



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN - 09

Ref: PSER:SCT:KLN-M1866:TCN-09

Date: 12-01-2018

Sub	Tender Change Notice -TCN-09	
Job	Design, Engineering, Manufacturing, Supply, Erection & Commissioning, Etc. Of Condensate Polishing Unit For 2X660 MW Maitree Super Thermal Power Project, Rampal, Bangladesh.	
Ref	1.0	Tender no PSER:SCT:KLN-M1866:17
	2.0	BHEL's NIT, vide reference no PSER:SCT:KLN-M1866: 6284 , Dated 21-11-2017
	3.0	BHEL's TCN-01 ref PSER:SCT:KLN-M1866:TCN-01 dated 05/12/2017
	4.0	BHEL's TCN-02 ref PSER:SCT:KLN-M1866:TCN-02 dated 12/12/2017
	5.0	BHEL's TCN-03 ref PSER:SCT:KLN-M1866:TCN-03 dated 16/12/2017
	6.0	BHEL's TCN-04 ref PSER:SCT:KLN-M1866:TCN-04 dated 23/12/2017
	7.0	BHEL's TCN-05 ref PSER:SCT:KLN-M1866:TCN-05 dated 01/01/2018
	8.0	BHEL's TCN-06 ref PSER:SCT:KLN-M1866:TCN-06 dated 03/01/2018
	9.0	BHEL's TCN-07 ref PSER:SCT:KLN-M1866:TCN-07 dated 05/01/2018
	10.0	BHEL's TCN-08 ref PSER:SCT:KLN-M1866:TCN-08 dated 11/01/2018
	11.0	All other pertinent issues till date.

With reference to above, following points/ documents, relevant to tender, may please be noted and complied with while submitting offer.

- 1.0 Extension of due date of submission of offer from 15-01-2018 to 22-01-2018 (15:00 hrs).
- 2.0 Clarification to bidder's queries vide **Annexure-A to TCN-09**.
- 3.0 Revised 'No deviation certificate' as per enclosed Annexure-2. Bidder shall submit no deviation certificate as per enclosed format only.
- 4.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

DY MGR (SCT)

Encl : As above.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION, DJ-9/1, SECTOR-II, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211691, 23211798, 23211796

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

BHARAT HEAVY ELECTRICALS LIMITED,
Power Sector - Eastern Region,
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Design, Engineering, Manufacturing, Supply, Erection & Commissioning, Etc. Of Condensate Polishing Unit For 2X660 MW Maitree Super Thermal Power Project, Rampal, Bangladesh.	
Ref	1.0	Tender no PSER:SCT:KLN-M1866:17
	2.0	BHEL's NIT, vide reference no PSER:SCT:KLN-M1866: 6284 , Dated 21-11-2017
	3.0	BHEL's TCN-01, vide reference PSER:SCT:KLN-M1866:TCN-01, dated 05-12-2017.
	4.0	BHEL's TCN-02, vide reference PSER:SCT:KLN-M1866:TCN-02, dated 12-12-2017.
	5.0	BHEL's TCN-03, vide reference PSER:SCT:KLN-M1866:TCN-03, dated 16-12-2017
	6.0	BHEL's TCN-04, vide reference PSER:SCT:KLN-M1866:TCN-04, dated 23-12-2017
	7.0	BHEL's TCN-05, vide reference PSER:SCT:KLN-M1866:TCN-05, dated 01-01-2018
	8.0	BHEL's TCN-06, vide reference PSER:SCT:KLN-M1866:TCN-06, dated 03-01-2018
	9.0	BHEL's TCN-07, vide reference PSER:SCT:KLN-M1866:TCN-07, dated 05-01-2018
	10.0	BHEL's TCN-08, vide reference PSER:SCT:KLN-M1866:TCN-08, dated 11-01-2018
	11.0	BHEL's TCN-09, vide reference PSER:SCT:KLN-M1866:TCN-08, dated 12-01-2018
	12.0	All other pertinent issues till date.

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the bidder)

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION DJ-9/1, SECTOR-II, SALTLAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211691, 23211798, 23211796

ANNEXURE-A TO TCN-01

Sub: Tender for Design, Engineering, Manufacturing, Supply, Erection & Commissioning, Etc. Of Condensate Polishing Unit For 2X660 MW Maitree Super Thermal Power Project, Rampal, Bangladesh.

Tender No. PSER:SCT:KLN-M1866:17

Sr. No.	REFERENCE CLAUSE OF TENDER	EXISTING PROVISION	BIDDER'S QUERY	BHEL CLARIFICATION
1.	Volume -II PE-TS-421-155-A001 Page No. 547 of 865	Condensate polishing system of each unit shall include at least: Heat exchangers integrated in the water/steam-cycle for the return condensate cooling complete with all components including all respective control equipment (for the process flow diagram water/steam-cycle (see also Annex B2-1) • One (1) heat exchanger for return condensate/treated condensate • One (1) heat exchanger for return condensate/cooling water.	Please confirm the scope & supply of Heat exchanger.	Heat exchangers are not in scope of supply of bidder.
2.	VOLUME-II-PE-TS-421-155-A001 Page No : 547 of 865	• Two (2)x 100% pressure increase/condensate extraction pumps, if required	Please confirm the scope & supply of condensate extraction pumps.	Condensate extraction pumps are not in scope of supply of bidder.

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Sr. No.	REFERENCE CLAUSE OF TENDER	EXISTING PROVISION	BIDDER'S QUERY	BHEL CLARIFICATION
3.	VOLUME-II- PE-TS-421-155-A001 Page No :561 of 865	Central chemical handling and storage facilities complete, including at least'. <ul style="list-style-type: none">• One (1) hydrochloric acid system.• One (1) HCl storage tank complete with inlet, outlet, level indicator, drainage, manhole vent with acid vapour absorption.• One (1) containment tank for spillage Control.• Two (2) transfer pumps complete with connecting pipe work.• One (1) caustic soda system.• One (1) caustic soda storage tank, complete with inlet, outlet, level indicator, drainage, manhole etc.• One (1) containment tank for spillage control.• Two (2) transfer pumps complete with connecting pipe work.• One (1) truck unloading station with unloading manifold, hose connections, all necessary equipment and installation for safe operation of the station, design according to the National corresponding to the needed supply capacity of the tank truck and regulations, rejection capacity corresponding to the needed supply capacity of the tank truck.• One (1) drum store for dosing chemicals.	Kindly confirm that no Central chemical handling and storage facilities are included bidder scope.	Bidder to note that Central chemical handling and storage facilities indicated on page 561 of 865 only shall be treated as deleted. However bidder to provide the chemical handling and storage facilities for condensate polishing unit package as indicated elsewhere in the technical specification.

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Sr. No.	REFERENCE CLAUSE OF TENDER	EXISTING PROVISION	BIDDER'S QUERY	BHEL CLARIFICATION
4.	PE-TS-421-155-A001 CI No B6.3.5 Pg No 569 of 865	Piping and accessories MOC shall be finalized during basis detail engineering and shall be subject to BIFPCL approval.	MOC of Piping shall be considered as per Page no. 648 of 865 clause no. 10.0. Kindly confirm.	MOC of Piping shall be as per datasheet –A Page no. 648 of 865 clause no. 10.0. Bidder to follow the same.
5.	PE-TS-421-155-A001 CI No 10.0 Pg 648 of 865	MOC of Condensate lines shall be ASTM A 106 Gr. B/C.	MOC of Condensate lines is ASTM A 106 Gr. B as per Page no. 688 of 865 clause no. 2.03.05, S no. 4. Please confirm the MOC of Condensate Piping ASTM A 106 Gr. B or C.	MOC of Condensate lines shall be ASTM A 106 Gr. B/C. Bidder to follow the same.
6.	PE-TS-421-155-A001 Pg No 11 of 865	One (1) no. hot water tank of MOC –SS304.	As per Page no. 27 of 865 clause no. 15 Page no. 688 of 865. Please confirm the MOC of hot water tank.	Bidder to note that Hot water tank MOC shall be SS-304.
7.	PE-TS-421-155-A001 Pg No 15 of 865	All pipes, fittings etc. required for hand railing, platforms, and ladders shall be in the scope of bidder	Hand railing, insert plate, rungs etc. required for RCC Sumps and Pits is not included in bidder scope as the Civil work is in M/s BHEL scope. Kindly confirm.	Bidder to follow tender specification.

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Sr. No.	REFERENCE CLAUSE OF TENDER	EXISTING PROVISION	BIDDER'S QUERY	BHEL CLARIFICATION
8.	PE-TS-421-155-A001 CI No 6.40 Pg 17 of 865	Motorized valves and Pneumatic valves as indicated in the P&IDs may change to Pneumatic valves and Motorized valves respectively during detailed engineering as per BHEL & Customer's requirement. Bidder has to comply the same without any price and delivery implication to BHEL and Customer.	No motorized valves are applicable for Condensate polishing system and Type of valve shall be in line with the Tender P & ID and system requirement. Kindly confirm.	Bidder to follow the TENDER P&ID.
9.	PE-TS-421-155-A001 CI No 20.0 Pg 35 of 865	Required number of electric hoist / manual hoist of adequate capacity, to meet the erection and maintenance requirements are to be provided for the various areas.	There is no requirement of electric hoist / manual hoist. Same needs to be deleted from Bidder scope.	Bidder to follow tender specification.
10.	PE-TS-421-155-A001 CI 8.2.5 Pg No 643 of 865	MOC of Acid & Alkali measuring tanks is SA 516 Gr. 60 or 70.	As per Page no. 710 of 865 clause no. 2.22.02 (d) Tanks shall be made of mild steel plates to BS 4360/IS 2062 Gr. B. Please confirm the MOC of Acid & Alkali measuring tanks.	Bidder to note that MOC of Acid & Alkali measuring tanks shall be SA 516 Gr. 60 or 70 with RL 4.5 mm THK in three layers.
11	PE-TS-421-155-A001 Subsection IA SI No xi of 2.0 Pg 638 of 865	<u>Data sheet of pre-filter</u> Pre -Filter Housing MOC - SA 516 Gr. 60 or 70.	MOC of Pre-filter is not clear. There is contradictio between both clauses regarding on MOC of Pre-filter. Whether MOC of pre-filter housing shall be in CS or CS with rubber lined. Please confirm.	Bidder to note that MOC of Pre -filter housing shall be CSRL. i.e.SA 516 Gr. 60 or 70 (with RL 4.5 mm thick in three layers).

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Sr. No.	REFERENCE CLAUSE OF TENDER	EXISTING PROVISION	BIDDER'S QUERY	BHEL CLARIFICATION
12	PE-TS-421-155-A001 Subsection IA SI No 5 Pg 227 of 865	<u>List of basic minimum spares</u> Cartridge filter elements: 30% of total installed membrane in <u>all three streams/trains</u>	Based on nos. of TG unit (2x660 MW), there are total two streams (each 1318.722 T /hr per unit, refer page 638 of 865). Hence, spare of cartridge filter element shall be applicable for two streams instead of three streams. Kindly check and confirm. Nos. of streams are not matched with TG units.	Referred clause details to be read as "Cartridge filter elements: 30% of total installed membranes(filter element).
13	PE-TS-421-155-A001 Pg No 8 of 865	Please refer point no-25 wherein one no. cation conductivity at common inlet header has asked to considered but as per P &ID, it is not there. Please clear	Not clear	Bidder to refer P&ID for the same and point no. 25, page 8 of 865 of technical specification for CPU shall be read as: "25) Two nos. cation Conductivity Analysers at outlet of each mixed bed ion exchanger vessel. Hence total 8 nos. of cation Conductivity analysers shall be supplied for each TG unit service vessel area. Total 16 nos. cation Conductivity analysers shall be supplied for service vessel area of both TG units."

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Sr. No.	REFERENCE CLAUSE OF TENDER	EXISTING PROVISION	BIDDER'S QUERY	BHEL CLARIFICATION
14	PE-TS-421-155-A001 Pg No 8 of 865	Please refer point no-24, 25, 26 wherein qty of conductivity analyser is not clear w.r.t P &ID. Please clear	Not clear	<p>Bidder to refer P&ID for the same and point no. 24,25 & 26 page 8 of 865 of technical specification for CPU shall be read as:</p> <p>24) One no. Specific Conductivity analyser at cation exchanger vessels common inlet, one no. Specific Conductivity analyser at mixed bed ion exchanger vessels common outlet, one no. Specific Conductivity analyser at each cation exchanger vessel outlet & One no. specific Conductivity Analyser at outlet of each mixed bed ion exchanger vessel. Hence total 10 nos. of Specific Conductivity analysers shall be supplied for each TG unit service vessel area. Total 20 nos. Specific Conductivity analysers shall be supplied for service vessel area of both TG units.</p> <p>25)Two nos. cation Conductivity Analyzers at outlet of each mixed bed ion exchanger vessel. Hence total 8 nos. of cation Conductivity analysers shall be supplied for each TG unit service vessel area. Total 16 nos. cation Conductivity analysers shall be supplied for service vessel area of both TG units.</p> <p>26) One no. pH analyser at cation exchangers common inlet, two nos. pH Analyzers at outlet of each cation exchanger vessel & One no. pH analyser at each mixed bed ion exchanger vessel outlet. Hence total 13 nos. of pH analysers shall be supplied for each TG unit service vessel area. Total 26 nos. pH analysers shall be supplied for service vessel area of both TG units.</p>

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Sr. No.	REFERENCE CLAUSE OF TENDER	EXISTING PROVISION	BIDDER'S QUERY	BHEL CLARIFICATION
15	PE-TS-421-155-A001 Pg No 674 of 865	"Local control panel required for operation shall be in bidder scope." Once DCS is not in our scope of supply then how local control panel can be in our scope of supply. Please clear.	Not clear	Local Control panel, if required for field operation shall be in Bidder's scope.
16	PE-TS-421-155-A001	Please inform, qty. of instrument shall be considered w.r.t specification or P &ID. Please Clear	Please clear	Please note that the instrument and analyser shown in P&ID are minimum. Further to meet the system requirement & redundancy requirement as specified in tender specification , any additional instrument & analyser required shall be in bidder's scope.
17	PE-TS-421-155-A001	Specification is totally silent about the MOC of Junction Box. Please clear	Not clear	MOC of JB shall be FRP/carbon Steel in line with NTPC projects.
18	PE-TS-421-155-A001 Pg No 673 of 865	Please refer point no-4 stated that type test has been attached but type test did not find. Please inform for which instruments type test / kind of type test is applicable/ require	Not clear	Test shall be carried out for C&I Items/Instruments/ Systems. Type test report for the same make & model no. of instrument/system , not older than 5 years , may be considered during detailed engineering and it shall be subject to owner's approval.