



UCH COMPRESSION PROJECT



Design Engineering, Procurement (Supply), Construction, Installation/Erection, Pre-Commissioning, Commissioning & Start-up (including performance testing and Reliability Guarantee Test) of Compression System at UCH Compression Project
Tender Enquiry No. PROC-FC/CB/PROJ/UCH(COM)-4462/2019

PRE-BID CLARIFICATION - 21

SR No.	Statement	Query	Response
1	SEC-III SOW <u>Chp. 5.0 Instrumentation and Control Engineering</u> 5.8 EPCC Contractor is responsible for Supply and installation of fire and gas detectors and devices for complete compression area	Contractor understand that no modification of Building F&G into existing UCH-II Control room building is requested in SOW, due to new cabinets & HMI add for compressor station project. Please to confirm.	Bidder understanding is correct.
2	0221-IMA-6000 <u>4.9.6 Control Valves</u> Valve Body & END Connections The preferred valve type for control valves shall be Globe. The CONTRACTOR shall take permission of Client if any other type is selected by the CONTRACTOR	Contractor ask to Company permit to utilize type: Ball Control Valve	Bidder to adhere with the tender requirement. However Design and selection of instruments may further be finalized duringdetail engineering stage.
3	0221-IMA-6000 <u>4.9.6 Control Valves</u> Valve Body & END Connections Bonnetts and blind heads shall be of the same material as the valve body and of integral or bolted type construction with fully retained gasketing. Threaded bonnetts are not acceptable. When split body valves are specified, they are to be of through bolted construction.	Contractor understand that valve assembly type : CONTROL VALVE - 3 PIECES - SIDE ENTRY -TRUNNION MOUNTED is allowed . Company please to confirm	Refer to OGDCI/ENAR response against Sr. No.2
4	0221-IMA-6001 <u>4.9.5 Shutdown Valves</u> General statement valve body	Contractor understand that valve assembly type : SHUTDOWN VALVE - 3 PIECES - SIDE ENTRY -TRUNNION MOUNTED; it is allowed . Company please to confirm	Refer to OGDCI/ENAR response against Sr. No.2



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5	<p><u>- 0221-DS-1704-0 (Datasheet of Trim Cooler 251-E-201 ABC</u> <u>- 0221-DS-1703-0 (Datasheet for Suction Scrubbers)</u> <u>- 0221-DS-1702-0 (UCH-I Slugcatcher M-210) EPRcomm</u> <u>- 0221-LS-9335-0 (Line List)</u></p> <p>Gas Lines Design Pressure</p>	<p>According to line list almost all gas lines are designed for 1350 psig. This value seems quite conservative considering that compressor discharge is about 865 psig, trim cooler design pressure is 1015 psig, suction scrubber to be designed for settling out pressure and maximum design pressure for slugcatcher is 1050 psig. Company to confirm is design pressure for process gas line shall comply with line list or can be reduced based on pressure on equipment:</p> <ol style="list-style-type: none">1) 1050 psig up to inlet compressor train isolation valve2) settling out pressure for suction part3) trim cooler design pressure for discharge part.	<p>Bidder to comply with Design pressures for process gas lines as mentioned in line list.</p>



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6	<p>Pre-bid clarification 5 answer 17 Pre-bid clarification 6 answer 16 Pre-bid clarification 10 answer 36</p> <p><u>Gas turbine power margin</u></p>	<p>About gas turbine power margin, Client answered to three different questions with the following statement:</p> <p><i>"Referring to Sec 8.2.1(f) of 0221-GS-9510-3 (Spec for Centrifugal Compressors); "The Gas Turbine shall be capable of developing at least 110% of the power input requirement, at site rated conditions, when the compressor is working rated compression scenario i.e. maximum flow and compression ratio." Bidder to adhere with stipulated the tender requirements."</i></p> <p>Bidder considers the requirement still ambiguous. Since the power margin requirement is critical for gas turbine model selection, for the sake of clarity, please clearly state if:</p> <p>a) given the worst operating condition (to be defined by Contractor among the cases in the data sheet 0221-DS-1701-0) as sizing operating case, the compressor will be designed with 10% capacity margin over the sizing operating case and the gas turbine shall be designed with 10% power margin over the sizing operating case or</p> <p>b) given the worst operating condition (to be defined by Contractor among the cases in the data sheet 0221-DS-1701-0) as sizing operating case, the compressor will be designed with 10% capacity margin over the sizing operating case and the gas turbine shall be designed with approx. 21% power margin over the sizing operating case (21% is resulting from 10 % power margin on top of 10% capacity margin over the sizing operating case)</p>	<p>Given the worst operating condition (to be defined by Contractor among the cases in the data sheet 0221-DS-1701-0) as sizing operating case, the compressor will be designed with 10% capacity margin over the sizing operating case and the gas turbine shall be designed with 10% power margin over the sizing operating case or on flow of compressor 10% with capacity margin, whichever is greater. However, bidder to select such turbine which shall fulfill the complete operating envelope of the compressor and site rated conditions, when the compressor is working at rated compression scenario.</p>



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7	MCC Room <u>sheet 2 of 2</u> Battery room - Fire fighting extinguishing system	No Fire extinguishing system is foreseen for Battery Room protection. Please confirm.	Fire extinguishing system shall be provided for battery room
8	Methanol skid Safety Showers	No indication of new Safety Shower has been found in the FEED documentation, please confirm that existing means are sufficient to guarantee operators protection in the new and revamped areas, specially for methanol skid area.	Refer note#2 of P&ID # 4985-PB-2223 (P&ID for Utility Water Header)/P&IDs binder, for eye washer connections in new areas at Plant Side. As far as wellhead area is concerned, it is to note that wellheads are unmanned facilities and as per existing philosophy, no safety washer is required for wellhead areas.
9	HAZOP Close-out doc. n. 0221-A-1006 Recommendation to EPC Ctr is to verify the adequacy of the existing flare for new gas load and liquid handling capacity.	Please provide the existing "Flare Heat radiation and dispersion study"	Please refer Tender document _Volume-IIA_Basis of Design (0221-A-1001) _Annexure-III_ for the required information.