranty Period The warranty shall remain valid for twelve (12) months from the date of successful performance acceptance test of compressor package at site. However, if performance test doesn't get carried out, within twenty days of commercial operation or 400 hrs of commercial operation, for reasons directly attributable to client/purchaser, then warranty period shall start from the date of completion of 20 days or 400 hours of successful commercial operation subject to issue of certificate by CUGL for the commencement of commercial operation.  OR Twenty Four (24) months from the date of delivery of last compressors of each lot at CUGL store / site. whichever is earlier.	Warranty shall be 18 months from receipt of material at CUGL store/site and 12 months from commissioning whicherevr is carlier.  Also billing to purchaser for Operation & compreshensive maintence shall start from the day of start of commercial operation. O&M rates applicable for the particular year of commissioning shall be levied	Tender condition prevails
33	Volume I of II	25 of 109	23.1	23.0 SUBLETTING 23.1 The supplier shall not without previous consent in writing of assignment Owner's authority, sublet, transfers or assign the contract or any part thereof or interest therein or benefit or advantage thereof in any manner whatsoever.  Provided, nevertheless, that any such consent shall not relieve the contractor from any obligation, duty or responsibility under the contract.	We understand that subletting of contrcat is allowed with prior approval of CUGL	Tender Condition prevails.
34	Volume I of II	25 of 109	31.1	31.0 QUANTITY VARIATION 31.1 The Purchaser reserves the right to vary the quantity at the time of Award without any change in quoted unit price or other terms and conditions.	We understand that there is no split clause in tender, we have considered tender MR qty of 04 no's for our commercial working. In case ther is variation of qty then kindly advice prior to bid submission. Kindly also advise whether there will be repeat order based on this clause	Bidder understanding is corrrect.
35	Volume I of II	35 of 109	12.1	Supply Portion - The SUPPLIER shall furnish performance guarantee in the form of Bank Guarantee/Demand Draft/ Banker cheque to the OWNER, in following manner •• For an amount equivalent to 3% of the total order value (exclusive of GST) i.e. Supply, Transportation, Erection, Commissioning & Paff harges against each order. (Valdity of BG shall be DO Issue Date + Contractual Delivery Period of material + Contractual Guarantee/warantee period + 3 months) •Operation & Comprehensive Maintenance - Supplier shall submit Bank Guarantee for 3% of annualizedvalue of AMC charges exclusive of GST (Operation & Maintenance) before start of AMC period of each year.	Request you to consider CPBG of 3% of basic order value of supply portion of rate contract valid for I year and to be extended per year as per requirement.  2)Kinldy accept bank guarntee of 3% for annualized value of AMC charges for per year rates excl. GST.	Tender condition prevails





TRACTEBEL			REPLY TO BIDDER'S PRE-BID QUERIES			Document No. P.014714 G 11031 R007			
						Owner: Central UP Gas Ltd. (CUGL)			
	engle		MEETING FOR SUPPLY,INSTALLA	TION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOI PACKAGE	R MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR	PMC- Tractebel Engineering Pvt. Ltd.			
				(TENDER NO. : P.014714 G	G 11031 R007)	Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC			
						Date: 28.06.2021			
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL/Tractebel's Reply			
36	Volume I of II	42 of 85	29.1	29.0 FORCE MAJEURE 29.1 Shall mean and be limited to the following: a) War/hostifities b) Riot or Civil commotion c) Earthquake, flood, tempest, lightening or other natural physical disaster. d) Restrictions imposed by the Government or other statutory bodies, which prevents or delays the execution of the Contract by the Seller The Supplier shall advise Owner by a registered letter duly certified by the local Chamber of Commerce or statutory authorities, the beginning and end of the above causes of delay within seven (7) days of the occurrence and cessation of such Force Majeure Conditions. In the event of delay lasting over one month, if arising out of causes of Force Majeure, Owner reserves the right to cancel the Contract and the provisions governing termination stated under Article 28.0 shall apply. For delays arising out of Force Majeure, the Supplier shall not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither Owner nor Supplier shall be liable to pay extra costs provided it is mutually established that Force Majeure Conditions prevalent in their works at the time of submitting their bid and whether the same have been taken into consideration or not in their quotations. In the	Kindly consider pandemic like COVID-19 into force majure categories which intern are affecting deliveries at present.	GCC clause 29 is explicitly clear.  Tender Condition prevails.			
37	Volume I of II	56 of 109	24.1	24.0 VARIATION DUE TO MINIMUM WAGES 24.1 The price variation clause will be applicable as below: The prices quoted by bidder for operation charges will be considered as firm & fixed for 1st year of operation considering minimum wages for that year announced by State Government for semi-skilled labour. If variation in minimum wages rate exceeds 10% as on 1st day of the month of April in each year from minimum wages rate of 1st year of Start of operation, then 100% increase in minimum wages above 10 % shall be passed on to contractors.	State Government wages shall be considered for bidding. Kindly confirm.	Operation is excluded from bidder scope. This clause is not available in tender document.  Tender Condition prevails.			
38	Volume I of II	37 of 109	16,1	16.0 TRANSIT RISK 16.1 All goods supplied under the contract shall be fully insured in a freely convertible currency against toss or damage incidental to manufacture or acquisition, transportation storage and delivery.  Insurance Requirements: All Transit risk insurance shall be in the scope of Bidde	We understand that transit insurance is in bidders scope. However all insurance and storage shall be responsibility of purchaser after delivery of equipment at CUGL store/site	Bidder understanding is correct.  Tender Condition prevails.			
TECHN	TECHNICAL								
39	Vol II of II	14 of 156	1.1	The field trial run of the Integrated CNG Compressor package will be for minimum of 72 hours (can be in multiple runs) and the package should be kept under observation for stable operation and no major breakdown in which satisfactory performance of the package together with all accessories auxiliaries and controls shall be established for satisfactory performance for specified operating conditions.	As Full load perfromance test is carried out at works for 4 hours on guarantee parameter on Natural gas, we request you to consider 30 mins filed trial run and also performance test at site.	Tender conditions prevail			
40	Vol II of II	14 of 156	1.1	It will be the endeavour of all the parties to get the performance acceptance test (PAT) at site conducted within a period of 20 days from the start of commercial operation of a particular package.	As Full load perfromance test is carried out at works for 4 hours on guarantee parameter on Natural gas, we request you to consider 30 mins filed trial run and also performance test at site.	Tender conditions prevail			
41	Vol II of II	14 of 156	1.1	Periodic inspections of Safety Valves, Transmitters, Pressure vessel gauge and any other equipment as per statutory norms of Dehii Factory Rules 1950. SMPV and Gas Cylinder Rules shall have to be carried out by the bidder at his own cost during the period of maintenance by the bidder.	Hydro testing of pressure vessels to be excluded from bidder scope. 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. Clauses Tender Conditions prevail applicable for vessels in compressor package are not present in Gazette notifications of Gas Cylinder Rules 2016 / Static and Mobile Pressure Vessels Rules.	Compressor pressure vessels shall be designed as per ASME Sec VIII.  However, Cascade cylinders shall be supplied as per latest Gas Cylinder Rules and to be hydrotested periodocally.			





TRACTEBEL

## Document No. P.014714 G 11031 R007 Owner: Central UP Gas Ltd. (CUGL)

# MEETING FOR SUPPLY,INSTALLATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR PACKAGE

### (TENDER NO. : P.014714 G 11031 R007)

						Date: 28.06.2021
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL / Tractebel's Reply
42	Vol II of II	17 of 156	1.1	Receipt at site, storage in warehouse as per manufacturer's recommendation and safety and security from theft and breakage during transportation, handling including security guard at site.	The storage in warehouse, safety and security from theft shall be in Client's scope.  Kindly confirm your acceptance to the same.	If package is stored at Owner's store then Security at site is responsibility of Purchaser.
43	Vol II of II	18 of 156	1.1	The bidder shall carryout calibration of gas detectors and flame detectors every six months or earlier as per requirement or instruction of EIC of CLIENT. Also yearly calibration of all instruments such as pressure gauges, transmitters, switches, mass flow meters etc shall be in the scope of the bidder. In addition to the above all safety relief valves shall also be tested and calibrated every year.	For mass flow meters, only zero calibration shall be carried out.	Tender conditions prevail
44	Vol II of II	18 of 156	1.1	The bidder shall carry out retesting of pressure vessels periodically i.e. every year or earlier as per Gas Cylinder rules 2016 / Static & Mobile Pressure Vessels Rules	All pressure vessels are part of a process equipment and shall be designed as per ASME Sec VIII Div.1. The process vessels have not been covered under Gas Cylinder Rules 2016 / Static and Mobile Pressure Vessels Rules. Retesting is carried out for only storage vessels like cascade. Only thickness check will be carried out every year.	Compressor pressure vessels shall be designed as per ASME Sec VIII.  However, Cascade cylinders shall be supplied as per latest Gas Cylinder Rules and to be hydrotested periodocally.
45	Vol II of II	21 of 156	6.0	Flame proof Electric motor, the Motor rating should not be more than 50 KW.	Please elaborate on the restriction of Motor rating & motor selection criteria.  As per the tender, the pressure range operating on online mode is 14 to 19kgcm2G, the motor rating would be selected at highest suction pressure. Please confirm the same on motor selection criteria.	Due to Power restraints at site, Maximum power capacity of main motor is restricted upto 50 KW.
46	Vol II of II	21 of 156	6.0	Flame proof Electric motor, the Motor rating should not be more than 50 KW.	In order to have Motor rating below 50KW, then the design of pakcage shall be at 19kgcm2G and same shall be guaranteed.	Tender conditions prevail
47	Vol II of II	21 of 156	6.0	The storage cylinders to be kept completely inside the enclosure of the machine.	We will keep cascade on the top of the enclosure and cover it by the enclosure side walls and top portion of the cascade isself having the enclosure hence no need to provide/cover from all the sides.  We have supplied Integrated package (witout VIP) to IGL and MGL and running successfully. Please confirm your acceptance.	Composite CNG dispensing unit shall have compressor block, motor, dispenser and cascades mounted on common skid. Top mounting of cylinder cascades over enclosure is not allowed Tender conditions prevail
48	Vol II of II	21 of 156	6.0	Dispenser shall be supplied with standard enclosure	Please elaborate on the requirement to understand it better.	Dispenser shall be enclosed inside the whole canopy and not to be kept out in the open.
49	Vol II of II	21 of 156	6.0	Bidder need to submit copy of valid type approval for offered integrated compressor package from PESO along with the bid	We shall provide Integrated (withut VIP) 400SCMH capacity PESO certificate for evaluation purpose and same package has been supplied to IGL & MGL. Please confirm your acceptance.	Bidder Understanding is correct
50	Vol II of II	21 of 156	6.0	Enclosure wall and doors shall be fire resistant and insulated from inside with rockwool. The side wall of the enclosure/doors shall not have any louvers (To prevent accidental escape of debris/fire). Doors shall have heavy duty double security locks to curtail sudden high pressure inside the enclosure.	Please note, Louvers shall be provided on side walls for ACHE and it is a proven design.  Kinldy confirm your acceptance.	We may accept the proprietary design of the bidder for placement of the Louvers only however other requirements of the reffered clause shall be strictly in line to the tender conditions
51	Vol II of II	21 of 156	6.0	Since composite/Integrated Compressor is planned to be placed inside the forecourt in the CNG station hence design of the enclosure should be impact resistant of slow moving vehicle and bidder should submit detailed calculations for the value of impact to be sustained by the enclosure offered by the bidder.	Please provide us sample report to enable us to submit the same.	For designing the impact resistant enclosure bidders may consider speed limit of incoming vehicle at CNG stations is 10 Km/hr. Bidder shall submit structural stability certificate for impact resistant of the enclosure structure and doors at this speed.
52	Vol II of II	21 of 156	6.0	4 nos. mass flow meters to measure the Natural Gas consumption at packages inlet – 1 no. & package discharge – 2 no. (part of dispenser section), both Coriolis type. The flow meters should be enabled with MODBUS/RS 485 communications. 1 No Thermal Mass flow meter to measure Vent Loss.	Since, dispenser is part of the package additionalt flow meter at discharge is not envisaged and also there will cost reduction to client.  Please confirm your acceptance.	No additional discharge mass flow meter is envisaged in the tender documents.  Total 4 no. Mass flow meters are required in the package 1 No Suction of package 1 No Vent of the Package 2 No Part of Dispenser section and will be used to measure Discharge also
53	Vol II of II	22 of 156	6.0	Pressure Transmitter and Temperature Transmitters shall be used for CNG Gas application with 4-20 mA output signals to PLC	We will provide temperature elements instead of Temperature Transmitters, considering the space inside the package.	Tender conditions prevail
54	Vol II of II	22 of 156	6.0	Block & bleed valves/Two valve SS316 Manifold to be provided for Pressure gauges and pressure Transmitters	Block and bleed valves cannot be offered due to space constraints. We shall offer needle valves for Pressure Gauges and Pressure Transmitters.  Please confirm your acceptance.	Tender conditions prevail



Document No. P.014714 G 11031 R007 Owner: Central UP Gas Ltd. (CUGL)

MEETING FOR SUPPLY,INSTALLATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR PACKAGE

(TENDER NO. : P.014714 G 11031 R007)

						Date: 28.06.2021
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL / Tractebel's Reply
55	Vol II of II	22 of 156	6.0	One no. relief valve at each stage discharge, first (1st) stage suction and Blow Down Vessel.	Relief valve at first stage suction is not required in addition to one on blow down vessel as suction line and blow down vessel are connected to each other.	Noted
56	Vol II of II	22 of 156	6.0	Y- type strainers, valves, sight flow indicators, check valves, auto & manual drain traps etc. as required for various auxiliary systems i.e. frame lube oil, cylinder lubrication system, cooling water systems etc. according to manufacturer safe design.	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.	Vendor May supply the component as per their proprietary design. However the same must have been supplied in the past and minimum 1 sets should have completed 8000 Hours of trouble free operations in field on CNG compressor application in India. If applicable the component should be listed in the Type Approval issued PESO to the bidder. Bidder shall submit proof during detailed engineering stage for approval.
						Tender Condition Prevails.
57	Vol II of II	22 of 156	6.0	Field Performance test at site	As Full load perfromance test is carried out at works for 4 hours on guarantee parameter on Natural gas, we request you to consider 30 mins filed trial run and also performance test at site.	Tender conditions prevail
58	Vol II of II	22 of 156	6.0	One set of priced spare parts catalogue along with the priced bid (Part-II), as built drawings and Maintenance catalogue with each Integrated CNG Compressor package.	There is no provision to provide prices of spare parts in the SOR.  Please clarify.	Same shall be provided for reference only as per bidder's standard spares list
59	Vol II of II	23 of 156	6.0	Only air cooled and lubricated compressor with suction/discharge volume bottles (dampers) for each stage (separators) with manual drains and automatic drain system, lube oil system, closed circuit cooling water system (console type)/Air cooled according to manufacturer safe design.	Please note that as per manufacturer's standard, volume bottles will be provided at each stage suction and final stage discharge only.  Please confirm your aceptance.	Vendor May supply the component as per their proprietary design. However the same must have been supplied in the past and minimum 1 sets should have completed 8000 Hours of trouble free operations in field on CNG compressor application in India. If applicable the component should be listed in the Type Approval issued PESO to the bidder. Bidder shall shoult proof during detailed engineering stage for approval.
60	Vol II of II	23 of 156	6.0	Duplex suction filters with filteration level upto 5 Micron to be provided outside battery limits of the package at the inlet of package with DP gauge after Y- type strainer.	Please note Duplex suction gas filter with oil drains and temporary suction inline strainer will be placed outside the package as the compressor package inlet.	Tender Condition Prevails.
61	Vol II of II	23 of 156	6.0	Secondary lubrication system with check valve protector, HP Filter (for all lubricating points) & DNFT flow switches with standby pump according to manufacturer safe design.	Standby pump is not envisaged and therefore will not be provided. Oil pump mounted on compressor is sufficient for cylinder lubrication.	Noted, Manufacturer's design is acceptable.
62	Vol II of II	23 of 156	6.0	Master operator cum Maintenance technician needs to be available at one location of Client's choice along with mandatory tools and spares. Master operator shall also provide necessary training to Client staff for successful operation as and when required.	We request you to include operations of the compressor packages in bidder's scope.  A team of maintenance comprising of electrical, instrumentation and mechanical personnel will be diployed for a group of machines. Also, in order to ensure round the clock operation of the compressor package, one operator (with suitable reliever) will be required per shift for each machine.  Please confirm your acceptance.	Operations will be done by Owner's personnel. However, Master operator cum Maintenance technician shall be available at all times for any operational ambiguity or doubt clearance. One Master operator cum maintenance technician shall be available for machines installed at each GA's ie (Kanpur, Bareilly & Jhansi). Bidder may keep a standby employee as per planning and bid accordingly.
						Tender Condition Prevails.
63	Vol II of II	23 of 156	6 (cables)	SCOPE OF SUPPLY FOR EACH INTEGRATED CNG COMPRESSOR PACKAGE	Main incoming Power cable from owners Power Distribution Board (PDB) to main control panel of the compressor through heavy duty GI conduit or trenches with double compression cable gland, ex proof gland in hazardous area, cable tags, lugs etc. as required By chem  Also, request you to please share the below distances in order to enable us to consider cable costs:  1. Compressor package to control/electrical room  2. URS DB to package distance for UPS supply to PLC panel  3. ESD Locations and its distance from Package  4. Air compressor to electrical room  5. CO2 Flooding system to compressor package	Each distances shall be considered as 50 Meters for eg. Distance between Compressor package to control/electrical room shall be considered as 50 Meters.  However, actual length at site may vary.
64	Vol II of II	24 of 156	8.0	Supplier shall arrange its own ups supply for testing, installation and commissioning compressor control circuitry	We understand that UPS is to be arranged by bidder only for testing, installation and commissioning activities and does not constitute as bidder's scope of supply.	Bidder's understanding is correct.
65	Vol II of II	24 of 156	7.0	Maximum footprint of Integrated compressor frame Package shall not exceed 4.0 Sq Mtr. Maximum with integration of all accessories.	With Reciprocating compressor, the maximum size of the pacakge shall be 1.5 mtr x 4.7 mtr, which is 7.05 sq.mtr. In this type of package, compressor width and motor width is the guiding factor which is above 1.2 meter and also length of the bare compressor is 1.8 meter. Please note, we need to keep provisin for removal of piston during maintenace. Also, we need to have disperser in line with the length compressor along with additional valves and vessel for variable operation. Hence, our package width and length will be 1.5 mtr x 4.7 mtr.  Request you to accept the same to enable us to participate in the tender.	
66	Vol II of II	25 of 156	8.0	Silencer has to be provided in the starting air vent line	Starting air is not required for motor driven compressors hence not applicable.	Noted, Manufacturer's design is acceptable.



## Document No. P.014714 G 11031 R007 Owner: Central UP Gas Ltd. (CUGL)

# MEETING FOR SUPPLY,INSTALLATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR PACKAGE

### (TENDER NO. : P.014714 G 11031 R007)

						Date: 28.06.2021
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL / Tractebel's Reply
67	Vol II of II	25 of 156	9.0	Bidder shall make his own provision for Instrument air if required with an electric motor driven air compressor with a suitably sized receiver & Refrigerant type air drier system. Air Compressor motor should be 415 V squirmel cage motor DOL / star delta starter having overload protection, single phase preventer. Gas based actuator to used for compressor & dispensers hence no air compressor is required	Please confirm whether the actuation of instruments will be with the aid of gas or air.	Air actuation shall be used, no gas based actuator to be used.  Refer Corrigendum #1
68	Vol II of II	27 of 156	1.0	Note: While working as a booster compressor inlet tubing provided will be of SS 316 ½"size.	The design shall be as per manufacturer's standard	Inlet Tubing that will be provided by the owner upto Owner's battery limit will be SS 316 %"size.  Bidder can further use his instruments to change the size as per system requirement, however all parameters shall be fulfilled as per tender conditions.  Tender conditions Prevails.
69	Vol II of II	27 of 156	2.5	Rated Suction pressure at which guaranteed flow is required, and at 35 deg. C (MAX), in Kg/Cm2 g 200 to 15	The flow of 600 SCMH can be guaranteed at a fixed suction pressure and not for a range of pressures. Please confirm the Guaranteed flow suction pressure.	Rated flow shall be 400 SCMH at both conditions i.e.  At Variable Suction Pressure and Online Pressure.
70	Vol II of II	28 of 156	ŋ	The first stage suction of the compressor must be capable of taking suction from 200 barg to 16 barg	The design of first stage need not to be capable of taking suction from 200 barg to 16 barg, since if the suction pressure of gas is around 50 barg, it will be directed to second stage.  Please confirm your acceptance.	The suction consists of the range from 200 to 16 bar in general. Bidder can provide bypass line as per their design, however the compressor should be able to provide 250 bar pressure at suction range from 200 to 16 bar.
71	Vol II of II	28 of 156	2.0 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-1IP with R.V. venting as per cl. 7.20.4 of API-1IP.All vented to common relief valve header.	Relief valve at first stage suction is not required in addition to one on blow down vessel as suction line and blow down vessel are connected to each other.	Noted
72	Vol II of II	31 of 156	3.5	Near Zero Gas Loss compressor package design is envisaged—Bidder to provide confirmation from compressor block manufacturer towards Discharge of Process Gas into the environment while in operations and in idling condition. Compressor should be design in such a way that no gas venting is done in case of emergency shutdown due to power cut etc.	We request you to please modify the clause as below: "Near Zero Gas Loss compressor package design is envisaged. The Compressor packages with gas loss in excess of 1% shall not be accepted". The same has been accepted in previous CUGL tender no. P.014714 D 11031 001 for 1200 SCMH Gas Engine Driven CNG Compressor Packages.	Please refer clause 7.2' Loading against Package Gas Loss  If package loss is quoted more than 1% of suction capacity gas consumption than bid shall be rejected.
73	Vol II of II	31 of 156	3.6	State of the art technology shall be applied to the piston ring to ensure reliability and oil control with polymer rings fitted to the final stage according to manufacturer safe design.	We use PTFE piston rings for final stage as per standardized design.	Vendor May supply the component as per their proprietary design. However the same must have been supplied in the past and minimum 1 sets should have completed 8000 Hours of trouble free operations in field on CNG compressor application in India. If applicable the component should be listed in the Type Approval issued PESO to the bidder. Bidder shall submit proof during detailed engineering stage for approval.  Tender Condition Prevails.
74	Vol II of II	34 of 156	3.3	Basic design of compressor	Motor starter mentioned as star/deta, or Electrical panel for motor starter (VFD/Soft starter etc) to be provided with both induced draught and forced draught ventilation - Kindly confirm	Main Motor Starter: Soft-starter / VFD. Tender Condition Prevails.
75	Vol II of II	35 of 156	3.31	Motor specification	Main Motor Starter: Soft-starter / VFD Kindly confirm We recommend for stardella starter for the 55kw Motor	Tender Condition Prevails.
76	Vol II of II	36 of 156	3.36	Electical systems Ammeters should be part of PLC HMI	Ammeters shall be part of VFD / SS panel	Tender Condition Prevails.
77	Vol II of II	37 of 156	4.4	There shall be provision of Two suction Coriolis based mass flow meters inside the compressor package	Please clarify the requirement of two suction mass flow meters inside the compressor package	Only one mass flow meter to be supplied at suction. However, provision shall be there for two mass flow meter for calibration purpose.
78	Vol II of II	37 of 156	4.6	The temperature gauge shall have an 65mm dial size.	We will provide standard size 100 mm dial. Please confirm your acceptance.	Noted.
79	Vol II of II	37 of 156	4.6	The temperature gauge shall be generally mercury in steel field type.	The temperature gauge shall be gas or gel filled.  Please confirm your acceptance.	Tender Condition Prevails.
80	Vol II of II	37 of 156	4.1	There shall be provision of barriers/isolators for DI cards between field & PLC. The barriers and isolators should be multichannel for easier replacement.	Barriers/isolators for DI are not required.	Tender Condition Prevails.



						Document No. P.014714 G 11031 R007
TRACTEBEL				REPLY TO BIDDER'S PRE-	Owner: Central UP Gas Ltd. (CUGL)	
			MEETING FOR SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR PACKAGE			PMC- Tractebel Engineering Pvt. Ltd.
				(TENDER NO. : P.014714 G	G 11031 R007)	Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC
						Date: 28.06.2021
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL / Tractebel's Reply
81	Vol II of II	38 of 156	4.12	Separate junction boxes shall be provided for each type of signal i.e. analog, digital, solenoids RTD, thermocouple, intrinsic safe and for power supply. No cable shall share power & signal.	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.	Vendor May supply the component as per their proprietary design. However the same must have been supplied in the past and minimum 1 sets should have completed 8000 Hours of trouble free operations in field on CNG compressor application in India. If applicable the component should be listed in the Type Approval issued PESO to the bidder. Bidder shall submit proof during detailed engineering stage for approval.  Tender Condition Prevails.
82	Vol II of II	39 of 156	4.22	Successful bidder to include in scope live demonstration of remote monitoring of all PLC logged parameters in one machine at his works	Please note this is an additional requirement and will impact the price of the machine. However, we can provide an extra port in our PLC for GPRS connectivity. GPRS hardware (sender end), Software (Receiving end) and cable from our PLC to owners Control room shall in owner's scope.	Tender conditions prevail
83	Vol II of II	43 of 156	6.2	Mechanical String Test	Performance test for Online Compressor will be performed at packager's shop and performance test for Variable Suction Compressor will be performed at site.	Performance test at site will be performed as per the configuration in which the package will be installed.  Package may be installed as VIP or online depending upon the availability of Gas at site.
84	Vol II of II	47 OF 156	a	a. On normal day (i.e. the day other than the schedule maintenance day) b. On schedule maintenance day:	We propose following penalties: Upto 4 hours: Ni - 4 hours: Ni - 12 hours to 12 hours: Rs. 5,0000- per day - 12 hours to 24 hours: Rs. 5,0000- per day - 12 hours to 24 hours: Rs. 10,0000- per day More than 24 to 72 hours – 50 % of Monthly Maintenance charge The penalty in all cases (gas loss, power consumption, efficiency) shall not exceed 50% of the monthly maintenance charges.  Request you to please accept the same in order to enable us to participate in the tender.	Tender conditions prevail
85	Vol II of II	51 of 156	ANNEXURE – I : GUARANTEED PARAMETERS	Power consumption of package in KWH for 400 SCMH delivery (basis for loading and penalty)- when used as Booster compressor	We understand that the loading will be on a fixed suction pressure and not on variable suction pressure range.  Please confirm.	Loading of package will be done on variable suction pressure, however, bidder to also quote Guaranteed power consumption for online fixed suction pressure.  Refer Corrigendum #1
86	Vol II of II	142 of 156		Data sheets- Pressure transmitter	Non SMART pressure transmitters to be provided considering space inside the package.  Please confirm your acceptance.	Dataheet is given for reference.  Tender conditions prevail
87	Vol II of II	13 of 153	1.1 Scope	Receipt at site, storage in warehouse as per manufacturer's recommendation and safety and security from theft and breakage during transportation, handling including security guard at site.	We understand that ward and watch of the Compressor Packages in CUGL stores / site will be in purchaser's scope Please confirm if our understanding is correct	If package is stored at Owner's store then Security at site is responsibility of Purchaser.
88	Vol II of II	22 of 153	8.0/ BATTERY LIMITS	Supplier shall arrange its own ups supply for testing, installation and commissioning compressor control circuitry. UPS of adequate rating along with battery backup to be part of vendor's scope.  Purchaser shall provide the 230V, 50Hz, 1Ph UPS, 3 wire for LCP at single point in the electrical room.	We understand that UPS is to be arranged by bidder during installation and testing of Compressor ONLY.	Bidder's understanding is correct.
89	Vol II of II	23 of 153,	9.0 / UTILITIES	Bidder shall make his own provision for Instrument air if required with an electric motor driven air compressor with a suitably sized receiver & Refrigerant type air drier system. Air Compressor motor should be 415 V squired cage motor DOL/ star delta starter having overload protection, single phase preventer. Gas based actuator to used for compressor & dispensers bence no air compressor is required.	We request purchaser to allow option of supplying Desiccant Type Air Drier System in addition to the refrigerant type Air Dryer.  Please accord your acceptance.	Tender conditions prevail
90	Vol II of II	30 of 153	3.18 / BASIC DESIGN OF COMPRESSOR	Package inlet flow meter should have isolation valve in upstream and NRV/Valve at downstream of flow meter. Flow meters which are on piping should be connected with flexible hoses and should have proper clamping support to avoid vibration so that correct reading are observed.	Isolation valve, NRV and Flexible Hose are provided as per the proprietary design to ensure safety in operations and have a proven track record of successful operations in field.  Please accord your acceptance.	Vendor May supply the component as per their proprietury design. However the same must have been supplied in the past and minimum 1 sets should have completed 8000 Hours of trouble free operations in field on CNG compressor application in India. If applicable the component should be listed in the Type Approval issued PESO to the bidder. Bidder shall submit proof during detailed engineering stage for approval.  Tender Condition Prevails.
91	Vol II of II	33 of 153	3.32 / FINAL STAGE DISCHARGE GAS TEMPERATURE	Special attention to be given while designing the gas cooler considering the local conditions. Bidders shall ensure that final delivered gas temperature is less than 52C.	Purchaser may deploy procured CNG Compressors to locations where maximum temperature within the enclosure during summer goes upto Ambient + 10 Degree C.  Therefore, we request to allow gas temperature after the after cooker as Ambient+10 Deg C. (ISO 16923 mentions discharge temperature upto 60 Deg C.)	





						Document No. P.014714 G 11031 R007
TRACTEBEL			REPLY TO BIDDER'S PRE-BID QUERIES			Owner: Central UP Gas Ltd. (CUGL)
enGie			MEETING FOR SUPPLY,INSTALLA	ION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 PACKAGE	00 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR	PMC- Tractebel Engineering Pvt. Ltd.
			Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC			
			Date: 28.06.2021			
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender Query/Clarification		CUGL/Tractebel's Reply
92	Vol II of II	40 of 153	5 / SKID AND ENCLOSURE	The maximum temperature within the enclosure shall be limited to 52C. We request purchaser to 3	allow the temperature limit as $8$ - $10\mathrm{C}$ above ambient temperature.	Tender conditions prevail
93	Vol II of II	45 of 153	7/ Penalty for Non- Performance during Period of Maintenance	More than 24 to 72 hours – 50 % of Monthly Maintenance charge  We request CUGL to acc  72 hrs. to upto 30 days.  More than 7 days – Entire Monthly Maintenance charges shall be deducted	cept penalty towards breakdown/shutdown will be 50 % of monthly maintenance charges beyond	Tender conditions prevail
94	Vol II of II	19 of 153 22 of 153	6 / Scope of supply for each integrated CNG Compressor Package	chickosure wan and doors shain be nire resistant and insulated from inside with rockwool. The	stor combine as well as storage cylinders are to be housed inside the compressor enclosure.  oof-top mounted cylinders / cylinder cascades are not permitted in the tender.	Bidder shall refer tender specifications.  Tender conditions prevail
95	Vol II of II	31 of 153	3.26 / Basic Design of Compressor	ramework snat or mounted on a sunance saul type toase, external-uning ages snat no provided in teach comer. Duplex suction filter, air compressor & ups (if applicable) & co2 flooding system can be placed separately (outside of the canopy) and electrical control panel can be ableed in remote safe area for optimisation of the floor print size. However, rest all ferms ic. Flow meters, priority panel, cascade, dispenser, junction boxes & plc control panel etc. Should see enclosed / mounted on the same frame & maximum Footprint of that compressor frame hazing shall be finded to 4.0 m 2. These package dimensions & integration of all accessories sessence of this tender & hence any deviation in these values & integration will not be	age enclosure shall have two compartments with partition wall in between.  rs are to be placed within the enclosure adjacent to the compressor block and motor compartment so of 15 mm thickness jacent to the dispenser also needs to be of 15 mm thickness for safety is inclusive of compressor, storage, dispenser all in one line  / cascades on top of compressor package enclosure roof top is not permitted for safety reasons	Bidder shall refer tender specifications.  Tender conditions prevail
96	Vol II of II	21 of 153	6 / Scope of supply for each integrated CNG compressor package	Master operator cum maintenance technician needs to be available at one location of client's  We understand that one necessary raining to client staff for successful operation as and when required.	master operator cum technician is to be provisioned for each package.  Herstanding is correct	One Master operator cum maintenance technician shall be available for machines installed at each GA's ic (Kanpur, Bareilly & Thansi), Bidder may keep a standby employee as per planning and bid accordingly.
97	Vol II of II	21 of 156	Cl. 6.0/Scope of supply/	Bidder need to submit copy of valid type approval for offered integrated compressor package from PESO long with the bid. Bidder must submit duly peso approved mechanical drawings/ mechanical lesign of the little part of th	adly allow submission of PESO type approval at the time of delivery of integrated compressor twe are in process of application submission stage for our GEO-M series integrated CNG or expect to get the PESO approval well before the schedule delivery of compressor package, if Please note that we have required infrastructure in Please note that we have required infrastructure in ower, PRS facility for testing of CNG compressor on CNG. We already have approval for our booster & we are well versed on PESO procedure and expect to get PESO approval by GL & Tractebel to visit our factory and see the available facilities, we shall ensure quality	Tender conditions prevail
98	Vol II of II	21 of 156	CL 6.0/Scope of supply	arage to be 200-40 Kg/cm dispense that site, the compressor converted to online with inlet pressure range for 14-19 (consideration of 14-19) (cons	ng online compressor for boosting application from LCV cascade, we request suction pressure nn2g. The reason is that by doing this we can utilize two stage compression to compress & Cg/cm2g starting suction from 2nd stage suction. Also this saves energy consumption by avoiding n2g to 15 Kg/cm2g which is more energy consuming & gas delivered a about 50 Kg - 70 Kg 10 WL cap. Type CNG cascade) & chances of condensation might also be there we consideration on above as well	Tender conditions prevail





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	TRACTEBEL			REPLY TO BIDDER'S PRE-BID QUERIES			Owner: Central UP Gas Ltd. (CUGL)	
		engie		MEETING FOR SUPPLY,INSTALLATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR PACKAGE			PMC- Tractebel Engineering Pvt. Ltd.	
						(TENDER NO. : P.014714 G	11031 R007)	Pre-bid meeting held on 18.06.2021 at 1500
								Date: 28.06.2021
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				(TENDER NO. : P.014714 G	Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC	
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Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL / Tractebel's Reply
99	Vol II of II	21 of 156	CL 6.0/Scope of supply	Flame proof Electric motor, the Motor rating should not be more than 50 KW	Please note that considering the guaranteed case of 400 SCMH @ 16 Kg/cm2g suction pressure and discharge pressure of 255 Kg/cm2g, the shaft power itself would be in excess of 45 kW, then the standard frame size of electric motor would be 55 kW only. Kindly revise this requirement accordingly & make it upto 60 kW	
100	Vol II of II	44 of 153 Vol-2	7.2	PENALTIES Penalty towards Excess Gas Loss: Considering: G above shall be taken as (Suction – Discharge) OR Reading from Vent Mass Flow Meter, whichever is higher	Kinldy clarify & confirm only one mass flow meter that shall be considered for gas loss calculation during O&M services. "Which ever is Higher' option as per clause is not acceptable.	Gas Loss will be checked as per tender condition:  G above shall be taken as (Suction – Discharge) OR Reading from Vent Mass Flow Meter, whichever is higher  Here Discharge is addition of 2 mass flow meters installed at Dispensers arms.
101	Vol II of II	45 of 153 Vol-2	7.2	Penalty for Non-Performance during Period of Maintenance	Kindly accept penalty term as Upto 4 hours: Nil 4 hours to 12 hours: Rs. 5,000/- per day 4 hours to 12 hours: Rs. 5,000/- per day. More than 24 to 72 hours – Rs. 25,000/- of Monthly Maintenance tharge More than 72 hours pto 7 days – 50 % of total Monthly Maintenance & operation charges shall be deducted More than 7 days – 50 % of total Monthly Maintenance & operation charges shall be deducted More than 7 days – 50 % of total Monthly Maintenance & operation charges shall be deducted	Tender conditions prevail
102	Vol II of II	44 of 153 Vol-2	7.2	Note:  1. Motor rating of more than 50 KW is not acceptable and will be summarily rejected.	Request to kindly clarify the restriction on motor kw rating. Either 45 kw or 55 kw rated motors are available in the market. We do not understand the restriction as per tender clause for 50 kw. Kindly explain. There are many Large, Medium & small scale industrial units operating in the state so availability of power should not be a problem.	Due to Power restraints at site, Maximum power capacity of main motor is restricted upto 50 KW.
103	Vol II of II	21 of 153	6	Secondary lubrication system with check valve protector, HP Filter (for all lubricating points) & DNFT flow switches with standby pump according to manufacturer safe design. Secondary lubrication system with divider block shall be provide	Lubrication system will be Splash lubrication type, as per manufacturer standard design.  Lubricator, DNFT, Double ball valve etc not applicable.	Vendor May supply the component as per their proprietury design. However the same must have been supplied in the past and minimum 1 sets should have completed 8000 Hours of trouble free operations in field on CNG compressor application in India.  If applicable the component should be listed in the Type Approval issued PESO to the bidder Bidder shall submit proof during detailed engineering stage for approval.  Tender Condition Prevails.
104	Vol II of II	19 of 153	6	200 kg/cm2(g) by taking gas from mobile cascade mounted on Light Commercial Vehicle	(1) Request to kindly clarify whether the package storage & dispensing unit shall be utilized during the BOOSTER MODE operation. The package storage capacity as per tender is only 450WL whereas the Compressor shall be decanting mobile cascade of minimum 2000/3000 WL capacity.  (2) The pressure range needs to be modified to 14 × 16 barg for better operation of the package. Guaranteed flow of 400 SCMH during online mode operation shall be 16 barg.	The compressor will be used to fill the vehicles while running in Booster mode and Online mode.  Also gas from cascade shall be used for filling of vehicle if Booster is not running.  2) Tender conditions prevail
105	Vol II of II	19 of 153	6	Flame proof Electric motor, the Motor rating should not be more than 50 KW.	The Motor rating will be minimum 55 KW.	Tender conditions prevail
106	Vol II of II	19 of 153	6	Three banks 450 Water Litre (minimum) capacity Cascade for 400 SCMH. (Detail specification REFER SECTION-2)	The offered cascade will be 750 WL capacity.	Bidder may offer higher capacity, however, Minimum tender conditions shall be fulfilled such as size of package etc.  No benefits will be given for additional specifications.
107	Vol II of II	19 of 153	6	The storage cylinders to be kept completely inside the enclosure of the machine.	The storage cylinders will be kept on top of canopy.	Composite CNG dispensing unit shall have compressor block, motor, dispenser and cascades mounted on common skid. Top mounting of cylinder cascades over enclosure is not allowed. Tender conditions prevail



Start

Document No. P.014714 G 11031 R007 Owner: Central UP Gas Ltd. (CUGL)

MEETING FOR SUPPLY,INSTALLATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR PACKAGE

(TENDER NO. : P.014714 G 11031 R007)

Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC

Date: 28.06.2021

					Date: 28.00.2021	
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL / Tractebel's Reply
108	Vol II of II	19 of 153	6	Dispenser should be detachable that can be used in separate location. If required vendor may be asked to connect 2 dispensers with the unit. Provision for necessary modifications shall be provided.	Dispenser will not be detachable and can't be used in separate location. Its a integrated unit.	Tender conditions prevail
109	Vol II of II	19 of 153	6	Bidder need to submit copy of valid type approval for offered integrated compressor package from PESO along with the bid. Bidder must submit duly peso approved mechanical drawings/mechanical design of the composite/Integrated compressor along with the Bid.	PESO only approves electrical componenets used in the package. Mechanical design/ drawings are not approved by PESO. Kindly modify the tender clause.	Tender conditions prevail
110	Vol II of II	19 of 153	6	Enclosure wall and doors shall be fire resistant and insulated from inside with rockwool. The side wall of the enclosure/doors shall not have any louvers (To prevent accidental escape of debris/fire). Doors shall have heavy duty double security locks to curtail sudden high pressure inside the enclosure.	Enclosure will be design as per manufacturer design standard with considering all safety majors and design requirements.	Tender conditions prevail
111	Vol II of II	19 of 153	6	Since composite/Integrated Compressor is planned to be placed inside the forecourt in the CNG station hence design of the enclosure should be impact resistant of slow moving vehicle and bidder should submit detailed calculations for the value of impact to be sustained by the enclosure offered by the bidder.	Not feasible to be provided. Adequate provisions shall be provided by User / Purchaser to protect the unit from vehicular impacts if any.	For designing the impact resistant enclosure bidders may consider speed limit of incoming vehicle at CNG stations is 10 Km/hr. Bidder shall submit structural stability certificate for impact resistant of the enclosure structure and doors at this speed.  Tender conditions prevail
112	Vol II of II	19 of 153	6	Bidder shall submit necessary engineering drawings, documents and calculations used to reduce or bypass	Not feasible to be provided being proprietary design parameter.	Noted, however, philosophy for functioning of compressor to be submitted during DDE.
113	Vol II of II	19 of 153	6	PLC based control panel with HMI. PLC based control system with 10" touch screen display. 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. Both CPU shall be connected with Figh-speed ling for bump less change over between primary and secondary CPU. This shall not affect compressor operation. 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. Additionally, separate communication ports shall be provided for GPRS modem for communication with SCADA system.	7" touch screen display will be provided. GPRS & SCADA will not be considered in bidder scope.	Tender conditions prevail
114	Vol II of II	20 of 153	6	Block & bleed valves/Two valve SS316 Manifold to be provided for Pressure gauges and pressure Transmitters	Due to smaller footprint of the package and space constraints & mounting problems, PG & PT will be supplied with Parker make needle valve. Kindly approve.	Tender conditions prevail
115	Vol II of II	21 of 153	6	Only air cooled and lubricated compressor with suction/discharge volume bottles (dampers) for each stage (separators) with manual drains and automatic drain system, libe oil system, closed circuit cooling water system (console type)/Air cooled according to manufacturer safe design.	Suction and discharge KOD as per manufacturer standard.  Considering safety hazards manual drains for KOD not considered.	Vendor May supply the component as per their proprietary design. However the same must have been supplied in the past and minimum 1 sets should have completed 8000 Hours of trouble free operations in field on CNG compressor application in India. If applicable the component should be listed in the Type Approval issued PESO to the bidder. Bidder shall submit proof during detailed engineering stage for approval.  Tender Condition Prevails.
116	Vol II of II	21 of 153	6	Duplex suction filters with filteration level upto 5 Micron to be provided outside battery limits of the package at the inlet of package with DP gauge after Y- type strainer. Filters should be installed in series.	For maintenance purpose suction filters will be placed in parallel.	Noted. Refer corrigendum #1
117	Vol II of II	21 of 153	6	Suction filter shall be placed remotely as metering and filteration skid is not envisaged.	Pipig between filtration skid and package will be in customer scope.	Connection between filters and suction is in Bidder's scope.  Tender conditions prevail
118	Vol II of II	21 of 153	6	Wires mesh type guard for heat exchanger fan.	Adequate protection as per manufacturer's standards shall be provided.	Vendor May supply the component as per their proprietary design. However the same must have been supplied in the past and minimum I sets should have completed 8000 Hours of trouble free operations in field on CNG compressor application in India. If applicable the component should be listed in the Type Approval issued PESO to the bidder. Bidder shall submit proof during detailed engineering stage for approval.  Tender Condition Prevails.



						Document No. P.014714 G 11031 R007
TRACTEBEL		REPLY TO BIDDER'S PRE-BID QUERIES				Owner: Central UP Gas Ltd. (CUGL)
	engie		MEETING FOR SUPPLY,INSTALLA	ATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOI PACKAGE	R MOTOR DRIVEN $400$ SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR	PMC- Tractebel Engineering Pvt. Ltd.
				(TENDER NO.: P.014714 (	G 11031 R007)	Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC
						Date: 28.06.2021
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL / Tractebel's Reply
119	Vol II of II	21 of 153	6	For added safety, manufacturer shall provide Compressor, Cascade & Dispenser in three separate sections, isolated from each other using heavy gauge steel sheet wall of minimum 15 mm thickness	Ok. However, steel structure shall be as per manufacturer standard.	Noted, however For designing the impact resistant enclosure bidders may consider speed limit of incoming vehicle at CNG stations is 10 Km/hr. Bidder shall submit structural stability certificate for impact resistant of the enclosure structure and doors at this speed.
120	Vol II of II	22 of 153	6	CLIENT's Logo and name to be displayed on dispenser side, in CLIENT approved colour scheme. CLIENT's Logo and name shall be painted on stainless steel panel with an appropriate coloured background or alternatively, vendor shall provide self-adhesive PE film sheet with CLIENT's Logo and name. The arrowork shall be of three colours. The colours, Logo size and name size shall be informed to successful bidder during detailed engineering.	Package Manufacturer's Branding will be applicable.	Tender conditions prevail
121	Vol II of II	22 of 153	6	From safety point of view, manufacturer to provide Compressor, Cascade & Dispenser in three separate sections, isolated from each other using heavy acoustic wall.	Ok. However, accoustic wall & steel structure shall be as per manufacturer standard.	Noted, however For designing the impact resistant enclosure bidders may consider speed limit of incoming vehicle at CNG stations is 10 Km/hr. Bidder shall submit structural stability certificate for impact resistant of the enclosure structure and doors at this speed.
122	Vol II of II	22 of 153	6	Maximum footprint of Integrated compressor frame Package shall not exceed 4.0 Sq Mtr.  Maximum with integration of all accessories.	We are the only CNG Compressor manufacturer which has pioneered, developed and supplied the first VIP Package without pressure reduction concept during Cascade decarding application (Booster Mode). Pressure reduction method should not be allowed as it defeats the very purpose of this application. Due to lack of this technology, few bidders may provide additional external PRS (Pressure Reducing Skid) to throttle & downsize the suction pressure resulting in lower dimensions of actual package. Hence it is not possible to develop & package this compressor without multiple actuations & regimes. Due to complex steel tubing & higher volume of BDV, package size can be restricted to minimum LxWxH (m) = 3.7 x 2.5 x 4 (m) i.e. 9.25 sq.m. The tender dimensional requirement of 4 Sq.m is not possible for VIP package incorporating the 'non pressure reduction technology'. Request to kindly review this aspect seriously. & accept.	Integrated Coompressor has to be installed in the forecourt therefore small footprint size is the essence of the package design hence maximum footprint shall be 4sqmts. However Bidder may install the pressure regulators adjacent to the suction filters near the LCV decanting point.  Tender conditions prevail
123	Vol II of II	19 of 153	6	4 nos. mass flow meters to measure the Natural Gas consumption at packages inlet – 1 no. & package discharge – 2 no. (part of dispenser section), both Coriolis type. The flow meters should be enabled with MODBUS/RS 485 communications. 1 No Thermal Mass flow meter to measure Vent Loss.	As per scope of supply, 1 No Flow meter at suction considered, for disharge 2 flow meters are considered (which will be part of dispenser)  The Thermal Mass flowmeter will be installed in the crank case & package vent line and not on the SRV vent line. Thermal mass flowmeter Make shall be 'PCD'. If required PTR for same shall be submitted.	Same will be discussed during DDE.
124	Vol II of II	19 of 153	6	PLC based control panel with HMI. PLC based control system with 10° touch screen display. 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	Redundant Power supply, CPU is not considered due to space constraints. Simplex IO's Considered. Kindly clarify whether GPRS connectivity with additional hardware is required.  Software redundancy is considered by considering S7-300	Tender conditions prevail



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BATTERY LIMITS

Compressor motor

DATIFY LIMITS

All drains from different process equipments, 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 Integrated CNG Compressor package package

UTILITIES

Any auxiliary motor above 10 hp shall be provided with star delta' soft starter (three phase controlled) type starter. Single phase motor will be not acceptable above 1 hp rating.

Bidder shall make his own provision for Instrument air if required with an electric motor driven air compressor with a suitably sized receiver & Refrigerant type air drier system. Air

should be 415 V squirrel cage motor DOL / star delta starter having overload protection, single phase preventer. Gas based actuator to used for compressor & dispensers hence no air compressor is required



All drains will be terminated as single point duely threaded with isolation valve

Being Gas operated actuator, air compressor not required hence not considered in scope of supply.

Noted

Refer corrigendum #1

Air compressor to be supplied, no gas based actuation shall be used.

Document No. P.014714 G 11031 R007 Owner: Central UP Gas Ltd. (CUGL)

MEETING FOR SUPPLY,INSTALLATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR PACKAGE

(TENDER NO. : P.014714 G 11031 R007)

0ate: 28.06.202	
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						Date: 28.06.2021	
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL/Tractebel's Reply	
127	Vol II of II	25 of 153	1	The compressor will be initially used as booster compressor with suction pressure range of 15-200 kg/cm/2(g) by taking gas from mobile cascade mounted on Light Commercial Vehicle (LCV). Later when the intel pipe line is available at site, the compressor converted to online with intel pressure range of 14-19 kg/cm/2(g) without major modification.  Package capacity shall be 400 SmSh at suction pr. of 16kg/cm/2(g), inlet line pressure range 15-200 kg/cm/2(g) with performance range 14 to 19 kg/cm/2(g) with discharge pressure 255 kg/cm/2(g) with 6 line of Banks) protry panel electric motor as detailed in score work owk and technical specification.  Note: While working as a booster compressor inlet tubing provided will be of SS 316 %"size.	(1) Request to kindly clarify whether the package storage & dispensing unit shall be utilized during the BOOSTER MODE operation. The package storage capacity as per tender is only 450WL whereas the Compressor shall be decanting mobile cascade of minimum 2000/3000 WL capacity.  (2) The pressure range needs to be modified to 14 ~ 16 barg for better operation of the package. Guaranteed flow of 400 SCMH during online mode operation shall be 16 barg.	The compressor will be used to fill the vehicles while running in Booster mode and Onlin mode.  Also gas from cascade shall be used for filling of vehicle if Booster is not running.  2) Tender conditions prevail	
128	Vol II of II	25 of 153	1	B. COMPRESSOR PERFORMANCE DATA Compressor Discharge temperature 52 °C (After cooker) with ambient air temperature of 47.5°C and gas inkt temperature of 35°C (max.).	Compressor Discharge temperature (After cooler) shall be ambient + 12 deg. C.	Tender conditions prevail	
129	Vol II of II	26 of 153	1	Hereinafter the rated suction pressure, where guaranteed flow is required, will be referred as Rated Suction Pressure, which means 16 Kg/Cm2g for 400 SCMH compressors. Suction pressures will be measured at inlet flange of the Integrated CNG Compressor package. Bidder has to ensure that compressors are designed such that the desired flow is achieved (without any negative tolerance) at Rated Suction Pressure	We shall consider 16 Kg/cm2G pressure at compressor suction flange for compressor sizing.	Compressor sizing shall be done for both Booster mode and online mode.  Tender conditions prevail	
130	Vol II of II	26 of 153	2c	All exposed rotating parts shall be provided with adequate guards of non-sparking type	Adequate protection as per manufacturer's standards shall be provided.		
131	Vol II of II	28 of 153	2.1-t	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.	As per industry standards applicable, 1/2" tube is suitable for CO2 flooding system.	Vendor May supply the component as per their proprietary design. However the same must have been supplied in the past and minimum 1 sets should have completed 8000 Hours of trouble free operations in field on CNG compressor application in India. If applicable the component should be listed in the Type Approval issued PESO to the bidder. Bidder shall submit proof during detailed engineering stage for approval.	
132	Vol II of II	29 of 153	3.7	The inter stage and final stage cooler tube material shall be carbon steel. Bidder to submit cooler sizing calculation for review	Cooler tube materail shall be manufacturer standard. Beign proprietery item details shall not be shared	Tender Condition Prevails.	
133	Vol II of II	29 of 153	3.11 & Cl 3.39	Compressor maximum vibrations of cylinders shall not exceed 10 mm/sec. unfiltered peak velocity. Maximum vibration level installed compressor frame shall not exceed an unfiltered peak velocity of 5 mm/sec or 200 micron unfiltered peak to peak vibration whichever is less. The bidder shall provide for all structural support within the package so that these levels can be achieved or Vibrations should be limited according to manufacturer safe design.	Vibration levels will be in line within acceptable industry standards.	Tender conditions prevail	
134	Vol II of II	29 of 153	3.12	In case of lubricated cylinder & packing design, single plunger per point force feed mechanical lubricator shall provide lubrication to compressor cylinders. Lubricators with double ball check valve shall be provided at each lubricator point. Digital no flow timer shall be provided to stop the compressor in case of loss of cylinder lubrication.	Lubricator- No lubricator used. Lubrication system - Splash type. Double ball check valve Not applicable. DNFT- Not applicable, as you cannot measure the flow of the splash	Vendor May supply the component as per their proprietary design. However the same must have been supplied in the past and minimum 1 sets should have completed 8000 Hours of trouble free operations in field on CNG compressor application in India.	
135	Vol II of II	29 of 153	3.14	Coolant tank must be provided with proper opening for flush/clean of the tank, so that coolant level trip system works properly. Switch position should be such that shadge doesn't deposit on float sensor. Material of coolant make up tank should be SS304	Being air cooled machine coolant tank not applicable and hence not considered	numer nee operations in neat on CNC compressor apparation in most. If applicable the component should be listed in the Type Approval issued PESO to the bidder Bidder shall submit proof during detailed engineering stage for approval. Tender Condition Prevails.	
136	Vol II of II	30 of 153	3.17	Level trips of oil & coolant must be provided with wire open alarm according to manufacturer safe design.	Splash type lubrication system.  Offered compressor block will have only visual oil level		
137	Vol II of II	30 of 153	3.18	Package inlet flow meter should have isolation valve in upstream and NRV/Valve at downstream of flow meter. Flow meters which are on piping should be connected with flexible hoses and should have proper clamping support to avoid vibration so that correct reading are observed.	Flexible hose will not be considered, proper care to be taken to avoid vibration of flow meter	Tender conditions prevail	



## Document No. P.014714 G 11031 R007 Owner: Central UP Gas Ltd. (CUGL)

# MEETING FOR SUPPLY,INSTALLATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR PACKAGE

(TENDER NO. : P.014714 G 11031 R007)

						Date: 28.06.2021	
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL / Tractebel's Reply	
138	Vol II of II	30 of 153	3.19	All cables entries should be from bottom in the FLP boxes (local control panel). There should be no cabling from the bottom of the package. All the cables should be routed from the side or top for easy trouble shooting.	Cabling shall be as per manufacturer standard. Will be routed as per Layout requirements. however proper space and routing will be ensured for easy trouble shooting	Tender conditions prevail	
139	Vol II of II	30 of 153	3,22 & 3,32	Direction of flow should be marked on the pipe line and nomenclature of all vessel (e.g. 1st stage discharge dampener etc.) should be written on them. Cross head inspection windows should be transparent for easy of inspection during running. Set values should be prominently marked on the gauges.	Being trunk design there are no cross heads, so Cross head inspection windows - Not applicable	Vendor May supply the component as per their proprietary design. However the same must have been supplied in the past and minimum 1 sets should have completed S000 Hours of trouble free operations in field on CNG compressor application in India. If applicable the component should be listed in the Type Approval issued PESO to the bidder. Bidder shall submit proof during detailed engineering stage for approval. Tender Condition Prevails.	
140	Vol II of II	31 of 153	3.28	An automatic restart shall be provided on restoration of power with a 10-second delay after temporary interruption. Existing alarm condition shall remain indicated	Due to safety concern not recommend restarting machine automatically after power recycle	Tender conditions prevail	
141	Vol II of II	31 of 153	3.29	The compressor shall be vented into BDV before restarting in order to avoid overload to the main drive. In any case venting of gas to atmosphere is not allowed. There is need to have a blow down vessels ot that gas is vented to vessel. The size of the BDV should be the sufficient to allow main drive to start. BDV volume to be designed in such a way that gas accumulated in the process should not be vented out in any case of main power supply failure /stopping/ emergency push of peakage. Calculation for BDV volume shall be considering 20% higher than calculated volume and it should be calculated on higher range (19 bar) of the operating pressure (14 bar to 19 bar). Bidder shall submit calculation for same at the time of designing/drawing approval to client. BDV should be preferably placed on top of package and if placed inside package, it should be in vertical position.		Noted, Manufacturer's design is acceptable.	
142	Vol II of II	32 of 153	3.30	3.30 Prime mover (Electric Motor) The motor shall be flame proof/ explosion proof and confirm to IS: 2148 suitable for zone 1 group II area as per IS/IEC. The Motor shall be of standard frame size as per IS/IEC and rated for continuous duty with high efficiency and shall be designed for star-de-ta starting. The Motor shall be provided with class 'F' insulation, however, temperature rise shall be limited to the temperature specified for class 'B' insulation as per IS and shall be suitable for voltage variation of 415V+ 10%. The bidder shall indicate the guaranteed total power requirement in KW. The motor rating shall be 110% of the greatest BKW required by the compressor. Electrical panel for motor starter (VFD/Soft starter etc) to be provided with both induced draught and forced	Star delta starter will be provided for motor starting.	Main Motor Starter: Soft-starter / VFD. Tender Condition Prevails.	
143	Vol II of II	33 of 153	3.32	Cooling system  Each compressor package shall be complete with its own cooling system. The cooler shall be air-cooled heat exchanger. The gas temperature after after-cooler shall not exceed 52 degree C.	Compressor Discharge temperature (After cooler) shall be ambient + 12 deg. C.	Tender Condition Prevails.	
144	Vol II of II	36 of 153	4.12	Separate junction boxes shall be provided for each type of signal i.e. analog, digital, solenoids RTD,thermocouple, intrinsic safe and for power supply. No cable shall share power & signal	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 guage box will be used for intrinsically safe signals.	Vendor May supply the component as per their proprietary design. However the same must have been supplied in the past and minimum 1 sets should have completed 8000 Hours of trouble free operations in field on CNG compressor application in India. If applicable the component should be listed in the Type Approval issued PESO to the bidder. Bidder shall submit proof during detailed engineering stage for approval.  Tender Condition Prevails.	
145	Vol II of II	36 of 153	4.14	Compressor package shall be provided with the following indicators:	We shall provide instruments as per P&ID submitted and Instrument schedule for approval.  Please consider following:  Pl- Each stage suction  PT-Each stage suction, Final discharge, Oil pressure  TT-First stage suction & Final stage discharge.	Tender Condition Prevails.	
146	Vol II of II	36 of 153	4.16	Each compressor package shall be provided with an audible and visual alarm system for annunciation on compressor abnormalities	Alarm detail available in HMI and flameproof hooter will be provided	Noted, Manufacturer's design is acceptable.	



					Document No. P.014714 G 11031 R007
TRACTEBEL				REPLY TO BIDDER'S PRE-BID QUERIES	Owner: Central UP Gas Ltd. (CUGL)
			MEETING FOR SUPPLY,INSTALLA	TION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR PACKAGE	PMC- Tractebel Engineering Pvt. Ltd.
				(TENDER NO.: P.014714 G 11031 R007)	Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC
					Date: 28.06.2021
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender Query/Clarification	CUGL / Tractebel's Reply
147	Vol II of II	37 of 153	4.22	There shall be two independent ports available in the PLC with all the parameters available on each individual port.  Second port shall be available for any third party interface which shall be OPC compliant for networking or SCADA. The recorded data or part of the data may be required to transmit to remote locations over open secured network through internet/ Ethernet using local cable/ data card/s in card (GPS/ GPRS/ CDMA). Modem/ router or any other medium to transmit the data should be available. Vendor shall provide protocol details to IGL and also provide necessary support for third party interface for remote data connectivity	Supply of SCADA is not in bidders scope, however, SCADA provision / supported system shall be supplied as per tender conditions.  Tender Condition Prevails.
148	Vol II of II	37 of 153	4.22	Data should be stored at 2 places simultaneously, in case of failure of one device data can be retrieved from second device. Trends, alarms, events should be logged for at least 3 months on day/ hour/ minutes/ basis	Tender Condition Prevails.
149	Vol II of II	37 of 153	4.22	PLC shall incorporate all process parameters (specified elsewhere) and status of compressor, engine & priority panels and shall be modular in construction with respect to CPU. Power supply, Interface. PLC components/ system shall be tropicalized, MLL standard adopted with complete witing and necessary terminals. Writing to be color coded with cross ferruling in position. PLC shall be capable of carrying out on line routines for at least ten separate loops without affecting the scan, cycle & updating time etc. PLC shall be configured as a remote terminal unit of supervisory computer and data acquisition system complete with GPRs and Ethernet connectively. One card for transferring and accessing data from minimum twenty devices with RS48S port shall be provided. In case of faither of master/ active controller CPU, standby controllers for the control in bump less manner. All values & data should be available through both the controllers immediately, i.e. there should be no data loss.	Tender Condition Prevails.

We shall provide tag for all parts as per P&ID. Complete BOM of machine shall not be feasible to share

Documents: 4.23.5 Bill of Material with Tag No & Technical Specifications

shall be returned to IGL with no extra cost.

other components.



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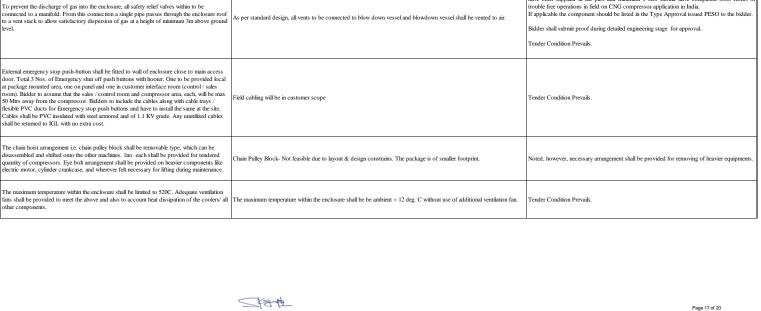
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Tender Condition Prevails. Will be discussed during DDE.

Vendor May supply the component as per their proprietary design. However the same mus have been supplied in the past and minimum 1 sets should have completed 8000 Hours of

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TRACTEBEL			REPLY TO BIDDER'S PRE-BID QUERIES  MEETING FOR SUPPLY,INSTALLATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR PACKAGE			Owner: Central UP Gas Ltd. (CUGL)	
						PMC- Tractebel Engineering Pvt. Ltd.	
			(TENDER NO. : P.014714 G 11031 R007)			Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC	
						Date: 28.06.2021	
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL/Tractebel's Reply	
155	Vol II of II	34 of 153	3.36	Motor feeder shall be provided with energy meter, MCCB with single phase presenter, contactors (AC-3  Duty), bi-metal relay switch fuse unit, earth leakage relays & voltmeter, push buttons, (for start/stop/tripletc. Ammeters should be part of PLC HMI. Stop push buttons shall be lockable and for the push push push shall be lockable and start stop with the push push push push push push push push	Main Motor Starter - STAR DELTA starter and for fan motor DOL starter having below component.  Main motor - STAR DELTA Starter, MCCB,Semiconductor fuse,Fan Motor-MPCB and Contactor  Multifunction meter,SPP,Voltmeter,Ammeter-common for Both Main Motor & Fan Motor.	Tender Condition Prevails.	
156	Vol II of II	40 of 153	5	Enclosures shall be engineered to give a noise level of maximum 75 + 3 Dba + measured at 1 meter. Specifying maximum burn extent with UL certification covering aluminum or steel with perforated steel inner face. Materials shall be non-combustible to deter spread of flame requirements.	Noise level will 75 + 3 Dba + measured at 1 meter in free field condition.	Tender Condition Prevails.	
157	Vol II of II	40 of 153	5	The bidder shall be providing a degree of protection equivalent to IP44 as defined in AS 1939.	Compressor enclosure will be weather proof & as per manufacturer's standard design.	Tender Condition Prevails.	
158	Vol II of II	40 of 153	5.1	Packing shall be sufficiently robust to withstand rough handling during ocean shipment & inland journey. Sling points shall be clearly indicated on crates.	Complate package shall be supplied inside canopy, additional packing not required, hence not considered	Tender Condition Prevails.	
159	Vol II of II	41 of 153	61	b) The MRT for the 25% compressors block of the lot shall be carried out with job or shop driver including complete job driving system i.e., job driven V-belt, job pulleys etc., for 4 hours continuously at the premises of compressor block OEM. The compressor need not be pressure loaded for MRT test. During this test following shall be recorded at agreed intervals (as applicable).  - Whention levels measured on cylinders and frame - Bearing temperature - Oil cooler inlet and outlet temp	MRT shall be clubbed with FAT i.e mechanical string test Following shall be not feasible during MRT:  - Rearing temperature. Not feasible to check due to flame proof construction	Tender Condition Prevails	

157	Vol II of II	40 of 153	5	The bidder shall be providing a degree of protection equivalent to IP44 as defined in AS 1939.	compressor encounter was be weather proof to us per maintained a standard design.	Tender Condition Prevails.
158	Vol II of II	40 of 153	5.1	Packing shall be sufficiently robust to withstand rough handling during ocean shipment & inland journey. Sling points shall be clearly indicated on crates.	Complate package shall be supplied inside canopy, additional packing not required, hence not considered	Tender Condition Prevails.
159	Vol II of II	41 of 153	61	b) The MRT for the 25% compressors block of the lot shall be carried out with job or shop driver including complete job driving system i.e., job driven V-belt, job pulleys etc., for 4 hours continuously at the premises of compressor block OEM. The compressor need not be pressure loaded for MRT test. During this test following shall be recorded at agreed intervals (as applicable).  Vibration levels measured on cylinders and frame  Bearing temperature  Oil cooler inlet and outlet temp  Subsequent to satisfactory run the compressor shall be examined as per standard procedure & following  shall be examined as minimum:  Bore & other parts by opening a valve  Piston & cylinder clearance  Visual examination of position rod, cylinder guide bore without dismantling  If any of part found damaged, all similar components shall be stripped for inspection. The MRT test shall  be repeated after replacement of such parts.		Tender Condition Prevails.
160	Vol II of II	49 of 153	9	Parameter FOOTPRINT AREA OF COMPRESSOR PACKAGE QUOTED (REQUIRED 4.0 SQM – 3.7 M X 1.1 M)	We are the only manufacturer which has pioneered, developed and supplied the first VIP Package without pressure reduction concept during Cascade decanting application (Booster Mode). Pressure reduction method should not be allowed as it defeats the very purpose of this application. Due to lack of this technology, few bidders may provide additional extendar PRS (Pressure Reducing Skid) to throttle & downsize the suction pressure resulting in lower dimensions of actual package. Hence it is not possible to develop & package this compressor without multiple actuators regimes. Due to complex steel tubing & higher volume of BDV, package size can be restricted to minimum LwXwH (m) = 3.7 x 2.5 x 4 (m) i.e. 9.25 sq.m. The tender dimensional requirement of 4 Sq.m is not possible for VIP package incorporating the 'non pressure reduction technology'. Request to kindly review this aspect seriously & accept.	Integrated Coompressor has to be installed in the forecourt therefore small footprint size is the essence of the package design hence maximum footprint shall be 4sqnts. However Bidder maximum footprint size is the statement of the footprint shall be 4sqnts. However Bidder maximum footprint shall be 4sqnts. Howe
161	Vol II of II	154 of 153	10.10	LEVEL TRANSMITTERS Suction K.O.D ( for automatic drain), Discharge K.O.D ( for automatic drain)	Level transmitters are not provided on separatore.	Noted, Manufacturer's design is acceptable.
162	Vol II of II		-	Test Certificates	Certificates will be submitted as per CP standard QAP Approved by end client	Tender Condition Prevails.
163	Vol II of II		-	DELIVERY BASIS & COMPLETION SCHEDULE	24 weeks from date of receipt of code-A approved drawings and manufacturing clearance.	Tender Condition Prevails.
164	Vol II of II	55 of 153	13.1	INSPECTION AND TESTING X-ray examination for welded joints for heat exch./Press. Vessel/gas Piping (Certificate to be furnished)	Not Applicable to heat exchangers as Welding application not involved.	
166	Vol II of II	55 of 153	13.4	Dye penetrant testing for cylinders liners, piston	Not feasible as per manufacturer standard design.	Kindly refer (QAP), further all tests in details will be discussed during detailed engineering.



Start

						Document No. P.014714 G 11031 R007		
TRACTEBEL								
			REPLY TO BIDDER'S PRE-BID QUERIES			Owner: Central UP Gas Ltd. (CUGL)		
	Choic		MEETING FOR SUPPLY,INSTALLS	IEETING FOR SUPPLY,INSTALLATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOR MOTOR DRIVEN 400 SCMH VARIABLE INLET PRESSURE (VIP) CNG INTEGRATED COMPRESSOR PACKAGE		PMC- Tractebel Engineering Pvt. Ltd.		
				(TENDER NO. : P.014714 G	11031 R007)	Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC		
						Date: 28.06.2021		
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL/Tractebel's Reply		
167	Vol II of II	55 of 153	13.8	Stripping check and internal inspection	As it is not feasible to disassemble any part of package, same is not feasible to offer	Tender condition Prevails.		
168	Vol II of II	55 of 153	13.10	Leak proof test of crank case (min 24 hrs with kerosene)	Hydrotest certificate for crankcase shall be provided			
169	Vol II of II	55 of 153	13.15	Functional /continuity tests-control panel (At sub vendor's works)	Shall be done along with MRT.			
170	Vol II of II	69 of 153	-	SPECIFICATIONS FOR DISCHARGE FILTER Filter Designed: Paint Compatible 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 Eex 2GD IIB T6.	Kindy approve manufacturer's standard filter with parker make filter cartridge(Borosilicate Microfibre Fabric).  Our standard filter is proven is CNG application.	Any additional vendor apart from those mentioned in attached vendor list may be accepted during execution subject to approval by owner/ owners representatives based on their past track records or credentials.  Refer Note 1 & 2 of Annexure(RECOMMENDED VENDOR LIST)		
171	Vol II of II	70 of 153		List of Makes	Please approve following makes:  1) DISCHARGE FILTER. ACII, standard filter with Parker filter element.  2) CARTRIDGE FILTERS. Parker Make  3) DIAPHRAGM VALVE-ACII. Make	Tender Condition Prevails.		
172	Vol II of II			QUALITY ASSURANCE PLAN	Inspection & Testing will be as per Approved QAP.			
173	Vol II of II		1.1	HYDROTEST OF - CYLINDER, PRESS. VESSELS, HEAT EXCHANGERS	Inspection by owner/TPI not considered			
174	Vol II of II		1.2	HYDROTEST OF - CYLINDER HEADS	Hydrotest for cylinder head not considered.			
175	Vol II of II		1.3	LEAK PROOF TEST OF CRANK CASE (4 Hours . with Kerosene )	Hydrotest TC for crankcase shall be submitted Inspection by owner/TPI not considered			
176	Vol II of II		1.6	RADIOGRAPHY AS APPLICABLE - PRESSURE VESSELS, HEAT EXCHANGER. GAS PIPING (Only 10% Joints To Be Witnessed)	Inspection by owner/TPI not considered			
177	Vol II of II		1.7	BARRING OVER TO CHECK CYLINDER END CLEARANCE AND PISTON ROD RUNOUT	Not feasible to check piston rod runout Inspection by owner/TPI not considered			
178	Vol II of II		1.8	NO LOAD MECHANICAL RUN TEST OF THE COMPR. WITH RATED (OR MORE) SPEED AND SHOP DRIVER	Shall be combined with Factory Acceptance Test (FAT) at full load on CNG fuel.  Inspection by owner/TPI not considered	Kindly refer (QAP), further all tests in details will be discussed during detailed engineering.		
179	Vol II of II	91 of 153		91 of 153	1.9	STRIP CHECK AND INTERNAL INSPECTION AFTER "NLMRT" OF ALL Refer COMPRESSORS	As it is not possible to disassemble any part of the compressor Package after assembly & Testing same is not feasible.  Inspection by owner/TPI not considered	Ranaly telet (QAP), future at tests in details was de discussed during detailed engineering.  Tender condition Prevails.
180	Vol II of II			1.12	CANOPY STRUCTURE PAINTING INSPECTION AT WORKS. SURFACE PREPARATION TO BE INSPECTED AFTER CLEANING AND BEFORE APPLICATION OF FIRST COAT OF PRIMER.	Third party inspection for canopy painting shall not be considered as same in not envisaged Inspection by owner/TPI not considered		
181	Vol II of II			1.13	FUNCTIONAL / HV / CONTINUTY TEST FOR CONTROL PANEL( AT SUB VENDOR'S WORKS.)	Functional / hv / continuity check for control shall be done during Factory Acceptance Test (FAT) at full load on CNG fuel.		
182	Vol II of II			1.17	PERFORMANCE ACCEPTANCE TEST (AT SITE) AT GUARANTEED PARAMETERS.	TPI inspection is not considered at site test		
183	Vol II of II		1.18	FIELD TRIAL RUN FOR 72 HRS.	TPI inspection is not considered at site test			
184	Vol II of II			SECTION – II: CASCADE SPECIFICATIONS				



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Supply of CNG storage cascades of capacity minimum 450 water liter (-0%, + 5%) at 15°C for 400 SCMH compressor

Bidder may offer higher capacity, however, Minimum tender conditions shall be fulfilled such as size of package etc.

TRACTEBEL						Document No. P.014714 G 11031 R007
				REPLY TO BIDDER'S PRE-	Owner: Central UP Gas Ltd. (CUGL)	
	engie		MEETING FOR SUPPLY,INSTALL	ATION,TESTING,COMMISSIONING AND COMPREHENSIVE MAINTENANCE FOI PACKAGE	PMC- Tractebel Engineering Pvt. Ltd.	
				(TENDER NO. : P.014714 G	Pre-bid meeting held on 18.06.2021 at 1500 HRS IST through VC	
					Date: 28.06.2021	
Sl. No.	Vol. No.	Tender Page No.	Clause No	Requirement as per tender	Query/Clarification	CUGL/Tractebel's Reply
186	Vol II of II	106 of 153	C1 No-7.2	All fittings including valves shall be as per recommended vendor list. Material shall be SS 316 conforming to ASTM A269. Open ends on fittings and vents shall be provided with caps.	Fittings will be SS 316 as per ASTM A182 (for fittings made from Forgings) / A276.(for fittings made from Bar Stock),	Tender condition Prevails.
187	Vol II of II	107 of 153	C1 No-7.3	The paint shall be chosen, primed and applied as to have a service life of five (5) years	Cylinder will be painted as per IS 7285 Part 2 standard requirement.  Also note that as per cascade manufacturer Painting will not be covered under warranty & / or guarantee for five years as per their standard practice	Tender condition Prevails.
188	Vol II of II	107 of 153	Cl No-7.3	Surface preparation by Shot Blasting as per grade SA 2 1 / 2 IS 9954/ ISO 8501. Three coats of paint shall be applied with minimum thickness of 300 micron. The recommended painting system should be of category C5-1 very high (Industrial) as specified in the standard ISO 12944 Part 1 – 8. The proposed Painting system shall conform to Table A5 of ISO 12944 - 5 standard.	Painting will be as per OEM standard. Quality painting standards are followed ensuring maximum durability in out door installations.	Tender condition Prevails.
189	Vol II of II	107 of 153	Cl No-9	Detailed quality control procedure/QAP, duly approved by PESO, Nagpur, for manufacture of cylinder, fabrication of frame etc within two weeks of release of order.	CCOE approves only cylinders. So QAP as per cylinder standard will be followed. For cascade we will provide QAP and it will be followed as agreed by customer.	Noted, Same will be discussed during DDE
190	Vol II of II			SECTION - III: DISPENSER SPECIFICATIONS		
191	Vol II of II	109 of 153	C1No-3.29	Overfill Protection Overfill protection shall be through electronically programmed hose to terminate the fill after 200 Kg/cm²g. Vendor shall include one number pressure transducer and one number pressure regulator per hose. Pressure regulator per hose. Pressure regulator per relief valve shall be provided to avoid overfilling. Relief valve set pressure shall be at 250kg/cm²g with resetting at 245kg/cm²g. Relief valve setting to be adjustable from 225kg/cm²g to 260kg/cm²g with resetting at 225kg/cm²g respectively. Calibration certificate shall be provided.	We have considerd Analogue Pressure Transmitter (4-20 mAmp) which along with Flow Meter Inputs in regards to Flow rate and Filling Algoritham restrict the filling pressure to 200 Bar in the vehicle, as supplied more than 1500 dispensers with the above arrangement and out of it almost 1200 dispensers are operating SAFELY. No Regulator will be provided.	Tender condition Prevails.
192	Vol II of II	143 of 153		Annexure-1 List of Makes	Please approve following makes Tubing: Parker Make BreakAway: Parker Make NGV Nozzle: Parker Make	Any additional vendor apart from those mentioned in attached vendor list may be accepted during execution subject to approval by owner/ owners representatives based on their past track records or credentials.  Refer Note 1 & 2 of Annexure(RECOMMENDED VENDOR LIST)  Tender Condition Prevails.
193	Vol II of II	152 of 153		QAP-Dispenser	For dispenser we will provide QAP and it will be followed as agreed by customer.	Noted, Same will be discussed during DDE



