



BHARAT HEAVY ELECTRICALS LIMITED  
PROJECT ENGINEERING MANAGEMENT, NOIDA

Date-28-Oct-21

CORRIGENDUM- 02

PROJECTs	:	2X500 MW NTPL TUTICORIN FGD
PACKAGE	:	EFFLUENT TREATMENT PLANT
ENQUIRY NO	:	PE/PG/NTF/E-6778/2021 Dated 04-Oct-21
SUBJECT	:	PRE-BID CLARIFICATION + DUE DATE EXTENSION

Type of Corrigendum			
Technical Corrigendum -	<input checked="" type="checkbox"/>	Commercial Corrigendum -	<input checked="" type="checkbox"/>

Bidders are requested to go through the following -

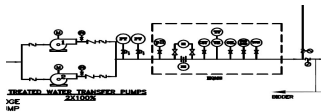
1. Due date & time of bid submission has been extended upto 28.10.2021 @11:00 AM. Bid opening shall be done at 04:00 PM on the due date.
2. Refer attached BHEL replies for pre-bid queries.

All the other terms and conditions of the tender enquiry remain unchanged. All the bidders are requested to quote accordingly.

Yours faithfully,

For and on behalf of BHEL

Upendra Chaudhary  
Manager/BOP

Sr. No.	Document No.	Pdf Page No.	Section	Clause No.	Description	Bidders's Query	BHEL Reply
1	1 - Technical Specifications	16 of 516	SECTION-I	14.0 DESIGN/ CONSTRUCTION REQUIREMENTS	14.0.1 Blowers and pumps speed shall be limited to 1500 RPM (max.).	Shall Bidder go with Maximum 2900 RPM for Pumps.	As per tender specification requirement 1500 rpm pumps & blowers are required . Hence, bidder to follow the same.
2	1 - Technical Specifications	19 of 516	SECTION-I	14.0 DESIGN/ CONSTRUCTION REQUIREMENTS	19. System to be designed to meet all the statutory requirements. Preparation of all necessary drawings/data/ documents for obtaining necessary Approval of statutory authorities like CCOE , IBR , Weight & Measures Department and any other agency/ competent authority ,on behalf of the customer, related to installation of DM plant (if required) is included in bidder's scope. All expenses required to obtain the approval shall also be borne by the successful bidder. Successful bidder shall inform customer well in advance requirement of authority letter along with format for the same. After issuance of authority letter by customer, it will be vendor's responsibility to regularly follow up with the concerned authorities to obtain timely approval from these authorities. Any delay on account of the same, unless any specific information related to above approval to be furnished by customer is delayed by customer, shall be to vendor's account and shall not be used as a reason for extension in contract completion.	Bidder has requested that all statutory approvals required shall be excluded from Bidder scope.	Statuary requirements shall be in bidder's scope as per tender specification.
3	1 - Technical Specifications	19 of 56	SECTION-I	14.0 DESIGN/ CONSTRUCTION REQUIREMENTS	Any statutory requirement / clearance required for the packages from government / local body shall be in bidder's scope. Any change arising out of any new government norms, statutory requirements during the course of execution of the project shall also be complied by the bidder without any commercial implication.	Bidder has requested that all statutory approvals required shall be excluded from Bidder scope.	Statuary requirements shall be in bidder's scope as per tender specification.
4	1 - Technical Specifications	87 of 516	SECTION-I	1.3.2 TREATED WASTE WATER OUTLET QUALITY	Please Provide Parameters defined by MOEF, State pollution control board norms and Local authority requirement in totality	Will Provide Guarantee only for TSS - 100ppm & pH 6.5 - 8.00.	Tender specification is clear bidder to refer latest guidelines of MOEF /state pollution control board etc. for effluent discharge as mentioned in tender specification
5	1 - Technical Specifications	245 of 516	SECTION-I	P&ID	Gypsum Desaturation cum Equalization Tank/ Sludge Tank/ Organosulfide and Coagulation Tank.	Please Provide Tank details. i.e. Dimentions/ Tank is Underground or above Ground. Total Height considering Top Tank Slab for all Tanks.	Gypsum Desaturation cum Equalization Tank,Organosulfide and Coagulation Tank shall be above ground. Sludge sumps shall be below ground as mentioned in datasheet-A. Further dimensions to be arrived by bidder only as per the design criteria mentioned in tender specification.
6	1 - Technical Specifications	245 of 516	SECTION-I	P&ID	Primary Clarifier Feed Pump is not mentioned in P&ID.	Tentative Height of Primary Clarifier would be 5 Meter so Feed Pump is Required. If Required Please Provide Pump Specification for Primary Clarifier Feed Pump.	Bidder to select height of Gypsum Desaturation cum Equalization Tank for gravity flow to primary clarifier. Accordingly pumps are not required.
7	1 - Technical Specifications	245 of 516	SECTION-I	P&ID	In P&ID Overflow of Thickener goes to Primary Clarifier and Centrifuge Overflow goes to Centrifuge.	Our suggestion Thickener & Centrifuge Overflow can be tranfer to Gypsum Saturation cum Equalization Tank directly through Gravity by RCC Drain Trench. RCC Drain Trench is in Client Scope.	Overflow of centrifuge shall goes to thickener and Overflow of Thickener goes to Primary Clarifier as indicated in tender specification.
8	1 - Technical Specifications	245 of 516	SECTION-I	P&ID		Instrument is Not readable. Please Provide readable Copy.	Following equipments are required in EQMS: 1)pH meter (pH) 2) Flow analyser (Flow indicator (FI),Flow element (FE)) 3) Temperature analyser (Temperature transmitter (TT), Temperature element (TE)), 4) Oil analyser (OIL), 5)COD/BOD analyser(COD,BOD), 6)Turbidity analyser (TUR),7)Total suspended solid analyser (TSS) 8) Conductivity analyser (CIT)
9	1 - Technical Specifications	389 of 516	SECTION-I	Tender P & ID	DCS or PLC	Please confirm whether plant Operation from Client DCS or dedicated PLC.	Bidder to note that control system shall be DCS based and under BHEL scope as mentioned in technical specification page no.279 and page no.387
10	1 - Technical Specifications	212 of 516	SECTION-I	2.13	Fire protection system	We understand that Fire Protection System is in client scope. Please confirm.	Firefighting facilities is under exclusion as mentioned in technical specification page no 13

Sr. No.	Document No.	Pdf Page No.	Section	Clause No.	Description	Bidders's Query	BHEL Reply
11	1 - Technical Specifications	357 of 516	SECTION-I	2 . 0	Area of classification	We have considere area classification as safe( non-hazardous).	Noted.
12	1 - Technical Specifications	98 of 516	SECTION-I	3 . 0	Electrical Tools & tackels	We don't envisage any requirement of electrical tools and tackels.	Tender specification is clear with respect to requiremnt of tools & tackles bidder to follow the same.
13	1 - Technical Specifications	21 of 516	SECTION-I	16	Plant operation philosophy	We have assumed Plant Operation is Manual with Safety Interlock.	Operation and control philosphy required are included in tender specification.Bidder to follow the same.
14	1 - Technical Specifications	245 & 14 of 516	SECTION-I		Tender P & ID- Final outlet line EQMS analyzer	We understand that all parametes are in single analyzer for measuring at final outlet as per tender P & ID.  Please confirm whether software is in bidder scope or not for this special analyzer.	As indicated in PID, these are different analyzers under EQMS system to be provided by Bidder. Tender specification is clear. Bidder to follow the same.
15	1 - Technical Specifications	245 of 516	SECTION-I		Tender P & ID- Double rdundancy of PT at common dischage of pumps and blowers	Please confirm whether Double rdundancy is required or not Required.	Redundancy criteria has been indicated in tender specification.Bidder to follow the same.
16	1 - Technical Specifications	281 of 516	SECTION-I	2.0	Specific requirement of enclosure for instruments	Please confirm whether instruments enclosure shall suitable for sea water environment or not.	All the instruments shall be corrosive resistive coating and suitable for sea water applications. Tender specification is clear. Bidder to follow the same.
17	1 - Technical Specifications	281 of 516	SECTION-I	6.0	Separate LIR/JB/SM BOX requirement	We shall be consider JB & SM BOX only. No seprate LIR is required.	Tender specification is clear. Bidder to follow the same.
18	1 - Technical Specifications	14 of 516	SECTION-I		O&M	We underserstand that the total O&M period is 6 months and all chemicals and consumables are not part of O&M vendor.  Also please specify if any minimum manpoer requirement or it shall be as per O&M vendors standard.	Details regarding O&M period, scope of chemicals and consumables & manpower requirements have already been mentioned in tender specification annexure-XII-operation & maintenance services.
19	1 - Technical Specifications	10 of 516	SECTION-I		Acoustic enclosure	The requirement of acoustic enclosure shall be depended upon the capacity & noise level.	Tender specification is clear. Bidder to follow the same.
20	1 - Technical Specifications	19 of 516	SECTION-I		Statutory approvals	Bidder has requested that all statutory approvals required shall be excluded from his scope.	Statuary requirements shall be in bidder's scope as per tender specification.
21	1 - Technical Specifications		SECTION-I		Laboratory Equipment Scope is not defined in Tender Document.	The laboratory equipments are not in bidders scope is an undestanding of bidder.	Laboratory equipments are not included in scope of supply of bidder as per tender specification.
22	1 - Technical Specifications	255 of 516	SECTION-I		Layout of Plant	We have assumed that Full Block No. 17 can be used for FGD WWTP Plant i.e. From Gypsum Desaturation Tank to Treated Water Transfer Pump, Chemical House, If any MCC/ PLC Panel.	Space indicated as block no 17, is dedicated for all equipments of FGD WWTP equipemnts
23	1 - Technical Specifications	54 of 516	SECTION-I		17. Clarifier/ Thickener Mechanism Vendor	Bidder would like to add some make for Clarifier/ Thickener Mechanism i.e. Excel Engineering.	Bidder to follow subvendor list included in tender specification. In addition, criteria for for approval of additional suppliers have already mentioned in tender specification page no.,67-68. Bidder to refer and comply.