



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN - 04

Ref: PSER:SCT:DPL-M1300:TCN-04

Date: 17/02/2012

Sub	Tender change notice (TCN) 04	
Job	PACKAGE-1 : Design, Fabrication , Manufacturing , Inspection and Testing , Painting , Supply / Delivery duly packed at project site including Freight , Including supply of consumables , Start up & commissioning spares , Special tools & tackles for maintenance for Cooling Water Treatment Plant at 1X250 MW Extension Unit no. 8 , Durgapur . PACKAGE-2 : Design , Fabrication , Manufacturing , Inspection and Testing , Painting , Supply / Delivery duly packed at project site including freight including supply of consumables, start up & commissioning spares , special tools & Tackles for maintenance for CW chlorination plant , at 1X250 MW Extension Unit no. 8 , Durgapur.	
Ref	1.0	Tender no PSER:SCT:DPL-M1300:11
	2.0	BHEL's NIT, vide ref no PSER:SCT:DPL-M1300 :12 Dated 21/12/2012
	3.0	BHEL's TCN-01 , vide ref no PSER:SCT:DPL-M1300:TCN-01 Dated 30/01/2012
	4.0	BHEL's TCN-02 , vide ref no PSER:SCT:DPL-M1300:TCN-02 Dated 06/02/2012
	5.0	BHEL's TCN-03 , vide ref no PSER:SCT:DPL-M1300:TCN-03 Dated 15/02/2012
	6.0	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 BHEL clarification to bidders query is attached as per Annexure-A to TCN-04.
- 2.0 Revised 'No deviation certificate' is attached. Bidder to submit 'No deviation certificate' as per attached Format only.
- 3.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

ENGR (SCT)

Encl

- 1.0 BHEL clarification : Annexure-A to TCN-04
- 2.0 Revised 'No deviation certificate' format.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

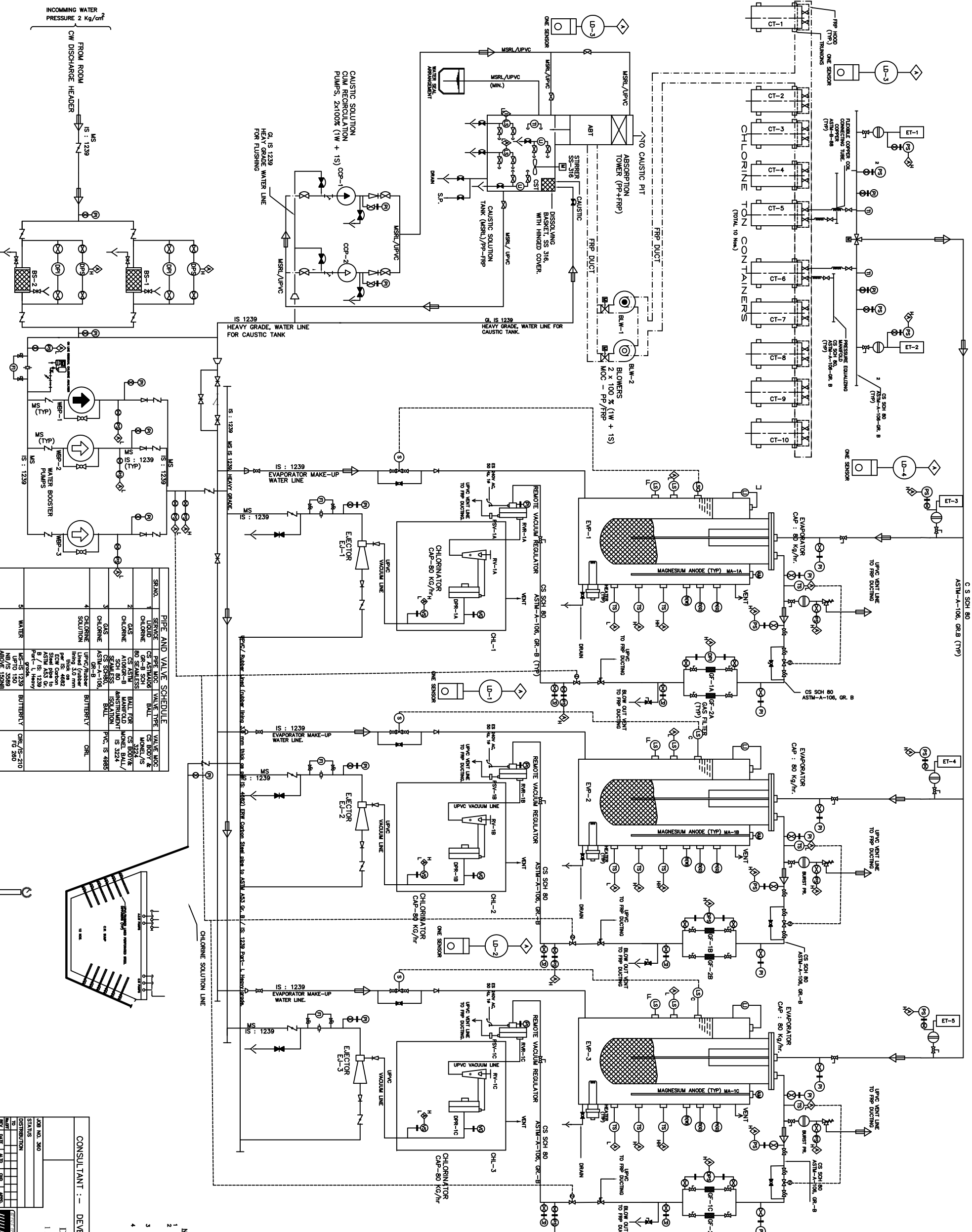
POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211798/ 1691

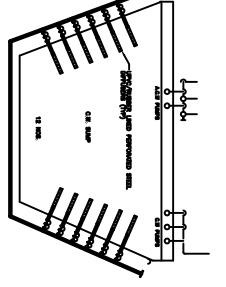
Tender no PSER:SCT:DPL-M1300:12
BHEL Clarification : Annexure-A to TCN-04

Sl. No.	Bidders Queries	BHELs Clarification
01.	The motive water supply pressure for booster pump is mentioned as flooded suction in Data sheet-A and technical spec. but the same is mentioned as 2 Kg/cm ² in the P&ID (PE-DG-360-174-A001). Kindly provide us the actual available pressure & the source of motive water.	Please note that the supply pressure of the Motive water shall be 2kg/cm ² .
02.	There are 4 nos. diffusers indicated in the P&ID vide the no. PE-DG-360-174-A001 , but in the plot plan the nos. of CW pump house is mentioned as five (nos) . Kindly clarify the nos. of diffusers to be considered.	The number of Diffusers indicated in the Revised P&ID enclosed below are minimum only. The final quantity of diffuser shall be decided during detail engineering.



PIPE AND VALVE SCHEDULE

S.NO.	SERVICE	PIPE MOC	VALVE TYPE	VALVE MOC
1	LIQUID CHLORINE	CS ASTA106	BALL	CS BODY & HOUSING
2	GAS CHLORINE	CS ASTA106	BALL FOR MANIFOLD INSTRUMENT	CS BODY & HOUSING
3	GAS CHLORINE	CS SCH 80	BALL	CS BODY & HOUSING
4	CHLORINE SOLUTION	UPVC	BUTTERFLY	GRG
5	WATER	MS-1239	BUTTERFLY	CRU/IS-210
6	CAUSTIC SOLUTION	MS-1239	DIAPHRAGM	CRU/PP
7	SOLUTION	MS-1239	DAMPER	PP+FRP
8	CHLORINE VENT	PVC, IS 4386	CLASS-1/	



LEGEND

FC	FLOW CONTROL VALVE
SV	NEEDLE VALVE AS PER IS 3224 / BS 341
CV	BALL VALVE AS PER RECOMMENDATIONS OF CHLORINE INSTITUTE
DV	DIAPHRAGM VALVE
GV	GATE VALVE
NRV	NON-RETURN VALVE
MOV	MOTOR OPERATED BALL VALVE
PRV	PRESSURE REDUCING VALVE
RV	VALVES AS PER RECOMMENDATIONS OF CHLORINE INSTITUTE IS3224/BS 341.
Y	Y-TYPE STRAINER
3W	3-WAY ROTORIZED PLUG VALVE
S	SOLENOID VALVE
RVR	REMOTE VACUUM REGULATOR
BST	BASKET TYPE STRAINER (BS)
PSV	PRESSURE SAFETY VALVE
RV	RAVE VALVE
FI	FLOW INDICATOR (ROTAMETER)
TIO	GAS TEMPERATURE INDICATOR
DPR	DIFFERENTIAL PRESSURE REGULATOR
PI	GAS PRESSURE INDICATOR
PLD	CHLORINE LEAK DETECTOR
FC	FLANGE CONNECTION
PS	PRESSURE SWITCH
WTI	WATER TEMPERATURE INDICATOR
PI	PRESSURE INDICATOR
VG	VACUUM GAUGE
LI	LEVEL INDICATOR
N	BUTTERFLY VALVE
TS	TEMPERATURE SWITCH
NC	INDICATES NORMALLY CLOSED VALVE
ALH	ALARM HIGH
ALL	ALARM LOW
AM	AMMETER
SP	SAMPLE POINT
GF	GAS FILTER
VS	VACUUM SWITCH
PPS	DIFFERENTIAL PRESSURE SWITCH
DDPI	DIFFERENTIAL PRESSURE INDICATOR
HE	HEATER
CHL	CHLORINATOR
EJ	EJECTOR
EVP	EVAPORATOR
WBP	WATER BOOSTER PUMP
AST	ABSORPTION TOWER
COP	CAUSTIC SOLUTION CUM RECIRCULATION PUMP
BLW	BLOWER
CT	CHLORINE TON CONTAINERS

- NOTES :**
1. ALL DRAIN SHALL BE LED TO STORM WATER DRAIN.
 2. ALL VALVES (GAS UNDER PRESSURE AND LIQUID CHLORINE UNDER PRESSURE) SHALL BE AS PER RECOMMENDATIONS OF CHLORINE INSTITUTE.
 3. CONTROLS AND INTERLOCK SHOW ARE IN LINE WITH THE REQUIREMENTS MENTIONED IN THE DESIGN PHILOSOPHY.
 4. ALL CHLORINE TON CONTAINERS SHALL BE PARTIALLY COVERED BY FRP HOOD.

CONSULTANT :- DEVELOPMENT CONSULTANT PVT. LTD.

DURGAPUR PROJECTS LIMITED
1 X 250 MW DURGAPUR PROJECTS POWER STATION

PROJECT INFORMATION

PROJECT NO. 300
STATUS: []
DISTRIBUTION: []
REV: []
DATE: []

PROJECT MANAGEMENT

PROJECT ENGINEER: []
DESIGNER: []
CHECKER: []
DATE: []

THE P&I DIAGRAM FOR CW CHLORINATION AND ABSORPTION SYSTEM

SCALE: []
DRAWING NO.: []
REV: []

**FORMAT FOR NO DEVIATION CERTIFICATE
FOR PACKAGE –A (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	PACKAGE-1 : Design, Fabrication , Manufacturing , Inspection and Testing , Painting , Supply / Delivery duly packed at project site including Freight , Including supply of consumables , Start up & commissioning spares , Special tools & tackles for maintenance for Cooling Water Treatment Plant at 1X250 MW Extension Unit no. 8 , Durgapur . PACKAGE-2 : Design , Fabrication , Manufacturing , Inspection and Testing , Painting , Supply / Delivery duly packed at project site including freight including supply of consumables, start up & commissioning spares , special tools & Tackles for maintenance for CW chlorination plant , at 1X250 MW Extension Unit no. 8 , Durgapur.	
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	7.0	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)

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