



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

( भारत सरकार का उपक्रम )

**BHARAT HEAVY ELECTRICALS LIMITED**

(A Govt. of India Undertaking)

TCN - 14

Ref: PSER:SCT:KLN-M1864:TCN-14

Date: 05-03-2018

Sub	Tender Change Notice (TCN) - 14	
Job	Design, Engineering, Manufacturing, Supply, Erection, Commissioning etc. of Water Treatment Plant Packages for 2x660 MW Maitree STPP, Rampal, Bangladesh.	
Ref	1.0	Tender no PSER:SCT:KLN-M1864:17.
	2.0	BHEL's NIT, vide reference no PSER:SCT:KLN-M1864:6286 Date: 21-11-2017.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:KLN-M1864:TCN-01 Date: 08-12-2017.
	4.0	BHEL's TCN-02, vide reference no PSER:SCT:KLN-M1864:TCN-02 Date: 12-12-2017.
	5.0	BHEL's TCN-03, vide reference no PSER:SCT:KLN-M1864:TCN-03 Date: 18-12-2017.
	6.0	BHEL's TCN-04, vide reference no PSER:SCT:KLN-M1864:TCN-04 Date: 23-12-2017.
	7.0	BHEL's TCN-05, vide reference no PSER:SCT:KLN-M1864:TCN-05 Date: 26-12-2017.
	8.0	BHEL's TCN-06, vide reference no PSER:SCT:KLN-M1864:TCN-06 Date: 02-01-2018.
	9.0	BHEL's TCN-07, vide reference no PSER:SCT:KLN-M1864:TCN-07 Date: 12-01-2018.
	10.0	BHEL's TCN-08, vide reference no PSER:SCT:KLN-M1864:TCN-08 Date: 16-01-2018.
	11.0	BHEL's TCN-09, vide reference no PSER:SCT:KLN-M1864:TCN-09 Date: 20-01-2018.
	12.0	BHEL's TCN-10, vide reference no PSER:SCT:KLN-M1864:TCN-10 Date: 30-01-2018.
	13.0	BHEL's TCN-11, vide reference no PSER:SCT:KLN-M1864:TCN-11 Date: 12-02-2018.
	14.0	BHEL's TCN-12, vide reference no PSER:SCT:KLN-M1864:TCN-12 Date: 17-02-2018.
	15.0	BHEL's TCN-13, vide reference no PSER:SCT:KLN-M1864:TCN-13 Date: 27-02-2018.
	16.0	Other References, if any.

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

- 1) Clarification of Bidder's queries attached vide **Annexure-A to TCN-14**.
- 2) Revised 'No deviation certificate' as per enclosed Annexure-2. Bidder shall submit no deviation certificate as per enclosed format only.
- 3) All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,  
for BHARAT HEAVY ELECTRICALS LTD

Sr. Engr (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 : (033) 2339-8000/ 2339 8236

## ANNEXURE-A TO TCN-14

TENDER NO : PSER:SCT:KLN-M1864:17.

JOB: Design, Engineering, Manufacturing, Supply, Erection, Commissioning etc. of Water Treatment Plant Packages for 2x660 MW Maitree STPP, Rampal, Bangladesh.

## CLARIFICATION OF BIDDER'S QUERY

SL NO	REFERENCE CLAUSE OF TENDER DOCUMENT	EXISTING PROVISION	BIDDER'S QUERY	BHEL'S CLARIFICATION
1.0	Datasheet -A for Pre Treatment Plant- Clause no. 6.4 - Clariflocculator,Rise Rate & Design and Construcion Requirements- Clause no. 7.11.1 - Average Flow velocity -Page no 713 of 920	Rise Rate for the Clariflocculator has been specified as 1.5 cum/hr/sq.m.  & Overall area of the unit shall be based on average flow velocity not more than 3 m3/m2/hr	Client to note that there is discrepancy on Rise Rate in Clariflocculator between the clause as referred. Client to clarify on the same.	Bidder to refer rise rate for clariflocculator as 1.5 cum/hr/sqm.
2.0	Datasheet -Rev 1 for Effluent Treatment Plant Clause no. 12, Point C - Free Oil at the outlet of TPI & Annexure-III Functional Guarantee and Liquidated Damages Clause no. 1.2 Point b) - Oil Water Separator	Free Oil at the outlet of TPI has been mentioned as 10 mg/l.  & Effluent Oil and Grease : 5ppm	Free Oil at the outlet tpi has been mentioned as 10 mg/l. Wheress as per the Guarnatee Clause Effluent Oil and Grease has been mentioned as 5 mg/l. We understand that this is the Guarantee at TPI Outlet.  Client to clarify on the same and confirm the Guarantee required.	Bidder to note that Effluent Oil & grease: 5 ppm (maximum) shall be at outlet of Lamella clarifier/ tube settler and Effluent Oil & grease: 5 ppm (maximum) shall be outlet at outlet of Oil water separator.
3.0	Revised Datasheet - A for CW Treatment Plant & Revised P&ID for CW Treatment Plant (PE-DG-421-156-A001 R1) - Scale Inhibitor Storage Tank,	As per Revised datasheet- Effective Capacity , In liters ( each Tank ) : 7.5 m3  As per Revised P&ID- Capacity : 14 days Storage	Client to note that there is discrepancy on effective capacity of tanks between datasheet and P&ID . Kindly confirm on effective capacity.	Bidder to consider 14 days storage capacity for Bulk Scale Inhibitor Storage Tank.
4.0	Revised Datasheet - A for CW Treatment Plant  & Revised P&ID for CW Treatment Plant (PE-DG-421-156-A001 R1) -Biocide Storage Tanks	As per Revised datasheet- Effective Capacity , In liters ( each Tank ) : 1 m3  As per Revised P&ID- Capacity : 14 days Storage	Client to note that there is discrepancy on effective capacity of tanks between datasheet and P&ID . Kindly confirm on effective capacity.	Bidder to consider 14 days storage capacity for Bulk Biocide Storage Tank.
5.0	Revised Datasheet - A for CW Treatment Plant  & Revised P&ID for CW Treatment Plant (PE-DG-421-156-A001 R1) -Bio Disperent Storage Tanks	As per Revised datasheet- Effective Capacity , In liters ( each Tank ) : 5 m3  As per Revised P&ID- Capacity : 14 days Storage	Client to note that there is discrepancy on effective capacity of tanks between datasheet and P&ID . Kindly confirm on effective capacity.	Bidder to consider 14 days storage capacity for Bulk Bio Disperent Storage Tank.

## ANNEXURE-A TO TCN-14

TENDER NO : PSER:SCT:KLN-M1864:17.

JOB: Design, Engineering, Manufacturing, Supply, Erection, Commissioning etc. of Water Treatment Plant Packages for 2x660 MW Maitree STPP, Rampal, Bangladesh.

## CLARIFICATION OF BIDDER'S QUERY

SL NO	REFERENCE CLAUSE OF TENDER DOCUMENT	EXISTING PROVISION	BIDDER'S QUERY	BHEL'S CLARIFICATION
6.0	TCN-05 ANNEXURE-XIII WATER ANALYSIS AND INFLUENT QUALITY -Raw Water Analysis, Point e.	TSS for the Raw Water has been mentioned as 1500 mg/l	Client is requested to clarify the Suspended Solids value for design for Sludge Thickener and Filter Press. With 1500 mg/l , Capacity for the Sludge Thickener and Filter Press turns out to be huge and is not fitting the configuration mentioned in the tender . Please clarify.	Tender specification is clear, Bidder to follow the same.
7.0	TCN-11 P & ID for Effluent Treatment plant File-PE-DG-421-164-A001 Annex :maitree-00-GN-FB-111202-PEM-2	Central effluent monitoring sump flow control station.	We request to clarify the flow coming out of Central Effluent monitoring sump to decide the line size and flow control station valve sizing .  We understand that there is no transfer pump in central effluent monitoring sump in our battery limit.	ETP discharge line size has already been indicated as 1400 NB in ETP P & ID furnished in TCN.
8.0	TCN-11 Point no. 10.  &  TCN-11 P & ID for Pre Treatment Plant Rev-1 Note 9 -Material of Construction for Piping	Raw Water and Clarified Water Piping upto 300 NB has been mentioned as Duplex SS in TCN-011 & Notes, Point 9, It is mentioned that All pipes shall be of Carbon Steel	Client is requested to clarify the discrepancy on Material of Construction for the Piping.	Bidder to follow TCN -11 for Pipe material selection. In addition, pipe size of 350 NB (pipe work-saline water) (raw water/clarified water piping) shall be of duplex SS as per sch.10s. However for non saline water MOC of pipe shall be selected as CS unless otherwise exclusively mentioned.

**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 Water Treatment Plant Packages for 2x660 MW Maitree STPP, Rampal, Bangladesh.	
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	15.0	BHEL's TCN-13, vide reference no PSER:SCT:KLN-M1864:TCN-13 Date: 27-02-2018.
	16.0	BHEL's TCN-14, vide reference no PSER:SCT:KLN-M1864:TCN-14 Date: 05-03-2018.
	17.0	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/uploaded offer/documents in accordance with tender instructions with acceptance of the terms & conditions of the tender by us 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, SALT LAKE CITY, KOLKATA - 700 091

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