



BHARAT HEAVY ELECTRICALS LIMITED/PEM-NOIDA

Corrigendum-6

PROJECT: 4X270 MW BHADRADRI TPS
PACKAGE: EFFLUENT TREATMENT PLANT
ENQUIRY NO: E-5669/2017 Dtd. 04.08.2017

Date: 25.09.2017

Dear all,

Please note the following.

1. Reply of Pre-bid queries of vendors are attached along with corrigendum-6, kindly go through the same. Bidders who have not submitted their offer shall submit your offer as per all corrigendum issued and hosted at site.
2. Bidders (who had already submitted their offer) are requested to review their offer once again and should incorporate all the necessary amendments, revisions updated over website till date. It should be complete in all respect.

Kindly ensure submission of offer on or before due date and time.

GURU DAS
DY.MGR/BOP-Ordering

PRE BID CLARIFICATION SCHEDULE
PROJECT:-4 X 270 MW BHADRADRI TPS
EFFLUENT TREATMENT PLANT

VOLUME	PAGE NO.	CLARIFICATION	BHEL REPLY
Technical Specification	P & ID of ETP	<p>BHEL has specified line size 50 NB & Capacity 10 m3/hr for TRANSFORMER Yard Oily Waste Transfer pumps for UNIT 1 TO 4 for pumps located in Sumps E1,E2,E3,E4 . We have calculated head of pumps are going upto 19 kg/cm2 considering sp. gravity 1.3</p> <p>A. Hence you are requested to increase flow rate upto 15 m3/hr & line size 65 NB to lower the pressure below 10 kg/cm2 .</p> <p>B. Kindly specify specific gravity of Oily Waste ???</p>	<p>Bidder to consider line size as 65 NB and 15 m3/hr flow rate of each pump located in sump E1, E2, E3 & E4. However common header needs to design accordingly.</p>
Technical Specification	P & ID of ETP	<p>BHEL has specified line size 100 NB & Capacity 100 m3/hr for floor wash water transfer pumps for UNIT 1 & 2 , 3&4 for pumps located in Sumps E6&E6 . We have calculated discharge header Line size should be 150 nb to meet velocity criteria guidelines</p> <p>a. Hence you are requested to increase LINE SIZE of discharge header 150 NB.</p> <p>b. Apart from line size, Pumps should be Vertical sump pump instead of Screw pumps as this liquid is not viscous as oily waste. 100 M3/HR Screw pump is not suitable for this application. Morevoer Maint. cost is very high in case of screw pumps wrt vertical centrifugal pumps.</p>	<p>a. Line size 150 NB has already been indicated in P & ID, follow the same.</p> <p>b. Follow tender specification.</p>
Technical Specification	Page 292 of 537	<p>AS per Clause 3.10 of page 292 OF 537 of technical Specifications , Maximum operating speed of all the pumps shall be limited to 1500 rpm or less unless specified. Since all vertical sump pumps are low flow (15 M3/Hr and 50 m3/hr with high head (Ranging from 35 mts upto 70 mts). As per pump manufacturer, sump pump rpm should be 3000 rpm. kindly allow 3000 rpm for sump pumps . Please confirm</p>	<p>Bidder to follow tender specification.</p>
Technical Specification	Page 8 of 537	<p>As per clause no 2.94 of page 8 of 537, Two nos. RIO panels are in bidder's scope for all effluent lifting sumps located outside boundary of ETP area.</p> <p>A. Please specify the location of each RIO panel.</p> <p>b. kindly specify which pumps are to considered for for Flrst RIO and Second RIO.</p> <p>C. 2 KMS FO cable from RIO TO PLC to be considered at TOTAL for both RIO panel or for each RIO panel.</p>	<p>a. Location of RIO panel is not required since FO cable requirement has already indicated.</p> <p>B. Grouping shall be desided during detailed engineering.</p> <p>C. Total RIO cable requirement has been indicated in tender specification.</p>