

LSTK-2: SYNGAS PURIFICATION UNIT

(NIT NO.: PNMM/PC288/E/001)

Pre Bid Clarification : Set-1 , Part 3 of 4 (Technical)

S. No.	Reference of Bidding Document				Bidder's Query	Owner's / PDIL's Reply_dtd 26.07.2024
	Section	Page No.	Clause No.	Subject		
1	PC009/E/001 P-II/ SEC-8.0	Sheet 4 OF 14	1.1.3 SI No 1	Clean Syngas input Q*	Kindly furnish the Raw Syngas Input cost which will be used for evaluation purpose.	Raw Syngas Input cost SHALL BE 2.53 Rs/Nm3. Amendment shall be followed.
2	PC0288/E/001/P-II/ SEC-4.0	Sheet 5 of 14	2.4.1	Storage for solid Sulphur will be an open pit for min. 15 days storage.	Bidder understand that storage space is in additional to the SRU space provided in the Plot plan. SL no 39. BCGCL/ PDIL to confirm the same.	Storage shall be in addition to space provided for SRU. Bidder understanding is correct.
3	PC0288/E/001/P-II/ SEC-4.0	Sheet 4 of 14	2.2.8	All utilities header such as HP steam, LP steam, BFW, condensate recovery system can be given in sharing mode with separate tap-off for each vessel/equipment.(HOLD)	Bidder understand that the Boiler Feed Water shall be provided at the battery limit at required pressure for the SRU plant for steam generation in SRU package. BCGCL/ PDIL to furnish the Parameters of BFW.	1. BFW shall be provided at B/L at one point. understanding is correct . 2.Suitable amendment will be given.The proposed tentative parameters for BFW is T/P = 105 DEG C 80KG/CM2G).
4	PC0288/E/001/P-II/ SEC-4.0	Sheet 4 of 14	2.2.8	De-aerator for feeding BFW into steam drums and condensers can be given as common	As boiler feed water is provided at the plant battery limit, Deaerator is not required in SRU package. BCGCL/ PDIL to confirm the same.	Bidder understanding is correct.BFW requirement to be furnished by the bidder for LSTK-2
5				Tie-in Location for LSTK-2 Package	Location of Tie-in to be identified for all the utilities/raw material provided at the plant battery limit. BCGCL/ PDIL to confirm the same.	The tie-in to be provided at battery limit , however exact location/co-ordinate will be shared during detail engineering stage.

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6	PC0288/E/001/P-II/ SEC-2.0	Sheet 4 OF 10	2.0	RAW MATERIAL, PRODUCT AND UTILITY SPECIFICATIONS	<p>Bidder understand separate HP/MP&LP headers are provided at the plant battery limit. Bidder shall take required steam from respective headers as per requirement.</p> <p>OR</p> <p>Bidder to consider the let down station required for lower parameter steam for users in plant and steam will be provided at HP level.</p> <p>As per Guarantee sheet only Steam is considered as utilities for arriving at work cost, whether all level of steam will have same cost of 800 rs/ Tonn or differential steam will have differential cost. BCGCL/PDIL to confirm the same.</p>	<p>1. Generation in the plant complex will be in HP only. Import of HP steam shall be preferable. However, MP steam may also be provided as per technical NIT section 2.0 clause no. 2.0. Bidder to furnish OPTIMISED steam quantity for your B.L. requirement along with CO2 (32 kg/cm2g and 57 kg/cm2g) export.</p> <p>2. Work cost to be calculated for Net steam, based on differential steam import and export. Suitable amendment shall be followed.</p>
7	PC0288/E/001/P-II/ SEC-2.0	Sheet 10 OF 10	3.3	ELEMENTAL SULPHUR Purity	<p>For SRU , Sulfur quality is 99.9 % . This purity can be achieved through Claus technology. If Sulfur purity requirement is relaxed to > 90 % then other technologies (Other than Claus) can also qualify. Since SRU size is small in this project, Bidder will have limited vendors for Claus process. BCGCL/PDIL to confirm the same.</p>	As per NIT.
8	PC0288/E/001/P-II/Sec 5.1	6 of 9	5	Deaerator Storage Capacity	<p>Bidder understand by deaerator storage capacity, storage capacity of Feed Storage Tank (FST). BCGCL/PDIL to confirm the same.</p> <p>Also, kindly review the storage capacity of FST as 20 minute.(as this is standard storage capacity followed in process industry)</p>	<p>De- areator is not in scope of LSTK-2</p> <p>Storage capacity of Deareator shall be as per NIT.</p>

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9	PC0288/E/001/P-II/Sec 5.1	6 of 9	5	Steam Drum Capacity	Bidder requested you to kindly review the steam drum capacity as 2 minute. (as this is the standard storage capacity followed in Process Industries). BCGCL/ PDIL to confirm the same.	As per NIT.
10	PC0288/E/001/P-II/Sec 5.1	7 of 9	9	Pressure relief Valves	Bidder understand that bypass are required only for safety valves in fire case of hydrocarbon application. BCGCL/ PDIL to confirm the same.	Kindly refer section PC0288/E/001/P-II/Sec 5.1 Clause no 9.0 PRESSURE RELIEF VALVES.
11	PC288/E/P-II/Sec 5.2	40 of 113	15	Online replaceable trim of Control Valve	Bidder understand that control valve design should be such that valve need not to be taken out from line during maintenance/ trim change. However, control valve itself shall be isolated in upstream and downstream side. BCGCL/ PDIL to confirm the same.	Bidder understanding is correct
12	PNMP/PC288/E001/Sec5.3.1	7 of 83	3.3.iv	Applicable NACE standard	Bidder understand that NACE MR0175 covers Oil field equipment and related facilities. PDIL is requested to review, as present application, more relevant NACE standard is MR0103.	As per NIT.
13	PC0288/E/001/P-II/ SEC-3.0	Sheet 14 OF 71	6.6.1	Fuel for Flare	Bidder understand Fuel for Flare as required shall be provided at the plant battery limit. BCGCL/ PDIL to confirm the same.	Noted
15	PC288/E/P-II/ SEC-5.2	Sheet 89 OF 113	27.0	OPERATOR TRAINING SIMULATOR	Bidder wish to exclude the simulator from the scope of suuply. BCGCL/ PDIL to confirm the same.	Bidder to follow NIT requirement
16	PC288/E/P-II/ SEC-5.2	Sheet 9 OF 113	3.19	Dis/DOs from MCC to DCS/ESD shall be with relays only also IRC/IRP shall be Separate for DI's & DO's and AI's / AO's. IRP/IRC shall be placed in MCC only.	Bidder proposes to place IRC/IRP in Control system(DCS/ESD). BCGCL/ PDIL to confirm the same.	Bidder to follow NIT requirement

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17	PC288/E/P-II/ SEC-5.2	Sheet 13 OF 113	21	Redundant Bulk Power supply with diode arrangements shall be provided for field instruments.	Generally Field instruments shall be loop powered thorough Control system(DCS/ESD). Kindly clarify the what is redundant power supply with dioder arrangements that need to be provided for field instruments.	Bidder understanding is correct Field instruments shall be loop powered thorough Control system(DCS/ESD).Redundant Bulk Power supply with diode arrangements shall be provided in DCS/ESD system cabinet which will provide loop power to field instruments
18	PC288/E/P-II/ SEC-5.2	Sheet 34 OF 113	13.0	Pressure Transmitters	Housing of transmitters shall be Die cast aluminium. BCGCL/ PDIL to confirm the same.	Bidder understanding is correct.Housing of transmitters shall be Die cast aluminium with anti corrosive paint
19	PC288/E/P-II/ SEC-5.2	Sheet 34 OF 113	14.0	Temperature Transmitters	Bidder understand that all the temperature elements(RTD/Thermocouples) shall connected to Temerature transmitters which in turn connected to Control system through JB. BCGCL/ PDIL to confirm the same.	Bidder understanding is correct
20	PC288/E/P-II/ SEC-5.2	Sheet 34 OF 113	21.0 b)	Instrument Calibration Work Bench and Test Equipments	Bidder understand that Instrumentation Calibration Work Bench and Test Equipments are not in the scope of bidder. BCGCL/ PDIL to confirm the same.	We have mentioned in caluse 21.0(b) that control room to have instrument calibration room and how it has to be designed /Sized and constructed.Instrument workshop related details are mentioned in clause 34.

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21	BOQ_850619	--	PII	Supply of Process License for SRU	Whether Process Licensor of SRU is mandatory as per Tender specification and whether any MOU to be submitted along with bid document for SRU package. BCGCL/PDIL to confirm the same.	MOU with licensor to be furnished as per the PQC requirment. Bidder to quote the price in the BOQ, as applicable.