

# **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-12

	FRE-DID CLARIFICATION-12											
SR No.	Disc.	Tender Document Reference	Statement	Query	Response							
1	I&C	P&ID 50561-F-207	ENAR was informed during site vist that BTU analysers at UCH-I gathering area are not operational these BTU analysers need be fixed as per the original design scheme for UCH compressor project	Contractor understanding that the BTU analyser fixing is not in Controcator Scope of work, as is not listed into SEC-III of the SOW. Please confimr.  In case it is required to fix the analyser, we kindly ask to clarify in detail the sow/mulfuntion and provide maker / model / type of analizer systems.	Bidder understanding is correct. BTU analyser fixing is not in Contractor scope of work.							
2	I&C	4958-ILT-6302	Control Room Layout	Contractor unserstand that this control room is located in UCH-II plant. With reference to dwg 4985-ELD-6704-4 (SH 1 of 2), please confirm that building identified as control room with dim. 30MX15M + 30MX15.230M located @ coordinates 5302.685M-N / 1752.720M-E	Bidder understanding is correct.							
3	I&C	SEC-III SOW	Chp. 5,0 Instrumentation and Control Engineering " Instrument and I/O related to Slug Catcher shall be interfaced in UCH-I Plant control System"	With reference to dwg 4985-PC-2202-A (UCH-I), we kindly ask to provied the layout draiwng of UCH-I Plant Control Room and cabinet room (CCR-MCCW).	The detail documents shall be shared with the successful bidder after contract award.							
4	I&C	0221-IMA-6000-0	4.4 Signal Transmission Analogue (Vibration) : 3-wire vibration sensor	In Specification for General & Packaged Instrumentation Contractor has not found any requirements for plant vibration monitoring system (VMS).  Contractor understand that for pumps and fans, for vibration trip if necessary, vibration senrors shall be direct linked to ESD systems (for thresholds and logic) by 4-20mA transmiter: for example water cooling tower fans vibration sensors shall be direct linked to ESD and not to a general plant VMS.  Please confirm.	Kindly refer project document 0221-GS-9510-3 (Spec for Centrifugal Compressors) in this regard.							
5	I&C	CL-4462-5	As per Scope of work Clause: 12.3.12.5; LAN and Telephone System shall be considrered for new MCC room. Also CCTV System is required.	Making reference to TLC systems, please provide for PAGA system the followoing:  - Maker / Model / Type  - existing architectura drawing  - existing plant device layout  Information to be provide both for UHC-I & UHC-II.	PAGA system is not required							



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6	I&C	CL-4462-5	As per Scope of work Clause: 12.3.12.5; LAN and Telephone System shall be considrered for new MCC room. Also CCTV System is required.	Making reference to TLC systems, please provide for CCTV system:  - Maker / Model / Type  - existing architectura drawing  - existing plant device layout information to be provide for UHC-I & UHC-II	Bidder should collect the relevent information during pre-bid site visit and shall clarify during Pre-bid site visit.							
7	I&C	CL-4462-5	As per Scope of work Clause: 12.3.12.5; LAN and Telephone System shall be considrered for new MCC room. Also CCTV System is required.	Making reference to TLC systems, please provide for Telephone system:  - Maker / Model / Type  - existing architectura drawing  - existing plant device layout information to be provide for UHC-I & UHC-II	Latest desk type model of Panasonic, Siemens may be considered. Further Please refer to OGDCL/ENAR reply against Sr.09.							
8	I&C	CL-4462-5	As per Scope of work Clause: 12.3.12.5; LAN and Telephone System shall be considered for new MCC room. Also CCTV System is required.	Making reference to TLC systems, please provide for Strutural system:  - Maker / Model / Type  - existing architectura drawing  - existing plant device layout information to be provide for UHC-I & UHC-II	Please refer to OGDCL/ENAR reply against Sr.09							
9	I&C	CL-4462-5	As per Scope of work Clause: 12.3.12.5; LAN and Telephone System shall be considrered for new MCC room. Also CCTV System is required.	In ITB are not mentioned the Design Criteria for LAN and Telephone System.  Contractor assumes that the new MCC building will be equipped wit equipment and device as indicated into attached markup layout "Att.#1 - TLC_layout_MCC_building.pdf".  Please kindly confirm or align the qty.	Bidder to notet that single telephone set and a Lan connection is required at new MCC room which will be linked to the existing Plant local telephone exchange at existing MCC. Cables may be laid from UCH-II existing MCC to new MCC room, provisions are available at existing MCC for both telephone and LAN connection. Bidder scope is to suuply and laying of telephone and LAN cables from existing MCC to new MCC along with supply and installation of telephone set, wall outlet face plates and other accessories required for complete installation of LAN and telephone set. Bidder may confirm the provisions during Pre-bid Site visit.  The quantity and placement shall further be finalized during detail engineering stage. Further, Bidder should colect relevent information during pre-bid site visit.							



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### PRF-RID CLARIFICATION-12

	PRE-DID CLARIFICATION-12													
SR No.	Disc.	Tender Document Reference	Statement	Query	Response									
10	I&C	CL-4462-5	As per Scope of work Clause: 12.3.12.5; LAN and Telephone System shall be considered for new MCC room. Also CCTV System is required.	Please confirm that TLC shall be foreseen only into MCC building and not in plant field.	Bidder understanding is correct.									
11	MEC	CL-4462-5	Turbocompressor selection	Answer to query 36 states: "Bidder has to select the vendor from approved vendor list (AVL) as already given and accordingly quote from one of the selected vendor from AVL"  Please clarify if the technical and commercial proposal shall be based on one (1) nominated turbocompressor Vendor without the possibility of changing it during project execution, or it may be based on a restricted shortlist of Vendors, being the Vendor be selected within that list during project execution	Please refer Section II, Instructions to bidders, Clause 1.5 j.									
12	PIP	DOC No. 0221-PA-2000 Rev A	I Specification for piping Design and	Piping Class "DC" and "AG" are missing in the documentation received. Pleae provide copy of the mentioned Piping classes.	"DC" piping spec is attached. Please refer "AA2" piping spec instead of "AG"									

NOM	INAL PIPE SIZ	E	1/2 " 3/4" 1	" 1½"	2" 3" 4" 6" 8" 10" 12" 14" 16" 18' 20" 24" 26" 28" 30" / 90° BRA										90° BRANCH C	BRANCH CONNECTIONS									
	4151.01.14.011															ΥÞ		NC	OMINAL BRANC	CH PIPE SIZE	(INS)				
	MINAL WALL	Threaded	SCH.80		SCH-80S 0.938"													/\ \\	½         ¾         1         1½         2         3         4         6         8         10         12         14         16         18         20         24						
		ocket welded	SCH.80							1								L.,	<del>/ , \</del>						1 1
PIPE			ASTM A-37 304L (SMLS) PER ASN B36.19N	P.E.AS ⁄/E	ASTM A-312 TP 304L (SMLS) B.E.AS PER ASTM A-312 TP 304L (SMLS) B.E. or ASTM A-358 TP 304L (EFW) Class 1 B.E																				
FLAN	IGES		SW 600 LE ASTM A-182 TO ASME E	F304L													24 S S S S W W W W W W R W R R E  20 S S S S W W W W W R R R E  318 S S S S W W W W W R R R E  16 S S S S W W W W R R R E								
FITTIN	NGS		SW 3000 ASTM A-182 TO ASME B	-182 F304L BW TO MAICH PIPE  ASTM A 402 WP 304LTO ASME R16 0												14 S 12 S 10 S 8 S	S S S S S S S S S	S W W	/ W R R E	R E					
OLET	S		SW 3000 ASTM A-182 TO MSS SI	F304L			MATCH 304L TO		B16.9										6 S 4 S 3 S 2 S	S S S S		E LEC E S	SEND = EQUAL T = SOCKOL	_ET	
GASI	KETS		600 LB SPIRAL WOUND TO ASME B16.20 CONSISTING OF 4.5mm THK. TYPE 316 ST. STEEL STRIP WITH NON-ASBESTOS FILLER & 3.2mm THK. CARBON STEEL OUTER AND INNER RINGS.											9 1½ R 1 R 34 R ½ E	R E	E		= REDUCII = WELDOL							
PIPE	NIPPLES		Material as pipe 100mm long																						
SWA	GE NIPPLES		Material a	s pipe t	to																				
BOLT	ING		TO ASTM A-320GR. B8 C/W 2 HEX NUTS TO ASTM A-194 GR. 8.									-	<b>DESIGI</b> TEMP	OND	TIONS RESS.	NOMINAL PIPE SIZE		OLTS ETER (Ins) GTH (mm)	NO. OF BOLTS						
													°F		PSIG	1/2 "		2 x 80	4						
SPEC	C. BLIND/ SPAI	DE & SPACER	$\mid \; \; \; \; \; \; \; \; \; \; \; \; \; \; \; \; \; \; \;$	SPACER ASTM A-240 GR. 304L  SPADE & SPACER ASTM A-240 GR. 304L									15 to 100		1480	3/4"	5/8 x 90		4						
	Т													200		1350	1"	5/8 x 90		4					
	GATE		VG-105 (SW VG-106 (								VG-109	9						•	300 400		1315 1270	1 ½ "	3/4 x 110 5/8 x 110		8
																			500		1200	3"	3/4 x 130		8
	GLOBE		VGL-104	(SW)	SW) VGL-106 USE GATE VALVE											-	600		1095	4"		7/8 x 150			
v	CHECK		VC-104 (	SWA							VC-105	5							650		1075	6"		x 170	12
Α	OHEOR		VO 104 (	311)		···													8"		1-1/8 x 200		12		
L V	BALL (REDU	ICED BORE)	VB-106 (	SW)		VB-108								ŀ	°C BARG			10" 1-1/4 x 2! 12" 1-1/4 x 2!			16 20				
E	DALL (5	0005)		_							\/D ====								-9 to 3		02.1	14"		8 x 270	20
S	BALL (FULL I	roke)									VB-109	<u> </u>							50		100.2 16"			1-1/2 x 295	
																			100		92.8	18"		8 x 315	20
														150		90.5	20"			24					
										ŀ	200		87.6	24"	1-7/	8 x 390	24								
												250 300		83.4 77.5											
SER\	VICE: H.P. P	lant Gas/liqu	d Piping, Chemical Inhibition.									•	350		73.9										
	PIPING MA		PROJECT	PROJECT Gas Plant Facility Project														L							
			SPEC.	ALLOWANCE MAIN								B31.3		A Rev.	10/1/20 Date		FIRST ISSUE Description	WRK Prep. by	MK	FS Appr. by					
C	ENA	R	RATING										KeV.	Doc. No. 4985-PA-2002-09(Sheet 1 of 2)					Appr. by:						

NOTES

- PRESSURE / TEMPERATURE LIMITS ARE BASED ON FLANGE RATINGS IN ACCORDANCE WITH ANSI / ASME B 16.5 LATEST EDITION.
- PRESSURE / TEMPERATURE RATING NOT APPLICABLE TO SOFT SEATED VALVES. E,G. BALL VALVES . В.
- TEST PRESSURE: 2100PSIG, REFER TO LINE LIST FOR HYDROSTATIC TEST PRESSURE. C.
- D. STAINLESS STEEL MATERIAL SHALL BE SOLUTION ANNEALED.
- STUDBOLT LENGTHS SHOWN ARE BASED ON ANSI/ASME B 16.5 LATEST EDITION AND ARE FOR STANDARD FLANGE BOLTING, SPECIAL BOLT LENGHTS E.G. FOR SPECTACLE BLIND, TO BE CALCULATED TO SUIT.
- COLD WORKING IS NOT PERMITTED. F.
- G. ALL COMPONENTS TO BE WELDED SHALL MEET THE FOLLOWING REQUIREMENTS.
  - (a) CARBON CONTENT = 0.030 % MAX
- H. IF IMPACT TESTING IS REQUIRED REFER TO PROJECT SPECIFICATION FOR PIPING DESIGN AND MATERIAL AND
- ALL PIPING MATERIAL SHALL BE COMPLIANCE WITH NACE MR-01-75/ ISO15156 (LATEST EDITION)
- FOR DETAIL REQUIREMENT OF VALVES REFER DOC#4985-PA-2003. J.

PIPING MATERIAL SPECIFICATION	PROJECT	Gas Plant Facility P	roject									
ENAD	SPEC.	DC	CORROSION ALLOWANCE	0.0 mm	DESIGN CODE	E ASME B31.3	A Rev.	10/1/2011 Date:	FIRST ISSUE Description	WRK Prep. by:	MK Chk. by:	FS Appr. by
LENAR	RATING	ASME 600 LB RF	MAIN MATERIAL	DUPLEX STEEL	JOB NO.	14 - 4985	Doc. No. 4985-PA-2002-09(Sheet 2 of 2)					

ADDITIONAL NOTES