



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

( भारत सरकार का उपक्रम )

**BHARAT HEAVY ELECTRICALS LIMITED**

(A Govt. of India Undertaking)

**TCN - 02**

Ref: PSER:SCT:SDG-M1349:TCN-02

Date: 01-06-2012

Sub	Tender change notice (TCN) 02.	
Job	Design, Engineering, Manufacturing/ Supply, Erection, Commissioning, Handing over, etc of CW Treatment Plant Package For 2x500 MW Units at Sagardighi STPP, WB.	
Ref	1.0	Tender No.:- PSER:SCT:SDG-M1349:12.
	2.0	BHEL's NIT, vide reference no PSER:SCT:SDG-M1349:2812,dated 09-05-2012.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:SDG-M1349:TCN-01, dated 30-05-2012.
	4.0	Other references (if any).

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

- 1.0 Amendment/Clarification to tender as per enclosed Annexure-A.
- 2.0 Make-up water analysis as per enclosed Annexure-B.
- 3.0 Revised 'No deviation certificate' as per enclosed Annexure-2. Bidder to submit 'No deviation certificate' as per attached format only.
- 4.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,  
for BHARAT HEAVY ELECTRICALS LTD

ENGR (SCT)

Encl

As above.

पावर सेक्टर पूर्वी क्षेत्र ( मुख्यालय )

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

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211798/ 1691

TENDER NO – PSER:SCT:SDG-M1349:12	
ANNEXURE-A TO TCN-02	PAGE 1 OF 1

JOB	Design, Engineering, Manufacturing/ Supply, Erection, Commissioning, Handing over, etc of CW Treatment Plant Package For 2x500 MW Units at Sagardighi STPP, WB.
TENDER NO	PSER:SCT:SDG-M1349:12.

SL NO	CLARIFICATION/ AMENDMENT/ MODIFICATION	
<b>1.0</b>	<b>VOLUME-II</b>	
	<b>QUERY</b>	<b>CLARIFICATION/ AMENDMENT/ MODIFICATION</b>
1.1	Unloading of the material at site.	As per tender, ie included in scope of bidder.
1.2	Store requirement for material at BHEL site by us.	As per tender, ie included in scope of bidder.
1.3	Make-Up Water Analysis	Make up water analysis is enclosed as ANNEXURE-B.
1.4	Intend COC to be considered to design recirculating water operating key parameters.	The COC of the system shall be 5. The same has been already indicated in serial number 3.0 “CAPACITY SELECTION”, page number 14 of the technical specification PE-TS-373-156-A001.
1.5	Scope of Supply of Chlorination Plant as under Civil Scope of Work in Section C1 of tender specification it has been mentioned supply of equipment for Chlorination plant is under bidder scope but P&I diagram and others engineering details not mentioned any where in Tender.	Reference clause number D, serial number – 1, page number – 10, line number 4 of technical specification PE-TS-373-156-A001:- “Chlorination Plant shall be in scope of bidder.” shall be read as “CW treatment Plant shall be in scope of bidder.”.
<b>2.0</b>	<b>General</b>	
2.1	Bidder shall submit offer strictly in compliance with technical specification and tender terms along with amendment/ clarifications issued till date within the due date.	
2.2	All other terms & conditions shall remain unchanged.	

**EXPECTED CLARIFIED WATER ANALYSIS**

SI.No.	Constituents	As	Analysis
1.	Calcium	CaCO <sub>3</sub>	106.25 ppm
2.	Magnesium	CaCO <sub>3</sub>	52.00 ppm
3.	Sodium & Potassium	CaCO <sub>3</sub>	138.00 ppm
4.	Hydrogen (FMA)	CaCO <sub>3</sub>	-
	Total Cations	CaCO <sub>3</sub>	296.25 ppm
5.	Bicarbonates	CaCO <sub>3</sub>	190.75 ppm
6.	Carbonates	CaCO <sub>3</sub>	-
7.	Chloride	CaCO <sub>3</sub>	48.00 ppm
8.	Sulphate	CaCO <sub>3</sub>	57.50 ppm
9.	Nitrate	CaCO <sub>3</sub>	-
	Total Anions	CaCO <sub>3</sub>	296.25 ppm
10.	M.O. Alkalinity	CaCO <sub>3</sub>	190.75 ppm
11.	P. Alkalinity	CaCO <sub>3</sub>	-
12.	Total Hardness	CaCO <sub>3</sub>	158.25 ppm
13.	Carbon-di-oxide	CO <sub>2</sub>	8.67
14.	Dissolved Silica	SiO <sub>2</sub>	20 ppm
15.	pH Value	-	7.6 – 7.8
16.	Turbidity, NTU	-	15

NOTE : This analysis has been arrived based on design dosage rates for chemicals as follows :

- ALUM - 50 ppm
- LIME - 15 ppm
- CHLORINE - 5 ppm

**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, Handing over, etc of CW Treatment Plant Package For 2x500 MW Units at Sagardighi STPP, WB.	
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	4.0	BHEL's TCN-02, vide reference no PSER:SCT:SDG-M1349:TCN-02, dated 01-06-2012.
	5.0	Other references (if any).

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)