

ENGINEERS INDIA LTD GURUGRAM - 122001					
COOLING TOWER AND COOLING WATER TREATMENT PLANT PACKAGE FOR BIO-REFINERY PROJECT OF M/S - ASSAM BIO REFINERY PVT LTD, NUMALIGARH					
<b>PRE-BID CLARIFICATIONS</b>					
S.No.	Reference		Description	Query	Clarification
	Section	Cl.no/Page.No			
1			A. CIVIL	1.RL of EGL (Existing Grade Level) is not available. Please furnish the same to enable us relate the available geo-technical investigation report with the RL of FGL (Finished Grade Level) in the cooling tower area provided in the specification.	Bidder to refer Notes of Overall plot plan B215-000-17-44-0002 attached with bid document.
				2.As per Clause No 3.40, page 21 / 1500 of tender document, construction water and power will be provided by customer at a single point near existing sub-station. In this context,please furnish the distance of sub-station from the cooling tower location and also confirm that construction water and power will be provided on free of charge basis.	construction water and power will be provided on free basis. Further distance between Substation and cooling tower refer Plot plan drawing attached with bid document.
			B. CONTROL & INSTRUMENTATION	1.Our query against SI no 18 has not been responded in the Amendment I. We have noted that valve at CW pump suction line will be manual (gear operated), however, whether pressure transmitter at individual CW pump discharge is required or not has not been clarified.  Please clarify and revise the P&ID suitably.	As per earlier response, it was clarified that pressure transmitter at individual pump discharge is not required.
				2. Our query against SI no 26 still remains unanswered from your end. Please confirm whether vibration transmitters are applicable for CW pump / motor. If applicable, quantity has to be specified for our estimation purpose.	Not applicable. However, Bearing housings shall have provision to permit measurement of vibration

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				3. In Tender P&ID document number B215 79 41 167 1111 Rev 2 Dated 11.04.2019 there is an (encircled B) for the cooling water supply and return line, no reference legend found in Tender P&ID legend sheet, please specify significance of the same. Update Legend sheet and Tender P&ID. Does this symbol indicates that A91A lines are laid underground / below ground. Please clarify.	Bidder to refer line legend in P&ID no B215-79-41-00-1191 in the tender where it is clearly mentioned that encircled B meaning is buried line.
				4. Please furnish detailed specification of MCT Block for electrical and instrumentation purpose	Vendor shall furnish the MCT details post order. Same shall be approved by Purchaser. MCT shall be of Standard RGB type of Brattberg or G type of Roxtec or Delseal or equivalent as specified in job specification for instrumentation.
				5. As per Note No 51 of tender P&ID (R2) dated 11-04-2019, turbidity analyser has to be supplied in the supply header. Please furnish instrumentation process data sheets for turbidity analyser and also revise the P&ID suitably.	Instrument datasheet shall be generated by vendor and approved by owner / EIL. Process datasheet for turbidity analyser is attached.
				6. Non-oxidising biocide dosing analyser has to be supplied by bidder. Please furnish instrumentation process data sheets for Non-oxidising biocide dosing analyser. Flow-weir in SSF Backflush lines to be supplied. Please furnish instrumentation process data sheets for same and also revise the P&ID suitably	Instrument datasheet shall be generated by vendor and approved by owner / EIL. Process datasheet for non oxidizing biocide analyser is already provided in Technical amendment-1. This line (Flow weir in side stream filter back flush lines) in note-3 of side stream filter datasheet stands deleted. Flow weir in SSF backflush is not required.