

Project: CONDENSATE POLISHING UNIT AS PER TECH. SPEC. NO.PE-TS-410-1 55A-A001 FOR 1 X 800 MW KOTHAGUDEM TPS
 Owner: TELANGANA STATE POWER GENERATION CORP. LTD.
 Client: BHARAT HEAVY ELECTRICALS LIMITED
 Enquiry No.: PE/PG/KOT/E-4945/2015 DATED JULY 16, 2015
 Doc. Title: **PRE-BID QUERIES**

Sr. No.	Volume	Section	Clause No.	Page No.	Specification Requirement	Clarification	Remarks	BHEL's Replies/Clarifications
1.	II-B	D1	2.01.0	273 of 581 (V.II-C/S-VI: 1)	Four (4) nos. Condensate Polisher Mixed Beds (4x33 (1/3)%) for 800 MW Unit, each complete with condensate inlet and outlet connections, connections for resin transfer to and from vessels, bed support-cum-under Drain system, inlet water distributors, all accessories and appurtenances etc. as required. - DEVELOPMENT CONSULTANTS SPECS.	However BHEL scope is different, page ref Page 10 of 581 & 64 of 581	Kindly confirm which scope we have to follow.	Please refer Cl. No. A. 1) Page 10 of 581.
2.	II-B	C1	13	11 of 581	Complete Instrumentation and Control for automatic operation.	We understand that PLC is also in our scope, kindly explain about plc to DCS link. Kindly specify distance between CCR to service vessel Area & regeneration Area. Kindly specify the location of control room, local and main control room for CPU and distance from Service vessel to Regeneration area.	Kindly confirm.	Please note that CPU is DCS controlled and the same shall be supplied by BHEL.Note that PLC is not applicable here. Please follow Technical specification.
3.	II-B	C	2.0	133 of 581	All instruments shall be terminated on JB/LCP in field and both instrument and JB/LCP is in bidder scope.	In case plc is in our scope, we terminate field instruments in JB and then JB to R/IO Panel hence LCP not required.	Kindly confirm.	Note that PLC is not applicable here.Also note that cabling shall be as per the Scope matrix mentioned in Electrical section. Please Follow Tender Specification.

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4.	II-B	D1	6.02.04 (4)	266 of 581	Cation conductivity indicators shall monitor the polishing system influent and effluent streams as well as the Discharge of each service vessel. A high influent conductivity alarm will alert the plant operator that a Problem condition such as air or condenser cooling water leakage has occurred. This conductivity analyzer shall also provide contacts for an alarm at the power station main control room.	Kindly confirm if power plants control room is main DCS, besides this which specs to follow BHEL or Development Consultants	Kindly confirm.	Power plant control room shall be regeneration area control room.
5.	II-B	D1	6.02.00	282 of 581 (V.II-C-S-VI: 10)	The CP System, shall be operated for service and resin transfer from concerned Service Area - Equipment Control centre (ECC) to be located indoor in the vicinity of Condensate Polisher Vessels. Operation from this ECC can only be undertaken under authorization from Regeneration Area - ECC addressed hereinafter. The regeneration of ion-exchange resins of CP System shall be carried out from Regeneration Area - ECC to be located in the vicinity of Power House area. Remote Terminal Unit (RTU) as an extended node of DDCMIS shall be considered in the vicinity of the CPU regeneration area along with a dedicated work station for control and monitoring of the Regeneration System.	These specs are ambiguous with BHEL specs.	Kindly confirm what to follow BHEL or Development Consultants Specs.	Please Follow Tender Specification.

SCHEDULE OF PRE-BID CLARIFICATION

JOB	CONDENSATE POLISHING UNIT FOR 1×800 MW KOTHAGUDEM TPS STAGE –VII, PALONCHA FOR TSGENCO
TENDER No.	PE-TS-410-155A-A001

Sr. No.	Volume	Section	Clause No.	Page No.	Specification Requirement	Clarification	Remarks	BHEL's Replies/Clarifications
	II-B	D1	4.05.01 (a)	539 of 581	In general all pumps (other than sump pumps), discharge valves shall be motor operated only, Tank Inlet Valve shall be motor operated only. But in P&ID, Drawing No. PE-DG-410-155A-A001 All discharge Valves of Pumps are pneumatic operated and there is no motorized valve in the tank inlet line.	Kindly confirm shall we take Pneumatic operated or Motorized valve in the discharge line	Kindly confirm	Please Follow P&ID, Drawing No. PE-DG-410-155A-A001.Rev-01

Sr.
No.BHEL's
Replies/Clarifications

1.

SCHEDULE OF PRE-BID CLARIFICATION

All clarification from the Technical Specification shall be filled in by the BIDDER clause by clause in this format only.

VOLUME	SECTION	CLAUSE NO.	PAGE NO.	SPECIFICATION REQUIREMENT	CLARIFICATION	REASONS FOR CLARIFICATION
II-B	C1	4.A.1)	10	*	*1	g
II-B	C1	2.(1)	64	**	*1	
II-B	C1	P&ID Layout		*	*1	
II-B	D1	1.02.06	273	***	*2	
II-B	D1	2.01.00	273	****	*2	

* Three (3x50%) service vessels for 800mw unit.

** No. of condensate polisher service vessel : Three (3x50%).

*** The proposed CP System shall comprise of 4 x 33(1/3) % Condensate Polisher Mixed Beds for 1x800MW Unit and One (1) no. common External Regeneration System for 1x800mw Unit.

**** Four (4) nos. Condensate Polisher Mixed Beds (4x33(1/3) %) for 800mw Unit, each complete with condensate inlet and outlet connections, connections for resins transfer to and from vessels, bed support-cum-under drain system, inlet water distributors, all accessories and appurtenances etc. as required.

*1 These documents specify 3x50% service vessels.

*2 These documents specify 4x33.3% service vessels.

★ These are contradictory requirements. Since specific requirements, Data sheet, P&ID, layout indicate 3x50% service vessels while only this General technical requirements specify 4x33.3% service vessels, it is presumed that actual requirement is 3x50% service vessels. Please confirm.

Three (3X50%) service vessels for 800 MW unit.

All clarification from the Technical Specification shall be filled in by the BIDDER clause by clause in this format only.

VOLUME	SECTION	CLAUSE NO.	PAGE NO.	SPECIFICATION REQUIREMENT	CLARIFICATION	REASONS FOR CLARIFICATION	BHEL's Replies/Clarifications
Commercial queries:							
General	-	-	-	-	Kindly confirm whether separate orders are issued for supply & service part.	For bidder's confirmation	Separate LOI's shall be issued for Main Supply, E & C and Supply of Mandatory Spares.
General	-	-	-	-	Kindly clarify if road permits & way bills for materials purchased outside Telangana shall be provided by BHEL.	For bidder's confirmation	Road permit is applicable & shall be provided by BHEL for materials purchased outside Telangana.
General	-	-	-	-	Kindly clarify whether service tax applicable on services part would be paid extra.	For bidder's confirmation	Refer clause no-18.A (i.e. Taxes & Duties) of SCC Rev-00 of the project.
General	-	-	-	-	Kindly clarify if Form C shall be issued by BHEL on Quarterly basis before the end of subsequent quarter.	For bidder's confirmation	Refer clause no-4.2.4 of GCC Rev-06.
General	-	-	-	-	Kindly provide us BHEL VAT registration number for Telangana.	For bidder's confirmation	It shall be provided later.
General	-	-	-	-	Kindly clarify if BHEL would sign High Sea Sales agreement for import purchases and whether applicable certificates and import & export registration codes for the same would be provided.	For bidder's confirmation	It shall be provided later.
General	-	-	-	-	Kindly clarify if insurance coverage during transit, storage, erection & commissioning is under the scope of BHEL. If so, insurance premium costs would not be in the scope of the contractor.	For bidder's confirmation	Refer clause no-17 of GCC Rev-06.
General	-	-	-	-	Kindly confirm if any concessions/benefits/exemptions on taxes & duties would be available for this job. If so, whether certificates for the same would be provided.	For bidder's confirmation	Refer clause no-18.A (i.e. Taxes & Duties) of SCC Rev-00 of the project.
General	-	-	-	-	Kindly confirm if civil works is envisaged in the scope.	For bidder's confirmation	Please Follow Tender Specification
General	-	-	-	-	Kindly clarify whether service tax (reverse charge) applicable on freight would be reimbursed or it should be loaded in the price bid.	For bidder's confirmation	Freight to be quoted inclusive of service tax (refer column no-6 of main price schedule). Freight shall be considered in evaluation (refer SCC Rev-00)
General	-	-	-	-	Kindly clarify if two separate orders are issued for supply & services whether TDS under Telangana VAT would not be applicable. For supply part tax invoice would be submitted and for service part, service tax invoice would be submitted.	For bidder's confirmation	Refer NIT & GCC Rev-06
General	-	-	-	-	Kindly clarify if VAT registration under Telangana would not be required for the contractor since Supply invoice would be submitted using Tamil Nadu VAT/CST registration since all the materials would be purchased outside the state of Telangana.	For bidder's confirmation	Refer NIT & GCC Rev-06
General	-	-	-	-	Kindly clarify whether billing schedule of the order would be jointly signed by purchaser and contractor for the contract price.	For bidder's confirmation	As per NIT
General	-	-	-	-	Kindly indicate us whether Octroi and Entry tax are applicable in the state of Telangana. If applicable whether same would be reimbursed by BHEL.	For bidder's confirmation	refer SCC Rev 00
Process queries:							
VOLUME: II B & III- TECHNICAL SPECIFICATION FOR CONDENSATE POLISHING UNIT	DATA SHEET – A - C1	SPEC NO: PE-TS-410-155A-A001	64/581	2.0 CONDENSATE POLISHER SERVICE VESSELS PER UNIT: (viii) Type of vessels - Spherical	Please confirm us whether the vessel is spherical , because in the PID (page no.73 ,Drawing no. PE-DG-410-155A-A001) it is shown as horizontal vessel.	For Bidder's confirmation	Please refer Note-2 of P&ID For Condensate Polishing Unit (PE-DG-410-155A-A001. Rev-01)
VOLUME: II B & III- TECHNICAL SPECIFICATION FOR CONDENSATE POLISHING UNIT	GENERAL TECHNICAL REQUIREMENT (MECHANICAL)	SPEC NO: PE-TS-410-155A-A001	290/581	9.00.00 BID EVALUATION CRITERIA With reference to Bid Evaluation Criteria, Bidder may please refer to Lead Specification - Volume I of this EPC Bid Document.	Please send us the Volume I document, which is missing.	For Bidder's confirmation	Stands Deleted
Special conditions of contract (REV 00)	18-A	Taxes and Duties (for domestic bidder)	4 & 5 of 8	Bidder to note that in order to derive the total landed cost to BHE, following pricing elements shall also be considered in evaluation: i. ED(as applicable on self-manufactured items), ii. CST/VAT (as applicable) iii. Freight (including service tax) iv. Service tax (as applicable for supply packages)	Please confirm us whether the custom duty is included in the bid evaluation.	For Bidder's confirmation	refer SCC Rev 00
PRICE FORMAT - INDIAN BIDDER	18-A	PRICE FORMAT	1	-	Please confirm us, where to enter the custom duty in the price format, since the resins are imported.	For Bidder's confirmation	refer NIT

PRICE FORMAT - INDIAN BIDDER	18-A	PRICE FORMAT	1	3.3) Lumpsum firm price for supply of Resin inclusive of all taxes, duties and other levies as applicable(12% of sl no 2.1 above).	Please confirm us, where to enter the custom duty in the price format, since the resins are imported.	For Bidder's confirmation	refer NIT
VOLUME: II B & III- TECHNICAL SPECIFICATION FOR CONDENSATE POLISHING UNIT	GENERAL TECHNICAL REQUIREMENT (MECHANICAL)	SPEC NO: PE-TS-410-155A-A001	291/581	Liquidated Damages (LD) for Additional Power Consumption With reference to Additional Power Consumption, Bidder may please refer to Lead Specification - Volume II-A of this Bid Document.	Please send us the Volume II-A document, which is missing.	For Bidder's confirmation	Stands Deleted
VOLUME: II B & III- TECHNICAL SPECIFICATION FOR CONDENSATE POLISHING UNIT	C1- SPECIFIC TECHNICAL REQUIREMENTS (MECHANICAL)	SPEC NO: PE-TS-410-155A-A002	23/581	Following guaranteed chemical consumption required per regeneration per vessel (in kg) to be furnished in sealed envelope. (Stamped & Signed) 1. Acid (30% HCL) consumption per vessel per regeneration 2. Alkali (48 % NaOH) consumption per vessel per regeneration.	Please confirm us whether any price loading in the bid for the guaranteed chemical consumption.	For Bidder's confirmation	Please Follow Tender Specification
Electrical queries:							
Vol II	C3- C&I Specific Technical Requirement		133/581	PLC	The Bidder has understood that PLC (PLC/ OWS/SCADA/HMI/LVS/ Annunciator Panel/Printer/ Furniture) is not in Bidder's scope. Kindly confirm.	For Bidder's confirmation	Specification requirement is clear in this regard.
Vol II	C3- C&I Specific Technical Requirement	5	133/581	230 V AC UPS Power supply shall be provided by BHEL at a single point, further distribution to various instruments/equipment of the system shall be in bidder scope.	The Bidder has understood that UPS Power Supply will be bought upto a point in both CPU and Regeneration area. Kindly confirm	For Bidder's confirmation	Please Follow Tender Specification
Vol II	C3- C&I Specific Technical Requirement			Instrument Air Line	The Bidder has understood that Instrument Air Line will be bought upto a point in both CPU and Regeneration area. Kindly confirm	For Bidder's confirmation	Please Follow Tender Specification
Vol II	C3- C&I Specific Technical Requirement		133/581	JB/LCP	The bidder will provide JB's in CPU and Regeneration Area. Cable From JB upto PLC/ DCS will be in BHEL's scope. Kindly confirm.	For Bidder's confirmation	Please Follow Tender Specification
Vol II	Scope of Supply and services	11.00.00	321/581	Complete Control and Instrumentation (C&I) systems in turnkey basis. Any item not specifically mentioned in this specification but required for completion of the total C&I system shall be included. The major C&I systems shall comprise of but not be limited to Distributed Digital Control and Management Information System (DDCMIS), SG and TG integral control and instrumentation systems, Plant Auxiliaries and Off site Plants Controls and monitoring systems, Performance Analysis Diagnostics and Optimisation (PADO) system, Master Clock system (MCS), Rotating Machine Condition Monitoring System (RMCMS) , Close Circuit Television (CCTV) System for plant surveillance, Furnace and Flame viewing System, PA and EPABX systems, Computerised Maintenance & Inventory Management System (CMIMS), Ambient Air Quality Monitoring System (AAQMS), Steam and Water Analysis System (SWAS), Continuous Emissions Monitoring System (CEMS), Microprocessor based Alarm Annunciation System, HART management system, Power supply, C&I Laboratory, Erection Hardware Field instruments and sensors, Performance and Guarantee test instruments, Primary flow elements, Pneumatic, motorized and hydraulically operated valves and dampers, cables, Panel, desks and cabinets, Racks, Maintenance, calibration, commissioning, site testing instruments, Special tools and tackle, Spares and Consumables etc.	Kindly mention the scope of these systems	For Bidder's confirmation	Stands Deleted

Pre-Bid clarification for Condensate polishing Unit Package

Tender: PE/PG/KOT/E-4945/2015

Design, engineering, manufacturing, supply, erection, testing, commissioning, etc of Condensate Polishing Unit system for 1x 800 MW TSGENCO

Project: KOTHAGUDEM TPS, STAGE VII - PALONCHA.

S.No	Volume	Section	Clause	Page No	Specification requirement	Clarification	Reasons for clarification	BHEL's Replies/Clarifications
1	IIB PE-TS-410-155A-A001	C1	4.0,A,12	11 of 581	Two Nos (2 x 100%) Rinse Recirculation pumps, each complete with electrical drive motor and all other accessories as required. of condensate polisher service vessel.	Whether Rinse recirculation pumps are mandatory or it is as applicable/optional?	Generally, the Fast rinse will be done through Condensate inlet water at the feed flow rate and the outlet of the rinse water should not be recycled. Instead it will be taken to hot well or to the neutralization pit without rinse recirculation pump. Generally Rinse recirculation is not recommended in high pressure CPU .Hence, Rinse Recirculation pump shall not be provided.	Please Follow Tender Specification.
2	IIB PE-TS-410-155A-A001	C1	4.0,A,16	11 of 581	Five (5) complete charges of resins (Cation + Anion + Inert (if applicable) alongwith 1 charge for resin makeup hopper shall be provided.	Whether one charge of resin for Resin makeup hopper means 150 litres each of Cation , Anion and Inert to be provided or a total of 150 litres shall contain a mixture of Cation , Anion & Inert.	Quantity is not clear .	Please Follow Tender Specification.
3	IIB PE-TS-410-155A-A001	C1	4.0,A,14	12 of 581	Bidder to include one no. toilet block having facilities for ladies & Gents as per attached space available for CPU regeneration area(wide ref.Dwg.No.PE-DG-410-155A-A003)	Whether Civil works is in bidder's scope or not ? Kindly confirm.	Civil scope is not clear.	Toilet Block is excluded from Bidder's scope.
4	IIB PE-TS-410-155A-A001	C1	4.0,E,8	15 of 581	MCC shall be located in CPU regeneration area.	Whether MCC is in Bidder's scope or not ? Kindly confirm.	Scope is not clear.	Please Follow Tender Specification.
5	IIB PE-TS-410-155A-A001	C1	Annexure V	54 of 581	Mandatory Spares	We understand that spares mentioned in the list shall be supplied as applicable for our CPU package.Kindly confirm.	Spares not applicable for this package are also included.(Like DC Motors)	Noted. However if found applicable during detail engineering,the same shall be provided without price implication.
6	IIB PE-TS-410-155A-A001	C1	DATASHEET - A, 3.2	66 of 581	BULK ACID AND ALKALI STORAGE TANKS (v) Useful capacity - Adequate to hold the quantity of acid /alkali required for 30 days of operation .	Whether the capacity of bulk storage tanks shall be for 30 days operation for single CPU service vessel or two CPU Service vessels or all the three CPU service Vessels.	Capacity of the storage tank is not clear.	Tender specification requirement is clear.
7	IIB PE-TS-410-155A-A001	D1	4.04.00, ix)	260 of 581	The resin shall be suitable for the condensate temperature that may be achieved in all operating regimes of TG cycle.However , the anion resin shall be suitable for a minimum temperature of 60 Deg.C	As per our Resin supplier's data , Anion resin shall withstand for a maximum temperature of 60 Deg.C only. Kindly confirm.		Please Follow Tender Specification.
8	IIB PE-TS-410-155A-A001	D1	4.07.01, i)	261 of 581	Minimum freeboards to be are as follows: i)Condensate Polisher /Mixed bed Polisher - 100%	Since , we are offering Spherical Vessels ,Freeboard is not applicable in this case.Kindly confirm.		Please Follow Tender Specification.
9	IIB PE-TS-410-155A-A001		Suggestive Price Schedule	579 of 581	Annexure - A & Annexure - B Price Format	There are two formats for Price schedule.Kindly confirm which format is to be followed?		one is for indian bidder & other is for foreign bidder.