

ASSAM GAS COMPANY LIMITED
(A Government of Assam Undertaking)
P.O. Duliajan, Pin – 786602
Dist-Dibrugarh, Assam

CORRIGENDUM-1

Reference: Tender No: AGCL/O&M/COMP_PKG/2021/02/06 Dated: 07/07/2021

This Addendum No. 1 dated 06/08/2021 is to Tender No. AGCL/O&M/COMP_PKG/2021/02/06 Date: 07/07/2021 for “**Design, Engineering, Manufacturing, Testing, Supply, Erection, Commissioning, and Operation & Maintenance for 3(three) years of 1(one) number of Natural Gas Engine driven Reciprocating Gas Compressor Package for AGCL Duliajan Compressor Station OR any other place within operational area of AGCL on LSTK basis.**” is issued to notify a few changes in Scope of Work & other terms and conditions of the bid document arising out of discussion in pre-bid conference held at Duliajan on 23/07/2021 through video conferencing.

The changes in the bid documents are given as **ANNEXURE-I**. Bidders are requested to take note of the same while preparing and submitting their offer. All other terms & conditions of the bid document remain unchanged.

***** **End of Addendum to Bid Document** *****

ANNEXURE-1

Modified Clauses of Tender No: AGCL/O&M/COMP_PKG/2021/02/06 Date: 07/07/2021 based on Online Pre- Bid meeting queries and AGCL clarification on 23/07/2021.

| Sl.No. | Clause No. | Existing Clauses | Modified Clauses |
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| 1 | IFB/1 | 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 | 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. |
| 2 | ITB/15 | 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 | 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 |
| 3 | ITB/14 | 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 | 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 valid for 300 days from Bid Closing Date |
| 4 | 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. | H.P. Requirement: The Natural Gas engine's power 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. The Natural Gas engine's power must satisfy the BHP required to drive the compressor at full load and the total |

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| | | | BHP required to drive the auxiliaries. |
| 5 | 7.3 Mechanical of 7.0 Design Requirements | The tube sizes shall be at least 1" NB size | The tube should be designed in such a way that the discharge gas temperature at outlet of the Air-Cooler should not exceed 55 Degree C. |
| 6 | 6.0 AGCL Scope of Utility Services | <p>c) Sun shelter with overhead standard lifting facilities above the compressor skid. Vendor is to furnish the required lifting capacity of the package.</p> <p>d) Connecting pipe-work from Package skid end connections of the scrubber and other drains to the station drain system.</p> <p>f) Connecting pipe-work from the Package skid edge connections of the relief valve discharge pipe to the station flare / Vent system.</p> <p>g) Piping connection to the engine fuel valve and starting motor.</p> | <p>c) Overhead standard lifting facilities (HOT of capacity: 2MT) above the compressor skid.</p> <p>d) Connecting pipe-work from Package skid end connections of the scrubber and other drains to the station drain system are in bidder's scope.</p> <p>f) Connecting pipe-work from the Package skid edge connections of the relief valve discharge pipe to the station flare / Vent system are in bidder's scope.</p> <p>g) Piping connection to the engine fuel valve and starting motor are in bidder's scope.</p> |
| 7 | xv) Auxiliary Pipe Work of A) General Requirement of 5. Package Technical Requirements | <p>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.</p> | <p>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. As per API 11P, Threaded connection in 2" and below sizes are allowed for Utility Lines. The terminal points shall be as shown in the P&ID. The terminal points include suction / discharge flanges, drain valves, vents, etc.</p> |
| 8 | SOW/ 5.1(x) | <p>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.</p> | <p>Control Panel & Instrumentation: Skid mounted Altronic DE-4000 OR Murphy Control Panel complete with all safety cut outs and Instrumentation required for safe operation and control of the compressor package.</p> |

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| 9 | SOW/ 5.1/(ii) | <p>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</p> | <p>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). The cooler may be of Harsco/Chart Industries OR Alfa Laval ACE Air cooler make.</p> |
| 10 | IFB/1.0 | <p>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 envisaged to complete the project in all respect will be single point responsibility of the bidder/packager</p> | <p>Civil work comprises of all the works required for successful commissioning of the package on single point responsibility basis as mentioned below:</p> <ol style="list-style-type: none"> 1. REMOVAL OF THE EXISTING 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. 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. 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. |
| 11 | SOW/3.5 | <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</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> |

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| | Erection & Commissioning /5 (F) GCC/Liquidated damages/ 9.1 | <p>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>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> <p>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> |
| 12 | 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. | 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 NOT LESS than 1400 BHP driver rating. O&M experience can be for same LSTK project or for any other project in Hydrocarbon sector in India. |
| 13 | Annexure-A | Design Data provided in page 91. | <p>The design parameters for the compressor package are as below :</p> <ol style="list-style-type: none"> 1. Minimum Suction pressure : 7kg/cm²g 2. Maximum operating Discharge pressure: 17.56 Kg/cm²g 3. Flow Rate: 0.55 MMSCMD. 4. Maximum Suction temp: 35⁰C 5. Maximum Discharge temp: 55⁰C <p>The package must maintain the discharge pressure of 17.56 Kg/cm² at suction pressure of 7 Kg/cm² at 1000 RPM. In addition to this the Prime Mover must satisfy the power requirement for all operating cases mentioned in the tender.</p> |
| 14 | SOW/3.1 | Compressor will have minimum designed capacity of 0.55 MMSCMD | Compressor will have minimum designed capacity of 0.55 MMSCMD at |

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| | | 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. | 7.0 Kg/cm²g 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. |
| 15 | SOR/1.03 | Supply of a suitable Suction Control Valve 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 | Supply of a suitable Suction Control Valve 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. The suction pressure upstream of control valve may be considered in the range of 7 to 12 kg/cm²g. |
| 16 | Control Panel/5.6 (a) | 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 | The engine shall be provided with on-line Turbine type EVC 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. |
| 17 | Control Panel/4.2 (j) | The controller should have capability to calculate flow as per latest AGA standard. | The controller should have capability to calculate flow as per latest AGA standard. The meter should be Orifice type to calculate the discharge gas volume. |
| 18 | SOW/8.0 | 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 will not exceed the limit as per the OEM design at 1(one) meter distance from the edge of the skid. The silencer should be of Hospital Grade instead of Residential type. |
| 19 | SOW/7.3.9 | Intake air filter: The air filter shall be dry type. It shall remove 98% of all particles greater than 10 µm. Air filters | Intake air filter: The air filter shall be dry type. It shall remove 98% of all particles greater than 10 µm. Air filters |

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| | | 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. | 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 or carbon steel as per OEM standard. |
| 20 | SOW/7.3.6 | The compressor package shall be complete with compressor suction and inter stage scrubbers. | The compressor package shall be complete with Suction scrubber. Discharge scrubber is not required but the filter at discharge outlet is required. |
| 21 | SOW/5.1 H(C) | Carrying out the valve dynamic response study | No need to submit the valve dynamic response study report along with the Technical bid but bidder must guarantee that the valves will be suitable for the required application. |
| 22 | BRC/10.0 | Offers received without Integrity Pact duly signed by the authorized signatory of the bidder will be rejected. | Bidder no need to submit Integrity Pact in the Technical bid. |