



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

**BHARAT HEAVY ELECTRICALS LIMITED**

(A Govt. of India Undertaking)

**TCN - 02**

Ref: PSER:SCT:NKP-C2005:TCN-02

Date: 20-01-2020

Sub	<b>Tender Change Notice (TCN)- 02.</b>	
Job	Construction of 3 nos. 150 meter high reinforced concrete single steel flue chimney with borosilicate glass block lining system on MS flue can and other incidentals complete including raft foundation for FGD system of 3 x 660 MW North Karanpura STPP, Jharkhand.	
Ref	1.0	Tender no: PSER:SCT:NKP-C2005:20
	2.0	BHEL's NIT, vide reference no PSER:SCT:NKP-C2005:7745 Date: 06-01-2020.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT: NKP-C2005:TCN-01 Date: 14-01-2020.
	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.

1. Clarifications/Modification attached vide **Annexure-A of this TCN-02.**
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

Dy. Mgr (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

**Construction of 3 nos. 150 meter high reinforced concrete single steel flue chimney with borosilicate glass block lining system on MS flue can and other incidentals complete including raft foundation for FGD system of 3 x 660 MW North Karanpura STPP, Jharkhand.**

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**ANNEXURE-A TO TCN-02**

**CLARIFICATIONS/ MODIFICATIONS**

SL. NO.	REFERENCE CLAUSE OF TENDER	EXISTING PROVISION	BIDDER'S QUERY	BHEL'S CLARIFICATION
1.0	Cl no 18 - NIT	Reverse Auction	Reverse auction process is not acceptable to us.	Shall be as per tender provision.
2.0	Cl no 34 - GCC (Supply)	SETTLEMENT OF DISPUTE AND ARBITRATION	Arbitration should be by joint arbitration procedure as per Indian Arbitration and Conciliation Act, 1996 as amended in 2015.	Bidders are requested to refer GCC-IA - Rev-01 issued alongwith TCN-01 of this tender.
3.0	Cl no 27 -TECHNICAL CONDITIONS OF CONTRACT (SERVICE)	Completion period : The entire work under this scope shall be successfully completed within 13 (Thirteen) months from the date of Start of work.	The specified completion time is too tight considering the quantum of work involved in this tender. We request BHEL to provide at least 16 months time forcompletion of work.	Shall be as per tender provision.
4.0	Sr. no. 65 - Price Schedule	Supply, fabricating and fixing of cleanout door of size 650X825 mm.	The requirement of clean-out door mentioned in clause 3.14.04; Sub-section IV-D; Section - VI has been deleted vide AMDT NO. 14 SL NO. 62 PAGE 16. Kindly review and furnish the exact requiremnt.	Requirement, if any shall be provided during detailed drawings.
5.0	Sr. no. S26F - Price Schedule	Supplying C276 strips, plates, gutters / vanes / pipes, bends, fittings and any other appurtenances as required...	Please specify the details of section, thickness of plates, diameter of the pipe etc. to enable us accurately estimate the work.	The details shall be as per condensate flow model study report which will be furnished later.

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<b>SL. NO.</b>	<b>REFERENCE CLAUSE OF TENDER</b>	<b>EXISTING PROVISION</b>	<b>BIDDER'S QUERY</b>	<b>BHEL'S CLARIFICATION</b>
6.0	Sr. no. 30AA, 30AAA, S30AAA- Price Schedule	Supplying 2 mm / 10 mm thick titanium sheet (Grade 2 as per ASME B265) to be wrapped over chimney mini-shell .....	Please furnish drawings / specification for the same to enable us understand the scope.	Please refer AMDT NO. 14 SL NO. 127 PAGE 49 of Technical Specification - Section-C issued earlier alongwith NIT (relevant page attached) for required details. Drawings shall be provided during detailed engineering.
7.0	Sr. no. S30AAA - Price Schedule	Thickness of borosilicate lining	Please furnish the thickness of borosilicate lining blocks to be installed by us.	Borosilicate glass block lining of minimum 38 mm thickness.
8.0	14.0 PAYMENT TERMS- TECHNICAL CONDITIONS OF CONTRACT (SUPPLY)	Payment shall be made by BHEL site office after 45 days of receipt of invoice subject to its completeness in all respects as per BHEL's procedure.	Payment shall be made by BHEL site office after 30 days of receipt of invoice subject to its completeness in all respects as per BHEL's procedure.	Shall be as per tender provision.
9.0	7.0 COMPLETION PERIOD- TECHNICAL CONDITIONS OF CONTRACT (SUPPLY)	The contractor shall supply the materials including supply of Mandatory spares, Start-up and Commissioning spares etc. in such manner that supply will be completed within 6 (Six) months for Unit # 1, 8 (Eight) months for Unit # 2 and the entire scope of supply within 10 (Ten) months from the date of LOI.	The contractor shall supply the materials including supply of Mandatory spares, Start-up and Commissioning spares etc. in such manner that supply will be completed within 10 (Ten) months for Unit # 1, 12 (Twelve) months for Unit # 2 and the entire scope of supply within 14 (Fourteen) months from the date of LOI.	Shall be as per tender provision.

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SL. NO.	REFERENCE CLAUSE OF TENDER	EXISTING PROVISION	BIDDER'S QUERY	BHEL'S CLARIFICATION
10.0	26.0 CONSTRUCTION SCHEDULE- TECHNICAL CONDITIONS OF CONTRACT (SERVICE)	Sl. No. Activity Completion time 26.2.1 Completion of Chimney U#1 9 months 26.2.2 Completion of Chimney U#2 11 months 26.2.3 Completion of Chimney U#3 13 months Phase gap between unit 1, 2 & 3 shall be 2 Months	26.2.1 Completion of Chimney U#1 14 months 26.2.2 Completion of Chimney U#2 16 months 26.2.3 Completion of Chimney U#3 18 months Phase gap between unit 1, 2 & 3 shall be 2 Months	Shall be as per tender provision.
11.0	27.0 COMPLETION PERIOD TECHNICAL CONDITIONS OF CONTRACT (SERVICE)	The entire work under this scope shall be successfully completed within 13 (Thirteen) months from the date of Start of work.	The entire work under this scope shall be successfully completed within 18 (Eighteen) months from the date of Start of work.	Shall be as per tender provision.
12.0	36.3 INTERIM PAYMENTS- TECHNICAL CONDITIONS OF CONTRACT (SERVICE)	Balance 5 % retained from each RA bill will be released on completion of guarantee period. However, this 5 % payment can be released against submission of bank guarantee valid for the guarantee period	Please clarify whether we have to be submitted BG@ 2.5% or @ 5% of retention value	Shall be as per tender provision.
13.0	36.5 INTERIM PAYMENTS- TECHNICAL CONDITIONS OF CONTRACT (SERVICE)	Contractor's RA bill, complete & correct in all respects, certified by BHEL engineer, shall be paid after 45 days of receipt of bill with all supporting documents as per BHEL's procedure.	Contractor's RA bill, complete & correct in all respects, certified by BHEL engineer, shall be paid after 30 days of receipt of bill with all supporting documents as per BHEL's procedure.	Shall be as per tender provision.

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**CLARIFICATIONS/ MODIFICATIONS**

<b>SL. NO.</b>	<b>REFERENCE CLAUSE OF TENDER</b>	<b>EXISTING PROVISION</b>	<b>BIDDER'S QUERY</b>	<b>BHEL'S CLARIFICATION</b>
14.0	24.4 Major T&P items - TECHNICAL CONDITIONS OF CONTRACT (SERVICE)	1 No 18 / 20 T Crawler Crane.	As per site requirement	Shall be as per tender provision.
15.0	24.4 Major T&P items- TECHNICAL CONDITIONS OF CONTRACT (SERVICE)	2 Nos. Automatic batching plant with printing facility (approx. 30 Cum/Hr) – to be commissioned at site.	1 Nos. Automatic batching plant with printing facility (approx. 30 Cum/Hr). If require, contractor will mobilise additional plant of suitable capacity.	Shall be as per tender provision.
16.0	36.4 INTERIM PAYMENTS- TECHNICAL CONDITIONS OF CONTRACT (SERVICE)	1.5 % of gross bill amount shall be paid in the following manner on certification by BHEL engineer after compliance of each of following activity in each month. In case of non-fulfilment of respective activity by vendor in each month, no payment shall be made by BHEL against corresponding activity and no claim of bidder at a later date, whatsoever, in this regard shall be entertained by BHEL.	Please delete this clause as this will have negative cash flow for project.	Shall be as per tender provision.

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17.0	3 ACID RESISTANT BRICKS (List of vendors) - TECHNICAL CONDITIONS OF CONTRACT (SUPPLY)	CARBORANDUM UNIVERSAL, CHENNAI PELICAN, BHIWADI CAMBRIAN, ALWAR KERATECH, VADODARA CHAMPION CERAMICS, CHAMPA SUNSHINE CERAMICS, CHAMPA MAHAKOSHAL POTTRIES, KATNI PERFECT ACIDWARE, JABALPUR BABA BAIDNATH REFRactories, PURULIA	Please also incorporate the following parties: - 1. Vidhanta Ceramics, Morbi (Gujarat) 2. Organ Refractories, Khammam (TS)	If required, shall be taken up with NTPC by the successful bidder after awarding.
18.0	5 CHIMNEY ELEVATOR- TECHNICAL CONDITIONS OF CONTRACT (SUPPLY)	MEKASTER ENGG & EQPT (P) LTD. (GUJARAT) ALIMAK, AB (SWEDEN)	Please also incorporate the following parties: - 1. Alikraft Engineers (P) Ltd., Vadodra (Gujarat) 2. Universal Construction Machinery & Equipment Ltd., Pune (Maharashtra) 3. Everest Elevator, Pune (Maharashtra)	If required, shall be taken up with NTPC by the successful bidder after awarding
19.0	CI no 6.6 of TAXES & DUTIES- VOLUME-IF-TCC-CML-S (REV-00)	TDS under GST (if/ as & when applicable later) shall be deducted at applicable rates on gross invoice value from the running bills (RA bills). However, as on date no TDS under GST is applicable.		CI no 6.6 of TAXES & DUTIES of VOLUME-IF-TCC-CML-S (REV-00) shall be read as follows:  <u>CI no 6.6A-</u> TDS under GST shall be deducted at applicable rates on gross invoice value from the running bills (RA bills).

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CLARIFICATIONS/ MODIFICATIONS

SL. NO.	REFERENCE CLAUSE OF TENDER	EXISTING PROVISION	BIDDER'S QUERY	BHEL'S CLARIFICATION
20.0	CI no 35.6 of TAXES & DUTIES- VOLUME-IF-TCC-CML-E (REV-00)	TDS under GST (if / as & when applicable later) shall be deducted at applicable rates on gross invoice value from the running bills (RA bills). However, as on date no TDS under GST is applicable.		CI no 35.6 of TAXES & DUTIES of VOLUME-IF-TCC-CML-E (REV-00)shall be read as follows:  <u>CI no 35.6- TDS under GST shall be deducted at applicable rates on gross invoice value from the running bills (RA bills).</u>

AMENDMENT NO. 02 TO TECHNICAL SPECIFICATION (SECTION VI)

SL. NO.	SPECIFICATION REFERENCE				EXISTING	READ AS
	SEC/ PART	SUB SEC.	PAGE NO.	CLAUSE NO.		
					All the material in contact with the condensate shall be of suitable material for the operating duty.	condensate of all the stack shall be provided. Storage tank shall be complete with stack condensate collection be pumped to absorber. Contractor shall provide 2 X100% pumps, complete with valves, piping fittings, level control/monitoring etc. Alternatively, bidder may propose its proven system for disposal of the condensate system in its bid for Employer's consideration. All the material in contact with the condensate shall be of suitable material for the operating duty.
127.	SI. No.-39 AMENDMENT NO. CS-4410-109-2- AMDT-08	16 of 83			<p><b>Wet stack</b></p> <p>a) Wet stack sizing criteria</p> <p>A wet stack shall ..... of the flue gas. The Contractor, shall take into account the entire characteristics of expected combination of fuels to be fired, for the complete load range of operation and the expected numbers of Steam Generator start-ups while designing the wet stack flue liner considering Steam Generator in operation both <b>with &amp; without FGD system in operation</b>. The wet stack fuel liner cladding shall be made of 2 mm thick Titanium (Grade 2 as per ASME SB265) or C-276 alloy over 8mm thick (minimum) mild steel base metal of flue liner. Cladding shall be done to achieve the required quality as per ASTM B 898-11. External surface of wet stack flue liner</p>	<p><b>Wet stack</b></p> <p>a) Wet stack sizing criteria</p> <p>A wet stack shall ..... of the flue gas. The Contractor, shall take into account the entire characteristics of expected combination of fuels to be fired, for the complete load range of operation and the expected numbers of Steam Generator start-ups while designing the wet stack flue liner considering Steam Generator in operation <b>with FGD system in operation</b>. The wet stack fuel liner cladding shall be made of 2 mm thick Titanium (Grade 2 as per ASME SB265) or C-276 alloy over 8mm thick (minimum) mild steel base metal of flue liner. Cladding shall be done to achieve the required quality as per ASTM B 898-11. <b>The top flue liner above the roof slab shall be made of solid C276 (as per ASME SA265) / Titanium (Grade 2 as per ASME SB265) of</b></p>

**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	Construction of 3 nos. 150 meter high reinforced concrete single steel flue chimney with borosilicate glass block lining system on MS flue can and other incidentals complete including raft foundation for FGD system of 3 x 660 MW North Karanpura STPP, Jharkhand.	
Ref	1.0	Tender no PSER:SCT:NKP-C2005:20.
	2.0	BHEL's NIT, vide reference no PSER:SCT:NKP-C2005:7745 Date: 06-01-2020
	3.0	BHEL's TCN-01, vide reference no PSER:SCT: NKP-C2005:TCN-01 Date: 14-01-2020.
	4.0	BHEL's TCN-02, vide reference no PSER:SCT: NKP-C2005:TCN-02 Date: 20-01-2020.
	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, SALTLAKE CITY, KOLKATA - 700 091  
फैक्स/Fax : (033) 23211960 फोन/Phone : बोर्ड/EPABX : 033-2339 8000/ 2339 8236