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

TCN – 03

Ref: PSER:SCT:NKP-B1744:TCN-03 Date: 30-05-2016

Sub	Tender change notice (TCN) 03	
Job	Erection, Testing and Commissioning of Main Boilers and Auxiliaries covering Structures, Pressure Parts, Rotating Machines, Ducts, ESP, Fuel firing system, Various SG/Critical/Misc. Piping etc. along with integrated Mill Bunker Structures of Unit # 2 including fabrication , erection and painting of Fire Water Storage Tanks at of 3x660 MW North Karanpura Project, Jharkhand.	
Ref	1.0	Tender No. **PSER:SCT: NKP-B1744:16**
	2.0	BHEL's NIT, vide reference no PSER:SCT:NKP-B1744:5029 Date: 20-05-2016
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:NKP-B1744:TCN-01, dated 25-05-2016.
	4.0	BHEL's TCN-02, vide reference no PSER:SCT:NKP-B1744:TCN-02, dated 26-05-2016.
	5.0	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 Clarification to bidder's query as per attached Annexure-A.
2.0 Painting system followed by BHEL-Trichy as attached.
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

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 : 23211691, 23211798, 23211796

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	Erection, Testing and Commissioning of Main Boilers and Auxiliaries covering Structures, Pressure Parts, Rotating Machines, Ducts, ESP, Fuel firing system, Various SG/Critical/Misc. Piping etc. along with integrated Mill Bunker Structures of Unit # 2 including fabrication , erection and painting of Fire Water Storage Tanks at of 3x660 MW North Karanpura Project, Jharkhand.	
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	4.0	BHEL's TCN-02, vide reference no PSER:SCT:NKP-B1744:TCN-02, dated 26-05-2016.
	5.0	BHEL's TCN-03, vide reference no PSER:SCT:NKP-B1744:TCN-03, dated 30-05-2016
	6.0	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)

ANNUXURE-A TO TCN-03

Erection, Testing and Commissioning of Main Boilers and Auxiliaries covering Structures, Pressure Parts, Rotating Machines, Ducts, ESP, Fuel firing system, Various SG/Critical/Misc. Piping etc. along with integrated Mill Bunker Structures of Unit # 2 including fabrication , erection and painting of Fire Water Storage Tanks at of 3x660 MW North Karanpura Project, Jharkhand.

Tender No. PSER:SCT: NKP-B1744:16

Sl No	Reference clause of Tender Document	Existing provision	Bidder's Query	BHEL's clarification
1	Sr. No. 2 of TCN-02 dated: 26.05.2016	____	Sr. No. 2 of TCN-02 dated: 26.05.2016 The response given by BHEL does not cover the enquiry raised. The enquiry is (cleaning by other method?). BHEL may please confirm what specific suitable tool required for cleaning as the cost difference between cleaning by brush and cleaning by tool is too high. Normally the boiler structure supplied by BHEL is having 1 or 2 coats of primer and one coat of finish paint at shop as such we feel that cleaning by tool is not required.	Bidder may decide about the cleaning process as per suitability of the item concerned as well as condition of materials due to weathering. Any specific method of cleaning cannot be identified at the Tendering stage.
2	Sr. No. 14 of TCN-02 dated: 26.05.2016	____	Sr. No. 14 of TCN-02 dated: 26.05.2016 The response given by BHEL does not cover the enquiry raised. Enquiry is "there is no column provided for quoting the rates in words and also there is no space for writing the rates in words in column provided" (copy of the same is enclosed for your ready reference). The excel file which is given by e-procurement site is also protected and for read only. Please note that the rate shall be written in figure only, this may be confirmed.	The rates may be quoted in figures correctly.
3	Sr. No. 17 of TCN-02 dated: 26.05.2016.	____	Sr. No. 17 of TCN-02 dated: 26.05.2016. As you are well aware that manufacturing of welding generator is very limited and moreover in other projects of BHEL the welding rectifier being used, please re-confirm that contractor shall use welding rectifier also.	As per Appendix-III of Tender TCC, deployment scope of Welding Generator by the vendor is both types of "Electric" and "Diesel" and these are mandatorily to be deployed by the agency as per job requirement However, vendor may deploy welding rectifier also in addition to deployment of required number welding generator.
4		____	KrishiKalayan Tax: As per Govt. circular, KrishiKalayan tax @ 0.5% shall be applicable from 1st June 2016. As the tender submission date is 10th June 2016 please confirm that the same shall be paid by BHEL.	Yes . Its payable & shall be reimbursed by BHEL against documentary evidence/proof.

ANNUXURE-A TO TCN-03				
Erection, Testing and Commissioning of Main Boilers and Auxiliaries covering Structures, Pressure Parts, Rotating Machines, Ducts, ESP, Fuel firing system, Various SG/Critical/Misc. Piping etc. along with integrated Mill Bunker Structures of Unit # 2 including fabrication , erection and painting of Fire Water Storage Tanks at of 3x660 MW North Karanpura Project, Jharkhand.				
Tender No. PSER:SCT: NKP-B1744:16				
Sl No	**Reference clause of Tender Document**	**Existing provision**	**Bidder's Query**	**BHEL's clarification**
5	CL. NO. 5.44.23 & APPENDIX-III OF TCC (Induction Heating Machine)	——	As per Clause No. 5.44.23 of TCC (Page No 32 of 90) required numbers of Induction Heating Machines with accessories, Annealing Cables, Compensating Cables, Welding Electrodes for P-91 Welding, Digital Temperature Indicator will be provided by BHEL at free of charges basis. Whereas as per Appendix-III of TCC (Major tools and plants & MMDs to be deployed by the contractor) Induction Heating Machines shall be deployed by contractor.(Page no: 86 of 90) Please confirm that which clause will be applicable for this tender i.e Induction Heating machine shall be deployed by Contractor for P-91 welding or it should be issued to us free of cost basis.	This has been clarified vide TCN-1 to the Tender.
6	CL. NO. 5.10.7 OF TCC (Finish Painting Details for Fire Water Storage Tanks)	——	Total DFT is not matching after adding up the individual DFT of all Primer & Finish Coats for Internal, External & Bottom Plate, Underside Painting of FW Tank. Please confirm the DFT of every coat for Painting Scheme so that Total DFT can be matched after adding up DFT of all Individual Coat.	Specified total thickness of primer and paint (min. 400 micron for internal painting and min. 300 micron for external painting of Tanks) shall be followed by applying suitable no. of coats of Primer and paints. Indicated no of coats and thickness of each coat for primer and paint are the basic minimum requirements.

PAINT SYSTEMS FOLLOWED BY TRICHY

TENDER NO - PSER:SCT:NKP-B1744:16

SINo	Substrate Details	Environment	Paint system	Remarks
01	**Un-insulated components** working temp. **up to 95 °C** Structures, supports, ducts, grating, floor grills, hand rails, posts, ladders, pipes etc	1.Normal Industrial Atmosphere	a) Power tool cleaning b) 1 coat of Red-oxide Zn PO4 IS 12744(30μ) c) 2 Coats of synthetic Enamel IS 2932 (2x20μ) d) Total DFT = 70 μ	**1.Permanently exposed to atmosphere & sun light – Needs Protection against Ultra Violet rays & provide aesthetic value. Hence finish paint is required. Since the hiding power of finish paint is poor, 2 coats is required.**
02	Components insulated and those coming in the gas path.	All Atmospheres	a) Power tool cleaning b) 2 coats of Red-oxide Zn PO4 to IS 12744(2x30μ)	**Needs only temporary protection till erection. No need for finish paint. One coat of primer paint fails in holiday test(pin-holes present).Hence 2 coats of primer required.**
03	Components **un-Insulated**	**All Atmospheres**	**Power tool cleaning Common for all the 3 paints**	# Can be applied over RPF **@ & $** Cannot be applied over RPF. To be removed by blasting or solvent cleaning or by flame heating. **Un-insulated high temperature components need to retain paint film at elevated temperatures. Hence Aluminum paints required. 3 different grades are suggested to reduce cost and meet minimum requirement.**
	# Working temp.from 95 to 200 °C		# 2 coats of General purpose Aluminum Paint to IS 2339(40)	
	@ Working temp. > 200 but < 400 °C		@ 2 coats HR of Aluminum Paint to IS 13183 Gde II (40)	
	$ Working temp. >400 °C		$ 2 coats of HR Aluminium Paint to IS 13183 Gde I (40)	