भारत हेवी इलेक्ट्रिकल्स लिमिटेड
(भारत सरकार का उपक्रम)
BHARAT HEAVY ELECTRICALS LIMITED
(A Govt. of India Undertaking)

TCN - 01

Ref: PSER:SCT:TSL-T1811:TCN-01 Date: 17-02-2017

Sub	Tender Change Notice (TCN)- 01.	
Job	Handing & Receipt of Materials from TSL Material Stores/Works, Transportation to Erection Site, Unloading, Pre-Assembly as required, Erection, Alignment, Welding, Pre-Commissioing, Commissioing, Final Painting and Handing Over to BHEL/Owner 1x40MW STG set with associated Electrical and C&I Works of 1x40MW Captive Power Plant for CDQ-10&11 at TSL, Jamshedpur, Dist-Singbhum (East), Jharkhand.	
Ref	1.0	Tender no PSER:SCT:TSL-T1811:17.
	2.0	BHEL's NIT, vide reference no PSER:SCT:TSL-T1811:5476 Date: 10-02-2017
	3.0	Other References, if any.

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

1. Addendum of TCC attached vide Annexure-A to TCN-01.

2. Revised `No deviation certificate' is attached. Bidder to submit `No deviation certificate' as per attached format only.

3. All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

Sr.Engineer (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 : 2339 8000

JOB	Handing & Receipt of Materials from TSL Material Stores/Works, Transportation to Erection Site, Unloading, Pre-Assembly as required, Erection, Alignment, Welding, Pre-Commissioing, Commissioing, Final Painting and Handing Over to BHEL/Owner 1x40MW STG set with associated Electrical and C&I Works of 1x40MW Captive Power Plant for CDQ-10&11 at TSL, Jamshedpur, Dist-Singbhum (East), Jharkhand.
TENDER NO	PSER:SCT:TSL-T1811:17.

ADDED/MODIFIED TERMS	
SL NO	**DESCRIPTION**
1.0	All Engineer/supervisor/workers of contractor must have Aadhar card for the issuing of gate pass for working inside Tata Steel project premises along with the following details: a. Agency PAN no. b. Agency Account no. c. Police verification/ Passport for each worker d. 3nos. photograph e. Safety training f. Issue of safety card g. Issue of Photo gate pass
2.0	The contractor shall arrange suitable vehicle for the worker for movement to/inside the project and by-cycle is prohibited for this purpose.
3.0	The Tools & Plants deployed shall have following documents,as applicable : a. Valid RTO papers b. Fitness certificate c. Eye test certificate d. Valid DL & PUC e. Third party test certificate
4.0	To identify the safety need training requirement, Educational certificate to be available with each person of contractor involved in the work.
5.0	Due to heavy weight of Surface Condenser (in assembled condition weighing approx 80MT) and Generator Transformer, These equipment shall be unloaded directly at site and shifted to the foundations.
6.0	Unloading of Surface Condenser and Generator Transformer at site shall be in successful vendor's scope.
7.0	The contractor shall do the necessary arrangement of rails, platform, jacks etc. for dragging/shifting of the surface condenser to the foundation.
8.0	Use of Hydra cranes is prohimited at site.In place of hydra Escort make F15 cranes or its equivalent is to be used where ever required.
9.0	Application of fire sealing shall be successful vendor's electrical/C&I scope as per the following details:
10.1	**Fire Break Coating (Rated for 30 minutes)** - 300 Sq meters (i.e 750 liters / 900 kgs) Required for HT/LT Power cables -- To be used on the outer surface of cables either by using spray gun or by paint brush as recommended by manufacturer.
10.2	Stop Compound -- Mortar Seal (Rated for 2 hours) - 300 Sq meters (i.e 19500 kgs) Required for (i) Sealing of cable entry into cellar/any other building, normally when cable passes through the conduits into a building from outdoor trench, Both ends of conduits are required to be sealed by using this material. (ii) Sealing of all sides of future floor cut-outs covered with chequered plates.
11.0	Terminal point details is attached at Annexure-B.
12.0	Site weld data is attached at Annexure-C however this is for tender purpose and actual no. of joints may vary.No compensation is payable for variation in the number of joints.

SPECIFICATION. NO	TATA CONSULTING ENGINEERS LIMITED	SECTION: C14
TCE.7742B-C-540-001	1 X 40 MW CAPTIVE POWER PLANT FOR CDQ 10&11 TATA STEEL LIMITED, JAMSHEDPUR TERMINAL POINTS	SHEET 1 OF 5

TERMINAL POINTS

MECHANICAL

The following will be considered as terminal points with respect to:

SL. NO.	ITEM		DESCRIPTION
1.0	Main HP Steam line		Main steam line terminal point will be at 5 m Outside power house building (A row). Rated steam parameters at turbine inlet will be: Pressure 53.03 kg/ cm2 (a), Temperature 485 +/-5 deg.C, Flow -145 TPH.
2.0	Condensate water line from CEP discharge		Condensate water line from CEP discharge will be terminated at individual inlet flange of DM water storage tank located at CDQ boiler 10 , CDQ boiler 11 area (60 m^3/hr , 2 kg/ cm^2 (a), Temperature 46 deg.C) and CDQ 5/6/7 area (25 m^3/hr, 2 kg/ cm^2(a) ,Temperature 46 deg.C). 3" size Sch 40 ASTM A106 Gr.B pipe around 850 m length will be considered for transporting condensate upto CDQ 5/6/7 DM water tank.
3.0	Vent		To atmosphere at 3m above TG building roof
4.0	Drains		All drain will be terminated to the nearest drain at S 95.969 & E 315.525 by CONTRACTOR.
5.0	DM water for hotwell initial filling , hot well level control and DMCW overhead tank initial fill and make up		Will be provided at one take of point near S 450 & E 450.
	DM water for emergency make-up during turbine trip condition		5M outside TG Building including control/isolation valves nd fittings, as indicated Sections C5 & C6

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6.0	Instrment air/ Service air		At outlet flange of air receiver to be located inside power house building.
7.0	Clarified water for cooling tower make up, TG & other building floor cleaning purpose		Will be provided at one point near power plant at E 346, S 165
8.0	Potable water		Will be provided at one take of point near power plant at S 160 & E 340.
9.0	Cooling tower blowdown water		Blowdown water will be disposed to nearest drain which leads to upper cooling pond at S 95.969 & E 315.525.
10.0	Plant effluent water		Oily effluent to be temporarily disposed at nearest pit. Oily effluents from these sumps to be disposed to trucks by sump pumps.
11.0	Cooling tower riser pipe		At 1m elevation from finished grade level will be under CONTRACTOR's scope.

General:

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1.0	Final Connection at Terminal Points		a) At all terminal points, whether at equipment or pipe lines, it is the CONTRACTOR's responsibility to supply all necessary jointing materials and make the final connections at the terminal points. b) At all terminal points, CONTRACTOR will supply the counter flanges together with necessary gaskets, nuts, bolts etc. c) All terminal connections will be made by the CONTRACTOR unless otherwise stated in this specification. d) All terminal points of utilities, isolation valve/PT/TT/FT is in CONTRACTOR's scope.

Electrical System

The terminal points of Electrical system are:-

1.0	Generator transformer	At the 33kV bushing and cable box
2.0	CDQ-11 6.6kV HT switchboard spare feeder located at ECR-11 building	At the spare feeder outgoing terminal of CDQ-11 HT switchboard at ECR-11 building.
3.0	Cooling Tower MCC	At the incomer of the CT MCC.
4.0	415V Switchgear	At the panel incomer/motor terminal of the respective equipment supplied by others – HVAC, Lighting, EOT, Lift, Compressed air system, DG set terminals, misc. Drain & sump pumps, etc.
5.0	Cable tray	From power plant upto TOP-11-4 is in scope of CONTRACTOR (The CONTRACTOR will include about 800m length of cable trays with support structures beyond TOP-11-4. Those trays will be manufactured, supplied, installed and commissioned by the CONTRACTOR based on the engineering dwgs of the OWNER)

Instrumentation & Control system

SPECIFICATION. NO	TATA CONSULTING ENGINEERS LIMITED	SECTION: C14
TCE.7742B-C-540-001	1 X 40 MW CAPTIVE POWER PLANT FOR CDQ 10&11 TATA STEEL LIMITED, JAMSHEDPUR TERMINAL POINTS	SHEET 4 OF 5

SL. NO.	ITEM	DESCRIPTION
1.0	STG DCS signal exchange with control system of CDQ 10, CDQ11, CDQ 5, 6,7 through STG DCS RIO	CONTRACTOR terminal point will be at the RIO of CDQ 10, CDQ11 & CDQ 5, 6, 7 electronic panel room respectively. The supply & erection of redundant FO cable with accessories required in between STG DCS and the above RIOs will be in STG CONTRACTOR's scope.
2.0	STG DCS redundant communication link with control system of CDQ 10 & CDQ11	CONTRACTOR terminal point will be at the control system panel of CDQ 10 & CDQ11 located at their respective control rooms. Required redundant FO cable & accessories and laying will be in STG CONTRACTOR's scope.
3.0	STG DCS redundant communication link with control system of COB 10 & COB11	CONTRACTOR terminal point will be at the control system panel of COB 10 & COB11 located at their respective control rooms. Required redundant FO cable & accessories and laying will be in STG CONTRACTOR's scope.
4.0	STG DCS connected with the existing Fuel monitoring system (FMD), Waste management system (WMD), Electrical monitoring system, Pollution monitoring system (PMS) through redundant communication link	CONTRACTOR terminal point will be at the control system panel of existing Fuel monitoring system (FMD), Waste management system (WMD), Electrical monitoring system, Pollution monitoring system (PMS) located at their respective rooms. Required redundant FO cable & accessories and laying will be in STG CONTRACTOR's scope.
5.0	Termination of control & signal cables from Compressed air, CW & IDCT system and HVAC system.	CONTRACTOR terminal point will be at STG DCS. Cables from the packaged sytems will be in Client / other package supplier's scope.

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6.0	STG DCS communication link with compressor PLC.		CONTRACTOR terminal point will be at STG DCS. Required communication ports will be made available by the CONTRACTOR. Cables from the packaged sytems will be in Client / other package supplier's scope.
7.0	Master Clock signal		Master clock system is in CONTRACTOR scope. Required ports for CDQ-10, 11, and other package control systems as per TS will be in STG CONTRACTOR's scope. However cable from Master clock system to other control system will be supplied by Client / other package supplier.

FILE NAME:

Proprietary rights of the information contained herein belong to Tata Consulting Engineers Limited (TCE). This information is intended to be used for the mentioned purpose/project only. In case of misuse of information and any claim arising thereof, cost and consequence will be on the party misusing the information.

ISSUE R1

SITE WELD DATA

FA001

TATA STEEL

PIPING

WO : 10193000

MATERIAL	SIZE in	SCHEDULE	NO OF WELDS
MATERIAL		SCHEDULE	NO OF WELDS
IBR			
A106GrB	4	40	20
A106GrB	1.5	80	40
A106GrB	1	80	50
A106GrB	.5	80	25
NON-IBR			
A106GrB	12	30	30
A106GrB	10	30	35
A106GrB	8	20	35
A106GrB	6	40	150
A106GrB	4	40	200
A106GrB	3	40	225
A106GrB	2	40	100
A106GrB	1.5	80	25
A106GrB	1	80	350
A106GrB	.75	80	35
A106GrB	.5	80	12790
A106GrB	.25	80	60
A335GrP11	6	40	75
A335GrP11	4	40	60
A335GrP11	3	40	60
A335GrP11	2	40	10
A335GrP11	1	80	75
SS	4	10	80
SS	3	10	80
SS	2	10	65
SS	1.5	40	50
SS	1	40	460
SS	.75	40	75
SS	.5	40	200
SS	.25	40	100

PIPING & LAYOUTS GROUP	PREPARED	CHECKED	APPROVED	DOC NO : 4-313-01-11284	
POWER PLANT ENGINEERIN	BALAJIC	S J HUSSAIN	MAH	Page 1 of 1	21-NOV-16

NOTE : THIS DOES NOT INCLUDE STUB WELDING

ANNEXURE - 2

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	Handing & Receipt of Materials from TSL Material Stores/Works, Transportation to Erection Site, Unloading, Pre-Assembly as required, Erection, Alignment, Welding, Pre-Commissioing, Commissioing, Final Painting and Handing Over to BHEL/Owner 1x40MW STG set with associated Electrical and C&I Works of 1x40MW Captive Power Plant for CDQ-10&11 at TSL, Jamshedpur, Dist-Singbhum (East), Jharkhand.	
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	3.0	BHEL's TCN-01, vide reference no PSER:SCT:TSL-T1811:TCN-01 Date: 17-02-2017.
	4.0	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)