



**OPEN TENDER ENQUIRY OF "CHEMICAL DOSING SYSTEM"
FOR 3x800 MW PVUNL PATRATU TPP PHASE I**

Ref No.: PE/PG/PA1/E-6305/2019

Date: 10.10.2019

CORRIGENDUM/ ADDENDUM- 2

Tender Enquiry no.: PE/PG/PA1/E-6305/2019
Date: 23/09/2019,

Extended Due Date
17 -OCTOBER- 2019
02:00 PM

1. The Due date for offer submission & Part-I opening for "CHEMICAL DOSING SYSTEM" for above mentioned project has been extended up to **17.10.2019, 02:00 P.M.** Techno-commercial offer (Part-I) shall be opened on **17.10.2019 at 03:00 P.M.** Kindly Ensure submission/uploading of offer on or before Extended due date & time i.e. by **17.10.2019, 02:00 P.M** on <https://bhel.abcpurchase.com>

2. Please note the following.

Pre –bid clarification annexure attached with this corrigendum shall be treated as part of NIT.

All the other terms and conditions of the tender enquiry remain unchanged.

All the bidders are requested to quote accordingly.

All corrigenda, addenda, amendments, time extensions, clarifications etc. to the tender will be hosted on BHEL websites only (<https://bhel.abcpurchase.com>) under subject tender reference. Bidders are requested to visit our website from time to time to keep themselves updated.

Thanking you,

Yours faithfully,
For and on behalf of BHEL

Ajay Nath
10-10-2019

Ajay Nath
(Assistant Engineer Gr. II / Project Group-3)

Please reply to:
AJAY NATH (Assistant Engineer Gr. I / Project Group-3)
Power Project Engineering Institute Building
HRD & ESI Complex Plot No. 25, Sector -16 A,
BHEL-PEM, Noida-201301 (U.P.)
Tel No. 0120-4213621/4368838.

CLIENT : BHEL NOIDA						
PROJECT: 3X800MW PATRATU TPP PHASE-1						
RFQ Ref: SPECIFICATION NO. PE-TS-434-154-A001, R0						
SR. NO.	DRG/Doc . NO.	Clasue No.	RFQ Reference	BIDDER CLARIFICATIONS	BHEL REPLY	
1	TECHNICAL SPECIFICATIONS SECTION VI, PART-B BID DOC. NO. CS-9585-001-2	SUB-SECTION - A-12 SURFACE PREPARATION & PAINTING Clause 1.03.00	Unless specified otherwise, paint shall not be applied to surfaces of insulation, surfaces of stainless steel/nickel/ copper/brass/ monel/ aluminum/ hastelloy/lead/galvanized steel items, valve stem, pump rods, shafts, gauges, bearing and contact surfaces, lined or clad surfaces.	All SS parts shall be unpainted. However necessary chemical cleaning shall be done. The carbon steel material shall be painted as per the scheme. Please confirm.	Bidder understanding is correct.	
2	ANNEXURE V: MANDATORY SPARES LIST	Sr. No.1 to 9	No. for each type of pump per unit.	Number of spare required is for unit. For example: For Drive shaft cum worm : Qty 1 No. for each type of pump per unit is mentoned. We understand that these spare to be quoted as 1 No. common for all 6 ammonia dosing pumps. Please give us your concurrence.	Bidder's understading is not correct. Mandatory spares shall be supplied for 3 units wherever per unit is specified.	
3	SPECIFICATION NO. PE-TS-434-154-A001 SECTION -I AND SUB-SECTION: IC	9	Gaskets, Fasteners, Counter and mating flange (SS316 material), nuts & bolts etc. shall also be included, wherever required with the field instruments.	All meterial shall be SS304 as per mechnaical speecification requirements. Please confirm.	Bidder's understading is not correct. Bidder to note that the referred clause i.e 9 only talks about the field instruments. The requirement of material is clearly specifie against respective component.	
4	SPECIFICATION NO. PE-TS-434-154-A001 SECTION -I AND SUB-SECTION: IC	11	All the wetted parts of the instruments including the accessories like root valves, impulse piping, drain cocks, gauge-zeroing cocks, valve manifolds and all the other accessories required for mounting/erection of these local instruments as well as valves shall be of SS-316 material, suitable pressure class and same shall be in bidder's scope	All meterial shall be SS304 as per mechnaical speecification requirements. Please confirm.	Bidder's understading is not correct. Bidder to note that the referred clause i.e 11 only talks about the field instruments. The requirement of material is clearly specifie against respective component.	
5	SPECIFICATION NO. PE-TS-434-154-A001 SECTION -I AND SUB-SECTION: IC	12	The quantity of instruments for the system as per tender P & ID wherever provided of the respective system is minimum, for bidding purpose. However, Bidder shall also include in his proposal all the instruments and devices that are needed for the completeness of the plant auxiliary system/ equipment supplied by the bidder, even if the same is not specifically appearing in the P & ID. During detail engineering if any additional instruments are required for safe & reliable operation of plant, bidder shall supply the same without any implication.	Please note the dosing system shall be supplied as per P&ID received along with RFQ with all instruments marked. The additional instruments other than scope shall be with price and delivery since this project will be fixed price and lowest price basis contract. We can not anticipate additional instruments requirments at proposal stage.	Bidder to supply Instruments as indicated in P&ID only.	
6	SPECIFICATION NO. PE-TS-434-154-A001 SECTION -I AND SUB-SECTION: IC	21	2 Feeders of 415 V AC power supply shall be provided by BHEL at a single point, vendor shall provide feeder with auto changeover facility with indication.	Please note as per the scope of supply bidder scope is limited to respctive skid edge for complete accessories skid. Hence we request to provide all terminals at respctive skids. Also, please we have not understand for provision of 2 feeders of 415 VAC power supply its confilcts with electrical scope of supply mentioned in specification.	Bidder to refer "ELECTRICAL SCOPE BETWEEN BHEL AND VENDOR" on pg.no. 83 for the electrical scope of supply.	
7	SPECIFICATION NO. PE-TS-434-154-A001 SECTION -I AND SUB-SECTION: IC	25	Double root valve shall be provided for all pressure tapings where the design pressure exceeds 40kg/cm2.	Please note the double root isolation is not required for NaOH dosing system. Please confirm. However for ammonia dosing system may be required since discharge presssure is 45 K/ Cm2 g	Bidder understanding is correct.	

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	PROJECT: 3X800MW PATRATU TPP PHASE-1					
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8	SPECIFICATION NO. PE-TS-434-154-A001 SECTION -I AND SUB-SECTION: IC	27	Redundancy of sensors shall be provided by bidder (i) Triple redundancy for all analog and binary inputs required for protection of the system/drives. (ii) For all other control functions dual redundancy of the sensors shall be provided by the bidder.	All instruments and redundancy shall be as per P&ID.	All instruments and redundancy shall be as per P&ID.	
9	SPECIFICATION NO. PE-TS-434-154-A001 SECTION : I SUB-SECTION: IIA	4.1.3 AMMONIA DOSING PUMPS (TOTAL 2 Nos.)	one pressure transmitter at a common discharge header of dosing pumps.	Please note as per P&ID 3 presssure transmitter is reflected at discharge of pumps on common header. We understand that one transmitter as refered in clasue is not required. Please confirm.	All instruments and redundancy shall be as per P&ID.	
10	SPECIFICATION NO. PE-TS-434-154-A001 SECTION : I SUB-SECTION: IIA	5.1.2 NaOH DOSING PUMPS (TOTAL 2 Nos.)	one pressure transmitter at a common discharge header of dosing pumps.	Please note as per P&ID 3 presssure transmitter is reflected at discharge of pumps on common header. We understand that one transmitter as refered in clasue is not required. Please confirm.	All instruments and redundancy shall be as per P&ID.	
11	PE-TS-434-154-A001 SECTION : I SUB-SECTION: IIA	8	Motors with base frame and fixing hardware for motors.	Please inform hazrdous area classification for the motor selection for pump motor and stirrer motor.	Chemical Dosing Skids are placed in Non Hazardus Area.	
12	LV MOTORS DATA SHEET-A	1 of 1	14.0 Energy efficient/ Flame proof motor : As per Customer spec. requirement	Please inform type motor is required for dosing systems.	Energy efficient motor shall be provided for chemical dosing system.	
13			Installation	Please inform us installation of dosing skids is it outdoor underroof or its outdoor without roof.	Dosing skids are placed indoor under roof.	
14			Local Control panel	We under stand that local control panel shall be without microprocessor basis PLC and shall comprise of pump autostroke controller, motor start stop push buttom and annuciation lamps. Please confirm.	Technical specification requirement is clear in this regard.	