

Tender No: AGCL/O&M/COMP_PKG/2021/02/06 Date: 07/07/2021
Sub: Online Pre- Bid meeting queries and AGCL clarification Date: 23/07/2021

SI.N	Clouse No.	Existing Clouse	Pre-bid query	AGCL reply/Clarification
1	IFB/6 (II) (Page 5)	EMD/ Bid Security may be paid online	Is it acceptable, if we pay EMD in the form of bank guarantee?	Tender conditions prevail.
2	BRC/10.0 (Page 14)	Offers received without Integrity Pact duly signed by the authorized signatory of the bidder will be rejected.	Please provide copy of Integrity Pact	No need to submit Integrity Pact.
3	SOW/3.1.1 (Page 37)	Suction pressure may vary above/below standard suction pressure value based on field condition. Accordingly, package is to be designed in a way that it maintains desired flow in such fluctuating operating conditions also.	We will provide capacity of compressor for various suction pressure mentioned in the tender i.e 7Kg/Cm ² g, 10Kg/Cm ² g, 12Kg/Cm ² g. However capacity will be guaranteed at suction pressure of 10Kg/cm ² g & discharge pressure of 20Kg/Cm ² g. We will consider suction temperature of gas as 30 Deg C for guaranteed parameters.	Suction gas temperature should be considered in the range of 15 to 35 deg C . Required capacity to be achieved at worst suction temperature.
4	SOW/5.1 (Page 44)	Prime mover should be of make Caterpillar or Waukesha	Kindly specify any specific models of gas engine are to be offered mandatorily.	The prime mover must satisfy the required parameters i.e the package must maintain the discharge pressure of 17.56 Kg/cm ² g at suction pressure of 7 Kg/cm ² g at 1000 RPM. In addition to this the Prime Mover must satisfy the power requirement for all operating cases mentioned in the tender.
5	SOW/5.1 H(C) (Page 48)	Carrying out the valve dynamic response study.	It is not possible to submit valve dynamic response study as it is not provided by compressor OEM. We however guarantee that the valves will be suitable for the required application.	Bidder's proposal accepted considering the OEM criteria.
6	SOW/7.3.6 (Page 53)	The compressor package shall be complete with compressor suction and	Is discharge scrubber required at downstream of after cooler? Kindly	Discharge scrubber is not required but the filter at discharge outlet is required.

		inter stage scrubbers.	confirm	
7	SOW/7.3.9 (Page 55)	Intake air filter: The air filter shall be dry type. It shall remove 98% of all particles greater than 10 µm. Air filters shall be sheltered from rain ingress. The filter shall be fitted with a differential pressure indicator to show when the filter requires attention. The filter housing shall be in Stainless steel SS 316.	Air filters will be as per OEM standard design and are equipped with rain shield and service indicator. Differential pressure indicator is not provided. Air filter housing will be of carbon steel.	Bidder's proposal accepted considering the OEM criteria.
8	SOW/8.0 (Page 59)	Noise level will not exceed the limit as per the statutory norms at 1 meter distance from the edge of the skid. Residential type silencer shall be provided. Noise level outside compressor station fenced area should be within a) 65 dBA during day time b) 55 dBA during night time.	Noise level for Waukesha engine is 102dBA at one meter distance from source. This is mechanical noise level which cannot be reduced. Request you to accept the same.	1. Bidder's proposal accepted considering the OEM criteria. 2. The silencer should be of Hospital Grade instead of Residential type.
9	GCC/3.6 (Page 74)	All local taxes, levies and duties, sales tax, octroi, etc. on purchases and sales made by Contractor shall be borne by the Contractor.	Whether AGCL will provide Essentiality certificate/Project authority certificate to import equipments on NIL customs duty?	AGCL will not provide any 'NIL custom' duty certificate.
10	Control Panel/2.0 (Page 81)	All the process parameters shall be indicated on the HMI by using dedicated transmitters/transducers	We understand that, Transducers are also acceptable.	Tender conditions prevail
11	Control Panel/4.2 (j) (Page 84)	The controller should have capability to calculate flow as per latest AGA standard.	Please let us know whether DP type flow meter is acceptable.	Orifice type meter to calculate the discharge gas volume.
12	Control Panel/5.6 (a) (Page 87)	The engine shall be provided with on-line flow meter for fuel gas volume. This flow measurement should be conforming to latest AGA standard. Online Flow Meter to be hooked up with the Programmable Controller and Totalizer indication should be available in the Control Panel Display.	Please let us know whether DP type flow meter is acceptable.	Turbine type EVC meter to calculate the fuel gas.
13	SOR/1.03	Supply of a suitable Suction Control Valve	Kindly specify the suction pressure	The suction pressure upstream of

	(Page 90)	Assembly of 300 Class pressure rating between skid limit and battery limit fitted with suitable positioners and instrumentation control device along with upstream, downstream and bypass manual valve arrangement	upstream of control valve	control valve may be considered in the range of 7 to 12 kg/cm ² g.
14	SOW/3.1 & Annexure-A (Page 37,91)	Compressor will have minimum designed capacity of 0.55 MMSCMD at 10.0 Kg/cm ² and should be operational at variable load of 25%, 50%, 75% and 100% at minimum suction pressure. The above duty conditions (capacities) are at normal operating speed of (75% of the maximum rated speed recommended by manufacture) and after considering other conditions/factors such as altitude, maximum gas temperature, ambient temperature etc.	<p>i) We will offer 100% of maximum rated speed for guaranteed case as gas engines are designed to operate at maximum rated speed declared by OEM.</p> <p>ii) Design parameters given in SOW/ 3.1 and Annexure-A are contradictory.</p>	<p>The design parameters for the compressor package are as below :</p> <p>1. Minimum Suction pressure : 7kg/cm²g</p> <p>2. Maximum operating Discharge pressure: 17.56 Kg/cm²g</p> <p>3. Flow Rate: 0.55 MMSCMD.</p> <p>4. Maximum Suction temp: 35⁰C</p> <p>5. Maximum Discharge temp: 55⁰C</p> <p>The package must maintain the discharge pressure of 17.56 Kg/cm² at suction pressure of 7 Kg/cm² at 1000 RPM.</p>
15	Experience criteria / 4.A	Bidder should have relevant experience in Engineering, Packaging, Procurement, Supply, Installation & Commissioning of Gas engine driven reciprocating Gas compressor unit of minimum 1500 BHP driver rating and discharge pressure of minimum 20 kg/cm ² g on LSTK basis in any Govt. PSU in hydrocarbon sector in India.	Whether the bidder should have the single point responsibility for the LSTK?	Apart from fulfilling all the mandatory package related obligations, all the Civil including foundation of compressor package, Structural, Electrical, Instrumentation, Mechanical job envisaged to complete the project in all respect will be single point responsibility of the bidder/packager.
16	Experience criteria / 4.A	Bidder should also in addition to above have an experience of O&M for a period of 3(three) years after commissioning of Gas Engine Driven Reciprocating Gas Compressor Packages having rating equal to or higher than 1500 BHP driver rating. O&M experience can be for same LSTK project or for any other project in Hydrocarbon sector in India.	<p>ii) Whether global experience in Oil & Gas sector will be considered relevant?</p> <p>iii) Whether the experience in private sector Oil & Gas industries will be considered as relevant?</p> <p>iii) Whether the experience of</p>	<p>i) & ii) Tender conditions prevail.</p> <p>iii) The experience of commissioning of Gas Engine Driven Reciprocating Gas Compressor Packages having rating equal to or NOT LESS than 1400 BHP.</p> <p>The bidder should have experience on single point responsibility basis to</p>

			commissioning of Gas Engine Driven Reciprocating Gas Compressor Packages having rating equal to or LESS than 1500 BHP.	carry out all the Civil including foundation of compressor package, Structural, Electrical, Instrumentation, Mechanical job envisaged to complete the project in all respect.
17	<p>SOW/3.5 (Page 41)</p> <p>Erection & Commissioning /5 (F) (Page 48)</p> <p>GCC/Liquidated damages/ 9.1 (Page 78)</p>	<p>i) The completion period (including commissioning) for complete scope of work will be 11(Eleven) months from the date of issue of LOI.</p> <p>ii) Vendor shall supervise the placement of compressor Package at location. After placement of the units, the vendor shall commence erection of the packages within 1(one) week and complete the erection/commissioning Jobs within 12 (twelve) weeks of the same.</p> <p>iii) In the event of the Contractor's default in timely on site delivery including commissioning of compressor package (32+12= 44weeks after received of LOI), for commencement of operations within the stipulated period, the Contractor shall be liable to pay liquidated damages @ 0.5%of basic contract value& applicable taxes per week or part there of subject to Maximum of 5% of total contract value.</p>	<p>Different clause mentioned regarding delivery period are Contradictory with each other. We request AGCL to confirm the delivery period (including installation, erection commissioning & PGTR) from the date of award of contract in the form of LOI.</p>	<p>The onsite delivery period of the package shall be 10(Ten) months from the date of award of contract in the form of LOI. The REMOVAL OF THE EXISTING FOUNDATION, installation, erection & commissioning of the New package is required to be achieved within 2(Two) months from the date of Delivery of the package at site.</p> <p>The completion period (including commissioning) for complete scope of work will be 12(Twelve) months from the date of issue of LOI/W.O.</p>
18	IFB/1.0 (Page 3)	Successful bidder/packager will have to execute the project on purely lump sum turnkey basis. Apart from fulfilling all the mandatory package related obligations, all the Civil, Structural, Electrical, Instrumentation, Mechanical job	Please specify the scope related to the Civil Whether compressor foundation is in Scope of Bidder?	<p>Civil work comprises of all the works required for successful commissioning of the package on single point responsibility basis as mentioned below:</p> <p>1. REMOVAL OF THE EXISTING</p>

		envisaged to complete the project in all respect will be single point responsibility of the bidder/packager		<p>FOUNDATION following the norms of hazardous Area Zone 2 Gas group IIA /IIB. The size of the existing foundation for Engine and Compressor is 23ft X10ft.New foundation will require for cooler.</p> <p>2. The bidder has to submit a detail plane for removal of the existing foundation and the total no of days of shut down of the Compressor Station for execution of the complete project.</p> <p>3. Apart from fulfilling all the mandatory package related obligations, all the Civil including foundation of compressor package, Structural, Electrical, Instrumentation, Mechanical job envisaged to complete the project in all respect will be single point responsibility of the bidder/packager.</p>
19	SOW/ 5.1/ii (page 44)	Coolers: Common unitized aerial cooler of fin fan design shall be provided to cater to cooling requirements of the lube oil, packing oil, compressor cylinder jacket water (if any), gas engine jacket water, process gas (discharge gas cooling). From previous experience AGCL prefer 'Harsco" make cooler only	Bidders request to include cooler of other maker also like Alfa Laval ACE Air cooler, ETR Heat Transfer Services etc.	The cooler may be of Harsco/Chart Industries OR Alfa Laval ACE Air cooler make.
20	SOW/ 5.1(x) (page 45)	Control Panel & Instrumentation: Skid mounted Altronic DE-4000 Control Panel complete with all safety cut outs and Instrumentation required for safe operation and control of the compressor package.	Bidders request to include Control Panel of other maker also like Murphy, Siemens, Allen Bradley etc.	The control Panel may be Altronic DE-4000 OR Murphy make.
21	xi) Lubrication	All high-pressure double ferrule fitting	We request AGCL to allow other	

	System of A) General Requirement of 5.	and 2/3 way valves shall be from SWAGELOC/ Hy-Loc/ PARKER makes & shall be S.S. material only. Material of tube shall also be SS316 as per ASTM A269 Sandvik make.	reputed make like Wesmec Engineering, Precision Engineering Industries, Mumbai & Kwality Precision Products P. Ltd. with similar technical specifications for all high-pressure double ferrule fittings, 2/3 way valves & tubes.	Tender conditions prevail
22	xv) Auxiliary Pipe Work of A) General Requirement of 5. Package Technical Requirements	Auxiliary Pipe work: All necessary auxiliary /ancillary pipe-work including fittings, valves and pipe supports, terminating at the package skid edge for both compressor, accessories, gas engine and accessories. Interconnected Piping between different components of the package. All on skid termination points shall be flanged as per ASME B 16.5, Weld neck, RF, Smooth finish. The terminal points shall be as shown in the P&ID. The terminal points include suction / discharge flanges, drain valves, vents, etc.	As per API 11P, Threaded connection in 2" and below sizes are allowed for Utility Lines. We request AGCL to allow threaded connection in 2" and below sizes for Utility Lines.	Proposal accepted subjected to the fulfillment of the safety standards.
23	SOW/ 3.1.8/ 3.1 (Page 38) Point f) & g) 6.0 AGCL Scope of Utility Services (Page 49)	Design, supply & fabrication of all interconnection/ hookup piping, hardware fittings & accessories of suitable pressure & temperature rating Beyond skid limit upto the battery limit i.e. up to existing process gas header system interconnection points on suction, discharge, start gas, fuel gas, vent header. BoM with detailed technical specifications is to be submitted for AGCL review and approval. f) Connecting pipe-work from the Package skid edge connections of the relief valve discharge pipe to the station flare / Vent system.	Both the clauses mentioned are contradictory regarding start gas, fuel gas & vent header connections. In Point 3.1.8 of 3.1 of 3.0 Scope of Work, it is mentioned that Inter interconnection/hookup piping, hardware fittings & accessories of suitable pressure & temperature rating beyond skid limit up to the battery limit i.e. up to existing process gas header system interconnection points on start gas, fuel gas, vent header are in bidder's scope whereas in Point f) & g) services mentioned that Connecting pipe-work from the package skid edge	The following points of Utility Services (Page 49) are in bidder's scope: f) Connecting pipe-work from the Package skid edge connections of the relief valve discharge pipe to the station flare / Vent system. g) Piping connection to the engine fuel valve and starting motor.

		g) Piping connection to the engine fuel valve and starting motor.	connection of the relief valve discharge pipe to station flare/vent system, engine fuel valve & starting motor are in AGCL's scope of supply. We request AGCL to give clarification on this.	
24	7.3.5 of 7.0 Design Requirements	Vendor shall submit fan performance curves along with the bid.	We proposed to amend the Clause as under: Vendor shall submit the fan performance curves after receipt of LOI.	Tender conditions prevail
25	7.3 Mechanical of 7.0 Design Requirements	The tube sizes shall be at least 1" NB size.	The tube size shall be as per OEM Standard. It should not be fixed. However we will make sure that the discharge gas temperature will not Exceed 55 Degree C at the outlet of the Air-Cooler. We request AGCL to amend the clause accordingly.	Proposal accepted subjected to that the discharge gas temperature will not exceed 55 Degree C at the outlet of the Air-Cooler.
26	7.3.9 Gas Engine of 7.0 Design	H.P. Requirement: The Natural Gas engine's power must satisfy the following requirements; BHP (Continuous rating under site condition) = 120% of both the total BHP required to drive the compressor at full load and the total BHP required to drive the auxiliaries.	We proposed to amend the clause as under: H.P. Requirement: The Natural Gas engine's power must satisfy the following requirements; BHP (Continuous rating under site condition) = 100% of both the total BHP required to drive the compressor at full load and the total BHP required to drive the auxiliaries.	The prime mover must satisfy the required parameters i.e the package must maintain the discharge pressure of 17.56 Kg/cm ² g at suction pressure of 7 Kg/cm ² g at 1000 RPM. In addition to this the Prime Mover must satisfy the power requirement for all operating cases mentioned in the tender.
27	13.1 Documents required with Bid of 13.0 Documentation	Vendor shall provide the following along with the bid: A preliminary production schedule of the complete package including design, engineering, fabrication, factory testing, installation, commissioning, start up and site activities with bar chart showing major mile stones and hold points. ☑ Comments / Deviations / Exceptions taken by the	Some of the documents asked by AGCL are not possible to submit along with the Bid because it involves detail engineering to complete the required documentation. So we shall submit the following documents after receipt of LOI: 1. Completed ISO 13631 datasheet 2. A machinery train general arrangement drawing for the	Tender conditions prevail

		<p>Vendor with respect to Codes, Standards and Regulations shall be explained with Technical justification for evaluation.</p> <ul style="list-style-type: none"> ☑ Functional description. ☑ Reliability / Availability information and figures. ☑ Detailed scope of supply. Etc. 	<p>complete package including weights, space required for maintenance.</p> <ol style="list-style-type: none"> 3. Completed auxiliary equipment datasheet (Gas Engine, Heat Exchanger etc.) 4. Vendor's P&ID for the complete package including all auxiliaries. 5. Functional description of the compressor package including start up, IPF and emergency shutdown procedures, capacity control, normal operation, etc. 6. Schedule of material of construction. 7. Full details of the proposed bearings and the lubrication oil system. 8. Panhandle diagram (Capacity versus suction pressure characteristics). 9. Full details of all the electrical items, electrical block diagrams showing all interfacing and inter connections. 10. Full description and specification of all piping and instrumentation incorporated with the package. 11. Project specific Quality plan. 12. Typical Inspection and test plan. 13. Anticipated ARM Availability, Reliability and Maintainability characteristics. 	<p style="text-align: center;">Tender conditions prevail</p> <p style="text-align: center;">Tender conditions prevail.</p>
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			Kindly provide the acceptance on this.	
28	ITB/14 (Page 26)	Bids shall remain valid for 180 days from the date of closing of bid prescribed by the Company. Bids of shorter validity will be rejected as being non-responsive. If nothing is mentioned by the bidder in their bid about the bid validity, it will be presumed that the bid is valid for 180 days from Bid Closing Date	AGCL clarification	Bids shall remain valid for 300 days from the date of closing of bid prescribed by the Company. Bids of shorter validity will be rejected as being non-responsive. If nothing is mentioned by the bidder in their bid about the bid validity, it will be presumed that the bid is <u>valid for 300 days from Bid Closing Date</u>
29	ITB/15 (Page 26)	Bid must be accompanied with earnest money (i.e. Earnest Money Deposit (EMD) also known as Bid Security) paid through RTGS/NEFT/internet banking in Assam Government e-Procurement System www.assamtenders.gov.in . Bidder shall ensure that EMD submitted shall be valid for 210 days from the bid closing date	AGCL clarification	Bid must be accompanied with earnest money (i.e. Earnest Money Deposit (EMD) also known as Bid Security) paid through RTGS/NEFT/internet banking in Assam Government e-Procurement System www.assamtenders.gov.in . Bidder shall ensure that EMD submitted shall be valid for 330 days from the bid closing date
30	IFB/1 (Page 3)	Design, Manufacture, Fabrication, Package, Test, Supply, Erection and Commissioning of 1(one) number of Gas Engine driven Reciprocating Gas Compressor Package on Turnkey (LSTK) basis	AGCL clarification	Design, Engineering, Manufacturing, Testing, Supply, Erection and Commissioning and Operation & Maintenance for 3 years of 1(one) number of Natural Gas Engine driven single stage variable reciprocating Gas Compressor Package for AGCL Duliajan Compressor Station OR any other place within operational area of AGCL on LSTK basis/Single point responsibility.

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