



# भारत हेवी इलेक्ट्रिकल्स लिमिटेड

( भारत सरकार का उपक्रम )

## BHARAT HEAVY ELECTRICALS LIMITED

( A Govt. of India Undertaking )

**TCN - 02**

Ref: PSER:SCT:NKP-B2125:TCN-02

Date: 27-10-2021

Sub	<b>Tender Change Notice (TCN) - 02.</b>	
Job	Execution of balance work of Erection, Testing & Commissioning of Boiler 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#3 at 3x660 MW North Karanpura Project, Jharkhand.	
Ref	1.0	Tender no PSER:SCT:NKP-B2125:21.
	2.0	BHEL's NIT, vide reference no. PSER:SCT:NKP-B2125:8731 Date: 11-10-2021.
	3.0	BHEL's TCN-01, vide reference no. PSER:SCT:NKP-B2125:TCN-01 Date: 21-10-2021.
	4.0	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.

- Due date of submission of offer was extended from 26-10-2021 to 28-10-2021 (13-00 hrs. IST) by NIC portal's Admin Corrigendum Date Extend Extension.

Due date of submission of offer is extended from 28-10-2021 up to **30-10-2021 (13-00 hrs. IST)**.

- NIT clause 1.0 (vi) is revised as under

vi	<b>OPENING OF TENDER</b>	<b>30-10-2021</b> <b>4 hours after the latest due date and time of Offer submission</b>	<i>Applicable.</i>
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- Clauses of Vol-IF-CML-R-00 (Technical Conditions of Contract) are revised as below: -

Cl. No.	Description	
28.5	<b>Project milestones of unit # 3</b>	
	Milestone	Schedule
28.5.6	Trial run & COD of unit.	23 <sup>rd</sup> month from start of erection.
28.5.7	Work completion including site demobilization	24 <sup>th</sup> month from start of erection.
46.0	<b>COMPLETION PERIOD</b>	
46.1	The entire work of pertaining to scope of contract shall be completed within a period of 24 months (Twenty four months) from the date of start of work, as certified by BHEL site Construction Manager.	

- The clarifications to bidder's queries are attached as Annexure-A to this TCN-02.
- Revised 'No deviation certificate' is attached. Bidder to submit 'No deviation certificate' as per attached format only.
- All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,  
for BHARAT HEAVY ELECTRICALS LTD

Dy. Manager / (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 : (033) 2339 8000

**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	Execution of balance work of Erection, Testing & Commissioning of Boiler 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#3 at 3x660 MW North Karanpura Project, Jharkhand.	
Ref	1.0	Tender no PSER:SCT:NKP-B2125:21.
	2.0	BHEL's NIT, vide reference no. PSER:SCT:NKP-B2125:8731 Date: 11-10-2021.
	3.0	BHEL's TCN-01, vide reference no. PSER:SCT:NKP-B2125:TCN-01 Date: 21-10-2021.
	4.0	BHEL's TCN-02, vide reference no. PSER:SCT:NKP-B2125:TCN-02 Date: 27-10-2021.
	5.0	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

फैक्स/Fax : (033) 23211960 फोन/Phone : बोर्ड/EPABX : 033-2339 8000



Job: Execution of balance work of Erection, Testing & Commissioning of Boiler 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#3 at 3x660 MW North Karanpura Project, Jharkhand.

Tender no. PSER:SCT:NKP-B2125:21.

TCN-02 (ANNEXURE-A)

Sl. No.	Reference Clause of Tender Document	Existing Provision	Bidder's Query	BHEL's Clarification
1	DETAILED SCOPE OF WORK, Cl. No. 5.0 of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	<p>The scope of work under this contract covers balance work of Erection, Testing, commissioning of Boiler and Auxiliaries covering Structures, Pressure Parts, Rotating machines and ducts, ESP, various SG/Critical / misc. piping etc. of Unit no # 3 with integrated Mill Bunker Structures.</p> <p>.....</p> <p>All balance work of the partly erected system/components including rectification/ modification (if any), commissioning, painting, punch point liquidation etc. is included in the scope of this tender and this shall be carried out by the contractor within his quoted price.</p> <p>.....</p> <p>Tentative scope of balance work for U#3 Boiler &amp; Auxiliaries is enumerated in Appendix- VI for brief overview of bidders.</p>	Please provide PGMA wise detail of Balance work in MT to have the better understanding and estimation of balance work.	Bidder may refer Appendix-I of TCC. For further clarification and better understanding, bidder should visit North Karanpura site to get himself apprised about the detailed status of the work already executed and the balance work to be carried out by them for completion of Boiler & Auxiliaries package of U#3 in all respect.
2	SERVICES TO BE RENDERED BY THE BIDDER, Cl. No.7.1 of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	Issuing materials from store/open yard as specified earlier from time to time for erection as per the construction programme. The contractor shall be the custodian of all the materials issued till the plant/equipment is officially taken over by the owner/ BHEL after complete erection any successful trial run & commissioning.	There are lacs of items needed for erection and completion of system. It is not pragmatically feasible for a sub-contractor to keep tab over entire items across the system while all the major security is with Customer. Therefore, Vendor responsibility should be limited to general watch & ward and in case of any missing/theft, only FIR/Informative at Police station has to be lodged. No financial implication should be there.	As per Tender



Job: Execution of balance work of Erection, Testing & Commissioning of Boiler 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#3 at 3x660 MW North Karanpura Project, Jharkhand.

Tender no. PSER:SCT:NKP-B2125:21.

TCN-02 (ANNEXURE-A)

Sl. No.	Reference Clause of Tender Document	Existing Provision	Bidder's Query	BHEL's Clarification
3	COMPUTER INFRASTRUCTURE, Cl. No.29.1 of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	<p>Additionally, The bidder will have to provide &amp; install 1(one) no. PC (multimedia PC work station Intel i7 or above, 1TB HDD, 8 GB RAM) of HCL/ COMPAQ/ ZENITH or equivalent make with window 10 (professional) O/S and required software like MS Office 2013 Professional with 1(one) no color printer compatible for A3 size printing (ink/cartridge for which to be supplied by contractor as and when required) with power backup at places, as per instruction of BHEL for exclusive use of BHEL. These computer/ printer shall remain contractor's property and they will be allowed to take out the same after completion of original contract period. The contractor shall provide data / information etc in prescribed formats for periodical updating of the progress reports, material management reports, updating of network pertaining to the contractor's scope of work etc. The contractor shall also provide one (1) no. computer operator and one (1) number service staff for miscellaneous service for BHEL's use at site/ PSER HQ for reconciliation, progress review &amp; day-to-day planning purpose, documentation etc. These facilities are to be provided within 30 days from LOI date till scheduled completion period. If contractor fails to provide computer/ printer or personnel as per requirement, for a continuous period of fifteen days or more, BHEL shall have the right to deduct the amount as per following rates on pro-rata basis, from contractor's RA bill or any other dues.</p>	<p>Services should be considered to deploy from zero date/official date of start of work, not from 30 days from LOI since without revenue generation it would be additional burden on vendor to provide services.</p>	As per Tender
4	TERMS OF PAYMENT: Stages of payment: Cl. No. 51.6.13 (Finish Painting), Cl. No. 51.7.12 (Finish Painting) & Cl. No. 51.8.13 (Finish Painting) of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	As per respective clauses of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	<p>Payment should be released on Prorate basis to maintain requisite cash flow, not at once on completion of entire work.</p>	As per Tender



Job: Execution of balance work of Erection, Testing & Commissioning of Boiler 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#3 at 3x660 MW North Karanpura Project, Jharkhand.

Tender no. PSER:SCT:NKP-B2125:21.

TCN-02 (ANNEXURE-A)

Sl. No.	Reference Clause of Tender Document	Existing Provision	Bidder's Query	BHEL's Clarification
5	TERMS OF PAYMENT: Stages of payment: Cl. No. 51.6.17 (Completion of all contractual Obligation and de mobilization of site office) of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	As per relevant clause of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	Please clarify what activity constitute of Contractual obligation & Demobilization of site.	Completion of Contractual Obligation means completion of facilities and handing over the package to BHEL/ Customer
6	TERMS OF PAYMENT: Stages of payment: Cl. No. 51.8.5 (Gas tightness test of ESP), 51.8.6 (Gas distribution test of ESP), 51.8.7 (Comm. of collecting rapping sys), 51.8.8 (Comm. of emitting rapp. Sys.) & 51.8.9 (Charging of all fields of ESP) of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	As per respective clauses of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	Payment should be released on Prorate basis (Pass Wise) to facilitate work progress and requisite Cash flow.	As per Tender
7	TERMS OF PAYMENT: Cl. No. 51.8 [The accepted rates per MT of ESP group ( Group VI) shall be distributed in the following manner for releasing payments against RA bills:] of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	As per relevant clause of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	Milestone payment should be limited to 15% maximum as eeping 25% will affect cash flow because after deducting 5% Retention, 2 % TDS, 1 % BOCW, revenue generation will be lower side in correspondent to expenses at site. Therefore %age allocated or GD Test-5%, Comm. Of Collecting — 1% & Emitting system-2 % should be deleted and merge it to Alignment and Welding %age. Full load and Coal Firing should be limited to 2 % instead of 3% and club it to GTT.	As per Tender



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Tender no. PSER:SCT:NKP-B2125:21.

TCN-02 (ANNEXURE-A)

Sl. No.	Reference Clause of Tender Document	Existing Provision	Bidder's Query	BHEL's Clarification
8	TERMS OF PAYMENT: Cl. No. 51.9.6 [Synchronisation & Coal Firing], Cl. No. 51.9.7 [Trial Operation] & Cl. No. 51.9.8 [Finish painting] of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	As per respective clauses of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	Activities like Synchronization & Coal Firing, Trail Operation and Finish Painting is linked to work of Insulation. Therefore these %age should be clubbed with 51.9.3 for proper cash flow during execution time.	As per Tender
9	Induction Welding machines: Sl. No. 7 of APPENDIX – II of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	DESCRIPTION & CAPACITY OF T&P: Induction Welding machines QTY: As reqd. REMARKS: On sharing basis as per requirement	We understand that it will be provided along with requisite accessories like Annealing Cable etc. Please clarify.	Annealing Cable & other requisite accessories for Induction Welding Machines will be issued by BHEL free of cost.
10	Huck Bolting Machine: Sl. No. 8 of APPENDIX – II of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	DESCRIPTION & CAPACITY OF T&P: Huck Bolting Machine QTY: As reqd. REMARKS: On sharing basis as per requirement	It must be provided brand new lfirst time as usually M/s BHEL provide old working machines which frequently get break down Land further its repair is in Vendor scope which costs time consumption and loss of requisite productivity or M/s BHEL take responsibility of initial three months maintenance from date of issuance.	Huck Bolting Machine will be issued to bidder as per availability at site. Spares for Operation & Maintenance will be issued by BHEL free of cost.
11	CRANE DEPLOYMENT OF 150/80/40 Ton: MAJOR TOOLS AND PLANTS & MMDs TO BE DEPLOYED BY THE CONTRACTOR FOR UNIT#3, APPENDIX – III of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	As per respective clauses of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	M/s BHEL should allocate some payment on its mobilization to ensure cash flow which indeed helps initial mobilization and good productivity.	As per Tender



Job: Execution of balance work of Erection, Testing & Commissioning of Boiler 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#3 at 3x660 MW North Karanpura Project, Jharkhand.

Tender no. PSER:SCT:NKP-B2125:21.

TCN-02 (ANNEXURE-A)

Sl. No.	Reference Clause of Tender Document	Existing Provision	Bidder's Query	BHEL's Clarification
12	CRAWLER CRANE OF 80/100 Ton: MAJOR TOOLS AND PLANTS & MMDs TO BE DEPLOYED BY THE CONTRACTOR FOR UNIT#3, APPENDIX – III of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	As per relevant clause of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	Please consider 75 Ton instead of 80 Ton. The purpose of deployment of 80 Ton can be well discharged by 75 Ton also	75 Ton Crane is also acceptable to BHEL instead of 80 Ton Crane.
13	DG set , Cl. No. A (TOOLS & PLANTS) of Appendix-III of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	DESCRIPTION OF EQUIPMENT: DG set CAPACITY: 550 KVA MINIMUM QUANTITY: 1 set	The requirement can be well managed with 250 KVA. Therefore, PI make it 550/250 KVA.	Bidder to deploy DG set of capacity 200kVA or above as per site requirement and instruction of BHEL engineer.
14	PAUT Machine , Cl. No. A (TOOLS & PLANTS) of Appendix-III of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	DESCRIPTION OF EQUIPMENT: PAUT Machine CAPACITY: As reqd. MINIMUM QUANTITY: Minimum 01 no (As per requirement and instruction of BHEL engineer)	Please provide the machine at free of charge to ensure proper Quality on instantaneous.	As per tender



Job: Execution of balance work of Erection, Testing & Commissioning of Boiler 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#3 at 3x660 MW North Karanpura Project, Jharkhand.

Tender no. PSER:SCT:NKP-B2125:21.

TCN-02 (ANNEXURE-A)

Sl. No.	Reference Clause of Tender Document	Existing Provision	Bidder's Query	BHEL's Clarification
15	DETAILED SCOPE OF WORK, Cl. No. 5.0 of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	The scope of work under this contract covers balance work of ..... .....the same will be executed/rectified by the bidder at free of cost. No further additional claim in this regard will be entertained. Tentative scope of balance work for U#3 Boiler & Auxiliaries is enumerated in Appendix- VI for brief overview of bidders.	Please Provide Total area wise Joint detail comprising of completed and balance.	Status of Miscellaneous Joints:  Pressure Parts: Scope: 50896, Completed:7860  Trim Piping: Scope: 3926, Completed:0 (Zero)  Soot Blower: Scope: 1300, Completed:0 (Zero)  Critical Piping: Scope: 8378, Completed:0 (Zero)
16	Crawler crane, Cl. No. A (TOOLS & PLANTS) of Appendix-III of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	DESCRIPTION OF EQUIPMENT: Crawler crane CAPACITY: 150 T MINIMUM QUANTITY: 01(One) no. (Within 30 days of LOI or within 15 days from instruction of BHEL engineer, whichever is later)	Since more than 20,000 MT materials have already been erected, in our opinion, the requirement of this crane may be subjected to requirement at site, and not compulsion.	As per tender
17	Crawler cranes, Cl. No. A (TOOLS & PLANTS) of Appendix-III of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	DESCRIPTION OF EQUIPMENT: Crawler cranes CAPACITY: 80 / 100 T MINIMUM QUANTITY: 02 (Two) nos . (1st Within 30 days of LOI or within 15 days from instruction of BHEL engineer, whichever is later. 2nd- As per as per requirement and instruction of BHEL engineer )	Since more than 20,000 MT materials have already erected, in our opinion, the requirement of both these cranes may be subjected to requirement at site, and D5 not compulsion.	As per tender



Job: Execution of balance work of Erection, Testing & Commissioning of Boiler 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#3 at 3x660 MW North Karanpura Project, Jharkhand.

Tender no. PSER:SCT:NKP-B2125:21.

TCN-02 (ANNEXURE-A)

Sl. No.	Reference Clause of Tender Document	Existing Provision	Bidder's Query	BHEL's Clarification
18	Tyre mounted/Crawler cranes with telescopic boom/lattice boom, Cl. No. A (TOOLS & PLANTS) of Appendix-III of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	DESCRIPTION OF EQUIPMENT: Tyre mounted/Crawler cranes with telescopic boom/lattice boom CAPACITY: 40 T MINIMUM QUANTITY: 02 (Two) nos (1st Within 30 days of LOI or within 15 days from instruction of BHEL engineer, whichever is later. 2nd- As per as per requirement and instruction of BHEL engineer )	Since more than 20,000 MT materials have already been erected, in our I opinion, the requirement of these cranes may be subjected to requirement at site, and not compulsion. Also, the minimum requirement should be 1 no.	As per tender
19	Pick & carry tyre mounted mobile crane, Cl. No. A (TOOLS & PLANTS) of Appendix-III of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	DESCRIPTION OF EQUIPMENT: Pick & carry tyre mounted mobile crane CAPACITY: 10 T/12 T/14 T MINIMUM QUANTITY: 14 (Fourteen ) nos (2 nos within 30 days of LOI next -8 nos progressively within 180 days as per instruction of BHEL engineer balance -4 nos as per requirement and instruction of BHEL engineer )	In our opinion, the minimum quantity required may be changed to 8 nos. for 1 Boiler that also progressively as per site requirement.	As per tender
20	Winches (electric) (winches also includes wire ropes) , Cl. No. A (TOOLS & PLANTS) of Appendix-III of TECHNICAL CONDITIONS OF CONTRACT (TCC) (Volume-IF-CML)	DESCRIPTION OF EQUIPMENT : Winches (electric) (winches also includes wire rope)  CAPACITY & MINIMUM QUANTITY  10 T - Minimum 02 nos. 7.5 T - Minimum 02 nos. 05 T - Minimum 14 nos. 03 T - Minimum 06 nos. Others - As per requirement 1 T - As per requirement	Request BHEL to remove the "Minimum terminology as the capacity and quantity of winches may vary as per rection weight and site requirements. It may so happen that majority erection is carried out by 7.5 T winches and such a huge quantity of 5T winches/10MT winches are not required.	As per tender