



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN – 03

Ref: PSER:SCT:BAR-C2246:TCN-03

Date: 06-09-2023.

Sub	Tender Change Notice (TCN) - 03	
Job	Construction of 01 no 150 Meter high reinforced concrete single steel flue Chimney (including piling) with borosilicate glass block lining and other incidentals works all complete for FGD system of unit-2 at 3x660 MW Barh STPP Stage-I, Bihar.	
Ref	1.0	Tender no. PSER:SCT:BAR-C2246:23.
	2.0	BHEL's NIT, vide reference no. PSER:SCT:BAR-C2246:10061, Date: 16-08-2023.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:BAR-C2246:TCN-01, dated 25-08-2023.
	4.0	BHEL's TCN-02, vide reference no PSER:SCT:BAR-C2246:TCN-02, dated 05-09-2023.
	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 Introduction of Supplier List (NTPC DOC NO: 9558-109-ER-QVC—W-01 REV NO-2) for Civil BOI to VOL-IF-TCC.
- 2.0 Introduction of Bore Log Data Sheet to VOL-IF-TCC, attached for tender purpose only.
- 3.0 The clarifications to bidder's queries are attached as **Annexure-A** to this TCN-03.
- 4.0 Revised 'No deviation certificate' as per enclosed Annexure-2. Bidder shall submit no deviation certificate as per enclosed format only.
- 5.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

MGR (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

Project : G/I Work for FGD at 5x660MW NTPC Barh STPP, Stage-I & II, Bihar.

CETEST

Job No : 4306

Created by : T.SAHA

Created on : 24/06/2019

Sheet No:

BORE LOG DATA SHEET**BORE HOLE NO.7**Co-ordinates E=622.000
S=907.000

Field Test	Nos	Samples	Nos	Commencement Date : 24/05/2019
Penetrometer (SPT)	15	Undisturbed (UDS)	12	Completion Date : 26/05/2019
Cone (Pc)		Penetrometer (SPT)	15	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	16	Level Of Ground : 45.494 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 4.00 m.

DESCRIPTION	SYMBOL	N-VALUE						SAMPLES	
		EACH DIVN=15CM						Ref. No	Depth (m)
0.00m									
Medium dense, light grey, silty sand.		8	10	10				SPT-1	1.00-1.45
								UDS-1	2.00-2.45
		4	5	5				SPT-2	3.00-3.45
								UDS-2	4.00-4.45
6.00m		3	8	8				SPT-3	5.00-5.45
								UDS-3	6.00-6.45
		5	7	10				SPT-4	7.00-7.45
								UDS-4	8.00-8.45
		3	5	5				SPT-5	9.00-9.45
								UDS-5	10.00-10.45
		4	5	9				DS-1	11.00
								SPT-6	11.50-11.95
								DS-2	12.50
								*UDS-6	13.00-13.45
								DS-3	14.00
		4	6	7				SPT-7	14.50-14.95
17.50m								DS-4	15.50
								UDS-7	16.00-16.45
								DS-5	17.00
		8	15	19				SPT-8	17.50-17.95
								DS-6	18.50
20.00m								UDS-8	19.00-19.45
								DS-7	20.00



BH-7/Sheet-1

Project : G/I Work for FGD at 5x660MW NTPC Barh STPP, Stage-I & II, Bihar.

CETEST

Job No : 4306

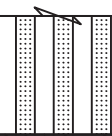
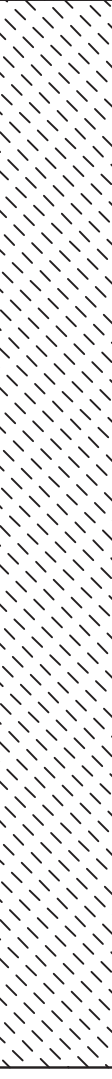
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Created on : 24/06/2019

Sheet No:

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S=907.000

Field Test	Nos	Samples	Nos	Commencement Date : 24/05/2019
Penetrometer (SPT)	15	Undisturbed (UDS)	12	Completion Date : 26/05/2019
Cone (Pc)		Penetrometer (SPT)	15	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	16	Level Of Ground : 45.494 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 4.00 m.

DESCRIPTION	SYMBOL	N-VALUE						SAMPLES	
		EACH DIVN=15CM						Ref. No	Depth (m)
20.00m		18	28	36	64			SPT-9	20.50-20.95
21.50m								DS-8	21.50
								*UDS-9	22.00-22.12
								DS-9	23.00
		10	17	24	41			SPT-10	23.55-24.00
								DS-10	24.50
								*UDS-10	25.00-25.12
								DS-11	26.00
		23	30	34	64			SPT-11	26.50-26.95
								DS-12	27.50
								*UDS-11	28.00-28.10
								DS-13	29.00
		8	18	20	38			SPT-12	29.50-29.95
								DS-14	30.50
								*UDS-12	31.00-31.10
								DS-15	32.00
		13	22	31	53			SPT-13	32.50-32.95
								DS-16	33.50
		19	26	30	56			SPT-14	34.00-34.45
35.00m		26	30	33	63			SPT-15	35.00-35.45

N.B. - '*' means sample could not be recovered.

Project : G/I Work for FGD at 5x660MW NTPC Barh STPP, Stage-I & II, Bihar.

CETEST

Job No : 4306

Created by : T.SAHA

Created on : 24/06/2019

Sheet No:

BORE LOG DATA SHEET**BORE HOLE NO.8**Co-ordinates E=647.000
N=907.000

Field Test	Nos	Samples	Nos	Commencement Date : 22/05/2019
Penetrometer (SPT)	14	Undisturbed (UDS)	13	Completion Date : 29/05/2019
Cone (Pc)		Penetrometer (SPT)	14	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	16	Level Of Ground : 46.090 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 3.70 m.

DESCRIPTION	SYMBOL	N-VALUE						SAMPLES	
		EACH DIVN=15CM						Ref. No	Depth (m)
0.00m									
Loose to medium dense, grey, silty sand.		4	6	7				SPT-1	1.00-1.45
						13		UDS-1	2.00-2.45
		3	3	4				SPT-2	3.00-3.45
						7		*UDS-2	4.00-4.45
5.00m									
Medium to stiff, brownish grey, clayey silt.		3	5	8				SPT-3	5.00-5.45
						13		UDS-3	6.00-6.45
		5	6	9				SPT-4	7.00-7.45
						15		*UDS-4	8.00-8.45
		2	3	3				SPT-5	9.00-9.45
						6		UDS-5	10.00-10.45
		2	2	3				DS-1	11.00
						5		SPT-6	11.50-11.95
								DS-2	12.50
								UDS-6	13.00-13.45
14.50m									
Very stiff, reddish brown, clayey silt. Obs. calcareous nodules.		8	11	14				DS-3	14.00
						25		SPT-7	14.50-14.95
								DS-4	15.50
								UDS-7	16.00-16.45
17.50m									
Hard, brownish grey to grey, clayey silt. Obs. calcareous nodules.		10	13	20				DS-5	17.00
						33		SPT-8	17.50-17.95
								DS-6	18.50
								UDS-8	19.00-19.45
20.00m									
								DS-7	20.00

Project : G/I Work for FGD at 5x660MW NTPC Barh STPP, Stage-I & II, Bihar.

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Job No : 4306

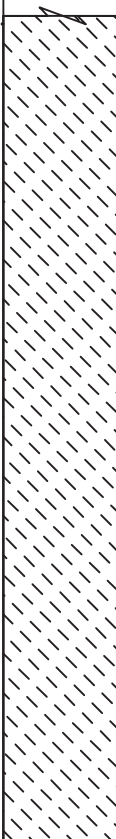
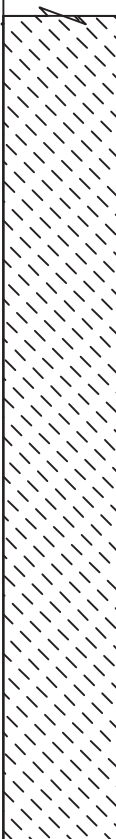
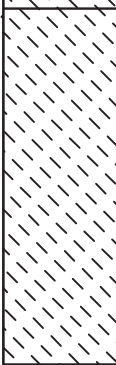
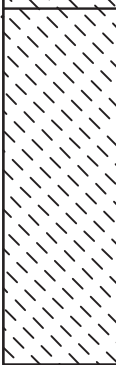

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Sheet No:

BORE LOG DATA SHEET**BORE HOLE NO.8**Co-ordinates E=647.000
N=907.000

Field Test	Nos	Samples	Nos	Commencement Date : 22/05/2019
Penetrometer (SPT)	14	Undisturbed (UDS)	13	Completion Date : 29/05/2019
Cone (Pc)		Penetrometer (SPT)	14	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	16	Level Of Ground : 46.090 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 3.70 m.

DESCRIPTION	SYMBOL	N-VALUE						SAMPLES	
		EACH DIVN=15CM						Ref. No	Depth (m)
20.00m		15	20	39		59		SPT-9	20.50-20.95
Hard, brownish grey to grey, clayey silt. Obs. calcareous nodules.								DS-8	21.50
								*UDS-9	22.00-22.12
								DS-9	23.00
		18	22	43		65		SPT-10	23.50-23.95
								DS-10	24.50
								*UDS-10	25.00-25.10
								DS-11	26.00
		16	21	37		58		SPT-11	26.50-26.95
								DS-12	27.50
								*UDS-11	28.00-28.11
								DS-13	29.00
				13	29	40		69	SPT-12
30.50m							DS-14	30.50	
Hard, brownish grey, clayey silt. Obs. calcareous nodules.								*UDS-12	31.00-31.10
								DS-15	32.00
		15	21	23		44		SPT-13	32.50-32.95
								DS-16	33.50
								*UDS-13	34.00-34.12
35.00m		27	42	44		86	SPT-14	35.00-35.45	
N.B. - '*' means sample could not be recovered.									



Project : G/I Work for FGD at 5x660MW NTPC Barh STPP, Stage-I & II, Bihar.

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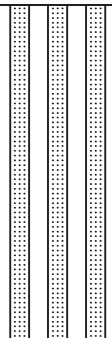
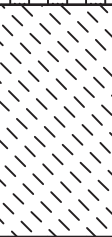
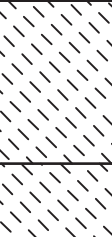
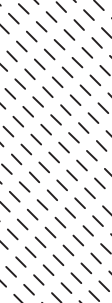
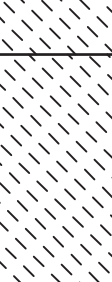


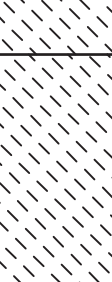




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Sheet No:

BORE LOG DATA SHEET**BORE HOLE NO.42**Co-ordinates E=620.000
S=938.000

Field Test	Nos	Samples	Nos	Commencement Date : 29/05/19
Penetrometer (SPT)	12	Undisturbed (UDS)	11	Completion Date : 31/05/19
Cone (Pc)		Penetrometer (SPT)	12	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	13	Level Of Ground : 46.626 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 4.00 m.

DESCRIPTION	SYMBOL	N-VALUE						SAMPLES	
		EACH DIVN=15CM						Ref. No	Depth (m)
0.00m									
Loose to medium dense, light grey, silty sand. Observed mica.		3	5	7				12	
								SPT-1	1.00-1.45
								UDS-1	2.00-2.45
		3	3	6				9	
4.00m									
								SPT-2	3.00-3.45
								UDS-2	4.00-4.45
		5	6	8				14	
7.00m									
								SPT-3	5.00-5.45
								UDS-3	6.00-6.45
		8	12	15				27	
9.00m									
								SPT-4	7.00-7.45
								*UDS-4	8.00-8.45
		3	3	4				7	
14.50m									
								SPT-5	9.00-9.45
								UDS-5	10.00-10.45
		3	4	6				10	
17.50m									
								DS-1	11.00
								SPT-6	11.50-11.95
								DS-2	12.50
20.00m									
								*UDS-6	13.00-13.45
								DS-3	14.00
		6	8	10				18	
Very stiff, light grey to reddish grey, clayey silt.									
								SPT-7	14.50-14.95
								DS-4	15.50
								UDS-7	16.00-16.45
Hard, light grey to reddish grey, clayey silt.									
								DS-5	17.00
		10	15	21				36	
								SPT-8	17.50-17.95
									
								DS-6	18.50
									
								UDS-8	19.00-19.45
									
								DS-7	20.00

Project : G/I Work for FGD at 5x660MW NTPC Barh STPP, Stage-I & II, Bihar.

CETEST

Job No : 4306


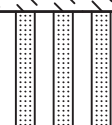
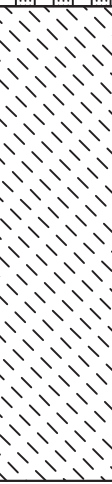

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
BORE LOG DATA SHEET**BORE HOLE NO.42**Co-ordinates E=620.000
S=938.000

Field Test	Nos	Samples	Nos	Commencement Date : 29/05/19
Penetrometer (SPT)	12	Undisturbed (UDS)	11	Completion Date : 31/05/19
Cone (Pc)		Penetrometer (SPT)	12	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	13	Level Of Ground : 46.626 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 4.00 m.

DESCRIPTION	SYMBOL	N-VALUE						SAMPLES	
		EACH DIVN=15CM						Ref. No	Depth (m)
20.00m Hard, light grey to reddish grey, clayey silt.		13	18	27	45			SPT-9	20.50-20.95
22.50m Very dense, yellowish grey, silty sand.		24	36	43	79			DS-8 *UDS-9	21.50 22.00-22.12
24.00m Hard, yellowish grey, clayey silt. Obs. calcareous nodules.		15	24	33	57			DS-9 SPT-10 DS-10 *UDS-10	23.00 23.50-23.95 24.50 25.00-25.10
30.00m		16	20	28	48			DS-11 SPT-11 DS-12 *UDS-11 DS-13	26.00 26.50-26.95 27.50 28.00-28.09 29.00
								SPT-12	30.00-30.45


N.B. - '*' means sample could not be recovered.

 A Maharatna Company	PROJECT: BARH STAGE - I	LIST AND STATUS OF ITEM REQUIRING QP AND SUB-SUPPLIER APPROVAL			NTPC DOC. NO. : 9558-109-ER-QVC-W-01	
	PACKAGE: FGD PACKAGE				REV. NO. : 2	
	MAIN SUPPLIER: BHEL-PSER				DATE : 12/04/2019	
	CONTRACT NO.: CS-0011-109(1A)	Sub systems: CIVIL				
SL. NO.	ITEM	QP& INSPECTION CATEGORY	QAP NO.	PROPOSED SUB-SUPPLIER NAME & LOCATION	SUB-SUPPLIERS APPROVAL STATUS / CATEGORY	REMARKS
A	B	C	D	E		F
1#	Reinforcement steel	Cat-III	-	As per Technical Specifications (Part-B, Section-VI, Sub-section - V-QD1. Clause 1.8.0)		
2#	Cement	Cat-III	-	BIS Approved sources with valid BIS Licence		
3#	Construction Chemicals - Admixtures, Water Proofing Compounds, Grouts	Cat-III	-	Main Contractor approved source		
4#	Paint and Painting System	Cat-III	-	Main Contractor approved source		
5	Colour coated sheet (for coil)	Cat-III	-	Main Contractor approved source		
6	Profilers for decking/ cladding sheets	Cat-III	-	Main Contractor approved source		
7	Electroforged Grating	Cat-III	-	Main Contractor approved source		
8#	PVC water stop	Cat-III	-	BIS Approved sources with valid BIS Licence		
9#	Bitumen	Cat-III	-	All Government Refineries		
10#	CPVC/UPVC pipes	Cat-III	-	BIS Approved sources with valid BIS Licence		
11#	Ceramic / vitrified tiles	Cat-III	-	BIS Approved sources with valid BIS Licence		
12#	Fire proof doors	Cat-III	-	Main Contractor approved source		
13#	Particle Boards, Plywood, MDF	Cat-III	-	BIS Approved sources with valid BIS Licence		
14#	High solid content liquid applied urethane based Elastomeric membrane for water proofing	Cat-III	-	Main Contractor approved source		
15#	Polythene water storage tanks (IS 12701)	Cat-III	-	BIS Approved sources with valid BIS Licence		


 अरुप रतन पाल / Arup Ratan Paul
 अभियंता (गुणवत्ता) : Engineer (Quality)
 बी. एच. ई. एल. : BHEL : PSER : H.Q.
 प्लॉट नं. - 91, लॉकर रोड : DJSR, SALT LAKE
 कोलकाता-700 091

Digitally signed by Arup Ratan Paul
 DN: cn=Arup Ratan Paul, o=BHEL-
 PSER, KOLKATA, ou=ENGR/QLY,
 email=arpaul@bhel.in, c=IN
 Location: BHEL, PS:ER, Kolkata
 Date: 2019.04.12 16:59:54 +05'30'


 R. S. Yadav

 A Maharatna Company	PROJECT: BARH STAGE - I	LIST AND STATUS OF ITEM REQUIRING QP AND SUB-SUPPLIER APPROVAL			NTPC DOC. NO. : 9558-109-ER-QVC-W-01	
	PACKAGE: FGD PACKAGE				REV. NO. : 2	
	MAIN SUPPLIER: BHEL-PSER				DATE : 12/04/2019	
	CONTRACT NO.: CS-0011-109(1A)	Sub systems: CIVIL				
SL. NO.	ITEM	QP& INSPECTION CATEGORY	QAP NO.	PROPOSED SUB-SUPPLIER NAME & LOCATION	SUB-SUPPLIERS APPROVAL STATUS / CATEGORY	REMARKS
A	B	C	D	E		F
16#	MS Black/GI pipes (IS:1239, IS:3589)	Cat-III	-	BIS Approved sources with valid BIS Licence		
17#	RCC pipes	Cat-III	-	BIS Approved sources with valid BIS Licence		
18	PTFE bearing / Elastomeric bearing	Cat-III	-	All current MORTH /RDSO Approved vendors		
19#	CI PIPES	Cat-III	-	BIS Approved sources with valid BIS Licence		
20#	Foundation Bolts & embedment / inserts	Cat-III	-	Main Contractor approved source		

LEGENDS

1. SYSTEM SUPPLIER/SUB-SUPPLIER APPROVAL STATUS CATEGORY (SHALL BE FILLED BY NTPC)

A – For these items proposed vendor is acceptable to NTPC. To be indicated with letter "A" in the list along with the condition of approval, if any.

DR – For these items "Detailed required" for NTPC review. To be identified with letter "DR" in the list.


2. QP/INSPN CATEGORY:

CAT-I : For these items the Quality Plans are approved by NTPC and the final acceptance will be on physical inspection witness by NTPC.

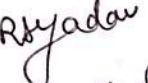
CAT-II : For these items the Quality Plans approved by NTPC. However no physical inspection shall be done by NTPC. The final acceptance by NTPC shall be on the basis review of documents as per approved QP.

CAT-III : For these items the Quality Plans approved by Main Contractor. The final acceptance by owner shall be on the basis of certificate of conformance (COC) by the main contractor.

Note : For the item placed in CAT-III and marked #, no QP is required. The review and final acceptance shall be done at site by NTPC-EIC / FQA on the basis of MTC / Certificate of Conformance submitted by Main Supplier / Main Contractor in line with FQP / Technical Specification .


 अरुप रतन पाल / Arup Ratan Paul
 अभियंता (गुणवत्ता) : Engineer (Quality)
 बी. एच. ई. एल. : बी.एच.ई.एल. मुख्यालय : BHEL : PSER : H.O.
 डी जे - 91, सोल्ट लेक : DJ-91, SALT LAKE
 कोलकाता-700 091 : KOLKATA-700 091

Digitally signed by Arup Ratan Paul
 DN: cn=Arup Ratan Paul, o=BHEL-PSER, KOLKATA, ou=ENGR/QLY, email=arpaul@bhel.in, c=IN
 Location: BHEL, PS:ER, Kolkata
 Date: 2019.04.12 16:56:08 +05'30'


 (R.S. Yadav)
 NTPC Ltel.

Tender no PSER:SCT:BAR-C2246:23 TCN-03 (ANNEXURE-A)				
Construction of 01 no 150 Meter high reinforced concrete single steel flue Chimney (including piling) with borosilicate glass block lining and other incidentals works all complete for FGD system of unit-2 at 3x660 MW Barh STPP Stage-I, Bihar.				
Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
1	Clause No. 18	BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted among all the techno-commercially qualified bidders.....	Reverse Auction (RA) should not be applicable	Shall remain as per tender
2	Annexure - A Amendment to GCC	Cl. No. 1.10.1 i. Upon acceptance of Tender, the successful Tenderer should deposit the 5% of the contract value as Security Deposit towards fulfilment of any obligations in terms of the provisions of the contract.	We request you to make security @ 3% instead of 5%.	Shall remain as per tender
3	Clause No. 27 NOTICE INVITING TENDER	MSME: NOT APPLICABLE FOR THIS TENDER	Please note that BIL is covered under MSME and our MSME registration number is UDYAM-MH-19-0001067	Shall remain as per tender
4	Clause No. 1.10.1 & 1.10.2 AMENDMENT TO GCC	Interest [@ (SBI Base rate + 6%) at monthly rest plus GST]	Interest Should be [@ (SBI Base rate + 2%) at monthly rate plus GST] for the delayed period as interest at SBI Base rate +6% is very high	Shall remain as per tender
5	Clause No. 3.3 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC	Scope of Work: The bidder's scope shall include excavation in soil and rock (if any with/without blasting as per the site conditions), dewatering, dressing to required profile, sheet piling or shoring/strutting, backfilling around completed structures and plinth filling, plinth protection, disposal of surplus earth and rock, concreting including Reinforcement and Formwork, Masonry work, Plastering, Painting, Flooring, Installation of borosilicate lining, Doors/Windows, Ventilators, Fire Proof Doors, Insulation, Roof Water Proofing, Dismantling of existing structures (below ground and above ground- RCC, Brick Works, Sheeting, Structural steel and Other facilities), RCC and Brick/ Block masonry and Steel Structures, fabrication and erection of all structural steel and miscellaneous steel (i.e. steel stair case, cable/duct/pipe supports, ladders, walkways, railing, Chequered plate/grating floor, inserts, anchor bolts, etc.).....	As work will be carried out based on BOQ provided by BHEL, Scope of bidder shall be limited to BOQ items.	Shall remain as per tender
6	Clause No. 6.4 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC	Successful bidder shall make their own arrangement for construction & maintenance of all-weather approach road from the common approach road, for their site office, stores, working area, etc..	1. Proper Approach road to be provided by BHEL. 2. Please Specify the distance of Fabrication yard and Batching Plant location from Chimney Site. It should be within 100-200m from chimney and BIL shall be allowed to Set up Batching Plant near Chimney to facilitate speedy construction.	1.Construction of approach road required if any, shall be under contractor's scope. 2. Fabrication yard and Batching Plant location shall be within existing plant boundary wall as per available space.

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Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
7	Clause No. 12.5 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC	CONFORMANCE TO THE STATUTORY REQUIREMENTS (AS APPLICABLE UNDER THE SCOPE OF THE CONTRACT) The work to be executed under these specifications has to be offered for inspection, at appropriate stages of work completion, to various statutory authorities for compliance with applicable regulations. The work related statutory inspections, though not limited to, are as under: 1) Inspectorate of Steam Boilers and Smoke Nuisance 2) Electrical Inspector 3) Factory Inspector, Labour Commissioner, PF Commissioner and other authorities connected to this project work. The scope includes getting the approvals from the statutory authorities, which includes arranging for inspection visits of statutory authority periodically as per BHEL Engineer's instructions, arranging materials for ground inspection, taking rub outs for stamping of the pressure parts / pipes to be offered for inspection, submitting co-related inspection reports, documents, radiographs etc and following up the matter with them. Contractor shall also make all arrangements for offering the Products / Systems for inspection at location, as applicable, to the concerned authority.	The work-related Statutory inspections shall be in BHEL scope	Shall remain as per tender
8.	Clause No. 12.7 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC	PENALTIES ON VENDORS / SUB-CONTRACTORS AGAINST NON-COMPLIANCE OF QUALITY NORMS.....	These penalties are on higher sider, we request BHEL to delete this clause. Particularly, penalty mentioned in clause no. 12.7.21 & 12.7.22. penalty equivalent to 1% value of the item per day delay is not acceptable to BIL. These penalties are very high. Please reduce the penalty amount.	Shall remain as per tender
9.	Clause No. 14.1.3In addition to the above, the contractor shall also provide 1 (one) no 07 seater AC vehicle of BHEL's sole utilization for the purpose of the work. Fuel, consumable, driver etc required shall be in contractor's scope only. These facilities are to be provided within 30 days from the date of start of work date till completion of scheduled contract period. etc purpose.....	As Chimney contract is very small compared to other works, BIL request BHEL to delete providing these facilities to BHEL	Shall remain as per tender
10.	Clause No. 7.1 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC	Contractor shall make all arrangements himself for the supply of construction water as well as potable water for labour and other personnel at the worksite/colony. However, drawl of construction/potable water from bore-well shall be permitted if found suitable. Any statutory clearance required shall be obtained by the contractor. Assistance, if required shall be provided by the owner.	Uninterrupted supply of Water for construction at three points to be provided within 100m of Chimney Site, 100m of fabrication yard, 100m of Batching Plant and 50m of Labour Colony (Free of cost). Connections should be provided along with handing over of work front to BIL.	Shall remain as per tender
11.	Clause No. 8.1 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC	To meet the construction power requirement of the complete FGD and associated, the Employer shall provide Two Number 415V feeders in LT switchgears in each stage. The Contractor shall extend supply from these Construction power feeders to meet the construction power requirements at the various locations The charges only for the actual energy consumed by the Contractor shall be recovered by the Employer based on prevalent rate of DISCOM for type of connection(HT/LT).	Uninterrupted supply of Electricity (Free of cost) at Three point to be provided within 100 m of Chimney Site, 100m of fabrication yard, 100m of Batching Plant and 50m of Labour Colony. Connections should be provided along with handing over of work front to BIL. Please also provide rate of DISCOM for construction power.	To meet the construction power requirement, the Employer shall provide Two Number 415V feeders in LT switchgears. However, additional requirement of connections if any (one number feeder), shall be taken care subject to availability of 415V feeder at the nearest location at site. Bidder may arrange site visit suitably to see the construction power network at site.

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Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
12.	Clause No. 14.2.6 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC	During construction contractor shall take an average Twenty colour digital photograph / slides each month (not less than four per week) of the works during progress through email only. However, if required, bidder to submit hard copies of photographs as and when required in line with instruction by BHEL site.....	Now a days Hard copies of Photographs are obsolete & difficult to get as such BIL will send photograph by email only.	Shall remain as per tender
13.	Clause No. 14.3.2 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC	Following (minimum) engineering manpower with power plant construction background to be deployed at site by the successful vendor for their day to day supervision etc.....	The deployment of personnel will be as per agreed schedule and/or as per site requirement.	Shall remain as per tender
14.	Clause No. 20.4 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC)	Following Major T&Ps to be arranged by contractor within the time as indicated: A.Hydraulic Excavator/Poclain 1 no Within 20 days B.Dumper 4 nos Within 20 days C.1 nos - 30 Cum/Hr& 1 nos - 15 Cum/Hr capacity of Automatic Batching Plant with Printing facility with required Silo for storing of Cement to be commissioned at Site. from Start the work-----	After award of order, the T&Ps schedule will be prepared by BIL for BHEL approval. The T&Ps will be deployed as per approved schedule. The batching plant will be commissioned within 120 days. The transit mixer will be deployed as per requirement.	Shall remain as per tender. Clause no. 20.5 of TCC,VOL-IF may be referred in this regard.
15.	Clause No. 22.4 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC)	The entire work under this scope shall be successfully completed within 20 (Twenty) months from the date of Start of work. 1 Completion of Piling 4 months 2 Completion of Raft foundations 7 months 3 Completion of RCC Wind Shield (M1) 11 months 4 Completion of Steel Flue (M2) 16 months 5 Completion of Borosilicate Lining work 19 months 5 Completion of all Balance work 20 months	The entire work under this scope shall be successfully completed in all respect within 24 (Twenty-Four) months from the date of start of work as certified by Construction Manager, BHEL 1 Completion of Piling 5 months 2 Completion of Raft foundations 10 months 3 Completion of RCC Wind Shield (M1) 15 months 4 Completion of Steel Flue (M2) 20 months 5 Completion of Borosilicate Lining work 22 months 5 Completion of all Balance work for 24 months	Shall remain as per tender
16.	Clause No. 22.3 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC)	START DATE / ZERO DATE The Actual Date of Start of Contract Period (Zero Date) shall be date of handing over of site to contractor for work and shall be certified by the BHEL Engineer.	The Actual Date of Start of Contract Period (Zero Date) shall be date of handing over of site agreed in writing by BHEL & BIL Engineer and only after completion of following: - 1.Handing over of hindrance free area for site, fabrication yard & Batching Plant 2.Issue of Form – V 3.Issue of Approved for Construction Drawings for Piling, Pile Cap & Chimney shell.	Shall remain as per tender
17.	Clause No. 28.1 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC)	LIQUIDATED DAMAGE/ PENALTY: ----- If the contractor fails to maintain the required progress of work which results in delay in the completion of the work as per the contractual completion period in such case recovery and/or liquidated damage levied by customer shall be recovered from the contractor's bill. Maximum of amount of liquidated damage shall be 5% of the contract value.	An amount equal to 0.25% of contract value per week with maximum limit of 5% of executed contract value will be imposed as liquidated damages if delay is attributable to BIL. The maximum amount of liability of BIL for LD & other penalties will be maximum of 5% of contract value. Grace Period of 3 months will be allowed for imposition of LD.	Shall remain as per tender

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Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
18.	Clause No. 31.1 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC)	Retention Amount shall be 10% of executed contract value and shall be recovered at the rate of 10% from each Running Bill admitted, including PVC Bills. 31.1.2 Out of above retention amount, 50% shall be released on successful completion of facility of Unit-2 entire FGD System & issuance of completion certificate for the same by BHEL/NTPC. 31.1.3 Balance 50% of the retention amount shall be released on successful completion of Guarantee test of Unit-2 entire FGD system package and issuance of operational acceptance certificate by NTPC.	We request you to make retention @ 5% instead of 10%. BIL will submit bank guarantee before payment of first RA Bill against 5% retention money & in turn BHEL will not deduct any retention money.	Shall remain as per tender
19	Clause No. 24.0 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC)	CERTIFICATE TOWARDS COMPLETION: The work under the scope of the contractor shall be deemed to have been completed in all respects only when so certified by CM, BHEL / NTPC. The decision of BHEL in this regard shall be final and binding on the contractor.	NTPC should not be involved for certificate towards completion The protocol for inviting BHEL officials is not defined in the tender. It may be considered to allow contractor / BIL to issue a RFI (Request for Inspection), as soon as any stage of Milestone is completed and the Client shall promptly inspect the completed works of that stage within 07 days of the receipt of such RFI NOTICE of completion of a mile stone and thereafter the Client shall issue a list of deficiencies, if any, in the contracted specifications of the executed work along with the time period as may be mutually agreed by both the parties, to remedy such deficiencies.	Shall remain as per tender
20.	Clause No. 39.3 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC)	Guarantee period (Except Borosilicate lining) shall be 12 months from the date of start of guarantee period as per relevant clause of GCC. For Borosilicate lining, Bidder shall provide ten (10) year of full replacement guarantee for the system, and bear the cost of replacement, supply, installation all complete, if the lining system deteriorates or fails to protect the chimney flue liner.	Upon receipt of Notice of Virtual Completion from BIL, within 15 days, BHEL shall intimate to BIL details of any defects / damages / defective workmanship if noticed in any of the materials / services as per "Scope of Work" (Called Punch List) and BIL shall rectify the punch list free of cost to the full satisfaction of BHEL. Within 15 days of intimation by BIL of completion of the punch list, BHEL will take over chimney and BHEL shall issue a completion certificate within 30 days of the above intimation. Warranty period for Workmanship / Defect liability shall be 12 months from the date of intimation of completion of Punch List by BIL or when the Principal Employer cum the Owner starts the use of Chimney whichever is earlier. For Borosilicate lining, Bidder shall provide Ten (10) years warranty for the system, and will bear the cost of repair / partial replacement, if the lining system deteriorates or fails to protect the chimney flue liner, due to supply and/or installation issue of BSGB lining.	Shall remain as per tender
21	Clause No. 25.0 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC)	EXTENSION OF TIME FOR COMPLETION: If the completion of work as detailed in the scope of work gets delayed beyond the contract / completion period, the contractor shall request for an extension of the contract and BHEL at its discretion may extend the contract.....	EOT/Time extension shall be decided by BHEL within 1 Months of receipt of EOT application submitted by BIL.	Shall remain as per tender

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Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
22	Clause No. 26.0 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC)	INTEREST BEARING RECOVERABLE ADVANCE/ MOBILISATION ADVANCE: As per GCC.	To avoid the negative cash flow, please provide Interest Free Advance as follows: - 1. 5% advance (Interest Free) excluding GST with LOI/LOA & against submission of Advance Bank Guarantee for equivalent amount 2. 5% advance (Interest Free) excluding GST against mobilisation of following: 2.1. Setting of site office, store. 2.2. Labour camp for initial work. 2.3. Electrical installations and water pipeline & water storage. 2.4. Mobilisation of workers and staff for initial work. 2.5. Completion of formalities for Labour License.	Shall remain as per tender
23	Clause No. 31.2.2 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC)	1.5 % of gross bill amount shall be paid in the following manner on certification by Engineer-in-charge 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. 31.2.2.1 0.7 % shall be paid on compliance of house keeping of vendor's working area and store/ office areas. 31.2.2.2 0.3 % shall be paid on compliance of general illumination of vendor's working area and stores, office area 31.2.2.3 0.2 % shall be paid on compliance of applicable OHSAS requirement as per guidelines of BHEL/ PSER and as specified in the tender. 31.2.2.4 0.3 % shall be paid on compliance of applicable safety requirement as per guidelines of BHEL/ PSER and as specified in the tender.	This clause is not acceptable to BIL as it amounts to penalty whereas it has to be deterrent	Shall remain as per tender
24	Clause No. 31.2.4 TECHNICAL CONDITIONS OF CONTRACT, SCOPE ETC)	The contractor shall submit his running bill, once in a month at the end of each month. The RA bill complete in all respect, accompanied by SES (Service Entry Sheet) of NTPC(Customer) will within 45 days of submission of bill, subject to completeness and correctness. Income Tax at the prevailing rates on gross value of work done & applicable surcharge shall be deducted from contractor's bill, unless exempted by Income Tax Authority.. ..	Contractor's RA bill, complete & correct in all respects, certified by BHEL engineer, shall be paid within 30 days of receipt of bill with all supporting documents. BIL will be allowed to do bill discounting through TReDS/RXIL	Shall remain as per tender
25	ANNEXURE - A LIST OF EQUIPMENTS FOR CIVIL SITE LABORATORY	ANNEXURE - A LIST OF EQUIPMENTS FOR CIVIL SITE LABORATORY	As per mutually agreed approved list	Refer clause no. 21.0 of TCC,VOL-IF-CML, list of equipments mentioned in ANNEXURE-A is tentative. However, number of equipment(s)/ time of requirement will be reviewed time to time at site and contractor will provide required equipment(s) to ensure completion of entire work within schedule/target date of completion without any additional financial implication to BHEL.

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Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
26	Clause No. 2.7.2.1 General Condition of Contract	Risk & Cost Amount against Balance Work: Risk & Cost amount against balance work shall be calculated as follows: Risk & Cost Amount= [(A-B) + (A x H/100)] Where, A= Value of Balance scope of Work (*) as per rates of new contract B= Value of Balance scope of Work (*) as per rates of old contract being paid to the contractor at the time of termination of contract i.e. inclusive of PVC & ORC, if any. H = Overhead Factor to be taken as 5 In case (A-B) is less than 0 (zero), value of (A-B) shall be taken as 0 (zero).	Overheads should not be charged for risk and cost amount.	Shall remain as per tender
27	Clause No. 2.7.2.2 General Condition of Contract	In case Contractor fails to deploy the resources as per requirement, BHEL can deploy own/hired/otherwise arranged resources at the risk and cost of the contractor and recover the expenses incurred from the dues payable to contractor. Recoveries shall be actual expenses incurred plus 5% overheads or as defined in TCC.Recoveries shall be actual expenses incurred plus Nil overheads or as defined in TCC.	Shall remain as per tender
28	Clause No. 2.8.3 General Condition of Contract	The contractor shall comply with all applicable State and Central Laws, Statutory Rules, Regulations, Notifications, etc. such as Payment of Wages Act, Minimum Wages Act, Workmen Compensation Act, Employer's Liability Act, Industrial Disputes Act, Employers Provident Act, Employees State Insurance Scheme, Contract Labour (Regulation and Abolition) Act, 1970-----	Rates quoted in the tender are on the basis of State Minimum wages where the work is being executed.	Shall remain as per tender
29	Clause No. 2.20 GENERAL CONDITIONS OF CONTRACT (SERVICE)	FORCE MAJEURE: "Force Majeure" shall mean circumstance which is: a) beyond a party's control, b) The party could not reasonably have provided against before entering into the contract, c) Having arisen, such	FORCE MAJEURE: "Force Majeure" shall mean circumstance which is: a) beyond a party's control, b) The party could not reasonably have provided against before entering into the contract, c) Having arisen, such	Shall remain as per tender

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Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
30	Clause No. 21 GENERAL CONDITIONS OF CONTRACT (SERVICE)	2.21 ARBITRATION & CONCILIATION 2.21.1 ARBITRATION: Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided in Clause 2.21.2 herein below or otherwise) in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract (hereinafter referred to as the 'Dispute'), then, either Party may, commence arbitration in respect of such Dispute by issuance of a notice in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the 'Notice'). The Notice shall contain the particulars of all claims to be referred to arbitration in sufficient detail and shall also indicate the monetary amount of such claim. The arbitration shall be conducted by a sole arbitrator to be appointed by the Head of the BHEL Power Sector Region issuing the Contract within 60 days of receipt of the complete Notice. The language of arbitration shall be English.....	Arbitration clause as per latest judgement of honorable Supreme court should be applicable.	Shall remain as per tender
31	Clause No. 2.23.2 GENERAL CONDITIONS OF CONTRACT (SERVICE)	2.23.2 Final Bill Final Bill' is used for final payment on closing of Running Account for works or for single payment after completion of works. 'Final Bill' shall be submitted as per prescribed format after completion of works as per scope and upon material reconciliation, along with the following: 'No Claim Certificate' by Contractor Clearance certificates where ever applicable viz. Clearance Certificates from Customer, various Statutory Authorities like Labour department, PF Authorities, Commercial Tax Department etc. Indemnity Bond as per prescribed format. BHEL shall settle the final bills after deducting all liabilities of Contractor to BHEL.	Final bill to be released within 45 days	Shall remain as per tender
32	Clause No. 2.27 GENERAL CONDITIONS OF CONTRACT (SERVICE)	LIMITATION ON LIABILITY: Notwithstanding anything to the contrary in this Agreement or the Work Order or any other mutually agreed document between the parties, the maximum liability, for damages, of the contractor, its servants or agents, shall under no circumstances exceed an amount equal to the Price of the Agreement or the Work Order. The Supplier shall not in any case be liable for loss of profit or special, punitive, exemplary, indirect or consequential losses whatsoever. This shall not be applicable on the recoveries arising out of Risk and Cost, recoveries made by Customer from BHEL on account of Contractor, any other type of recoveries for workmanship, material, T&P etc. due from the contractor.	Limitation on liability of BIL should be 10% of contract value and this shall not be applicable on the recoveries arising out of Risk and Cost, recoveries made by Customer from BHEL on account of Contractor, any other type of recoveries for workmanship, material, T&P etc. due from the contractor.	Shall remain as per tender

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Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
33	Clause No. 8 VOLUME-III PRICE SCHEDULE, REV-00	The rates quoted shall be inclusive of cleaning of site of any vegetation, dressing, clearing of old structures and levelling etc. including fixing of grid pillars, benchmarks etc. required for commencement of site activities. No separate payment will be made towards the same. However, if separate rate for such item is available in the rate schedule, the same shall be considered.	BIL will be carrying out job as per BOQ	Shall remain as per tender
34		Vendor List	Please provide the approved Vendor List of BHEL	Bidders are requested to refer NTPC DOC NO: 9558-109-ER-QVC—W-01 REV NO-2 DATED 12/04/2019 issued vide TCN-03.
35		Contractor All risk (CAR) Policy	CAR Policy will be taken by BHEL	Shall remain as per tender
36	Bank Guarantee	Formats of Bank Guarantee's	Format will be duly vetted by our bankers & thereafter BG, SDBG & PBG will be submitted	Shall remain as per tender
37	Bank Guarantees	Bank Guarantee extension & other action by BHEL	BHEL will give advance notice of 60 days to BIL for any action to be taken by BHEL for BG Extension etc	Shall remain as per tender
38	Clause 3.5 Clause TCC	All steel structures shall be fabricated in factory, transported and erected at site. All factory fabricated structures shall have bolted field connections. Chimney flue liners can either be fabricated at factory in segments, transported and welded at site before erection or fabricated at site. For Chimney flue liners, to prevent flue gas leakages, the applicable field joints shall necessarily be welded. Structural Steel shall be fabricated at a suitable fabrication shop, outside the plant premises	All structural steel will be fabricated at site only	Shall remain as per tender
39	Clause 14.3.2 Technical Conditions of Contract	Following (minimum) engineering manpower with power plant construction background to be deployed at site by the successful vendor for their day to day supervision etc.as directed.	The engineering manpower will be deployed as per approved deployment schedule & site requirement	As per tender. Clause no. 14.3.3 of TCC,VOL-IF may be referred in this regard.
40	Clause 20.4 Technical Conditions of Contract	Following Major T&Ps to be arranged by contractor within the time as indicated :.....	BIL will prepare schedule for deployment of equipment & will submit for BHEL approval. The equipment will be deployed as per schedule	As per tender. Clause no. 20.5 TCC,VOL-IF may be referred in this regard.
41	Clause 26.1 Technical Conditions of Contract	INITIAL MOBILIZATION: On receipt of LOI/written intimation from BHEL Site Construction Manager, Contractor shall discuss with Project Manager / Construction Manager regarding initial mobilization. Contractor shall mobilize necessary resources as per the T&P mobilization schedule mentioned in SL No 20.0 above & directive of Project Manager / Construction Manager.	Initial mobilization will be carried out as per agreed mobilization schedule	As per tender. Clause no. 22.2 TCC,VOL-IF may be referred in this regard.

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Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
42	Clause 27.2 Technical Conditions of Contract	Performance bond is applicable for Borosilicate supply & application portion. The Bidder shall provide ten (10) year of full replacement guarantee for the system, and bear the cost of replacement, supply, installation all complete, if the lining system deteriorates or fails to protect the chimney flue liner. Performance Bond may be submitted as per the following modality: A. Bidder shall furnish Performance Bank Guarantee of 5% of the the work value excluding taxes and duties of item F26 of Rate Schedule before start of application work against the Guarantee Period mentioned above. OR B. Bidder shall deposit 5% amount of work value excluding taxes and duties of item F26 of Rate Schedule before start of application work against the Guarantee Period mentioned above. Alternately, Bidder may request BHEL to deduct the same from their RA bills corresponding the the work @ 10% from each bill.	BIL suggest to submit Corporate bond against Performance bond for Borosilicate supply & application portion. Performance bank guarantee against performance bond will not be submitted & corporate bond of 5% of BSGB lining work value should be acceptable to BHEL	Shall remain as per tender
43	Annexure -A Technical Conditions of Contract	Tentative List of Equipments	List of equipments for civil site laboratory will be prepared & submitted to BHEL for approval. Equipment for civil site laboratory will be supplied as per approved list	However, mobilization schedule modification as well as no. of T&Ps as mutually agreed at site for major T&Ps, have to be adhered to. Numbers/ time of requirement will be reviewed time to time at site and contractor will provide required T&P/ equipment's to ensure completion of entire work within schedule/target date of completion without any additional financial implication to BHEL.
44	Clause 9.61 Special Conditions of Contract	Non Compliance	These penalties are very high. BIL request to reduce these penalties by 50%.	Shall remain as per tender
45	Clause 2.14.1 General Conditions of Contract	Variation in Final Executed Contract Value The quantities given in the contract are tentative and may change to any extent (both in plus side and minus side). No compensation becomes payable in case the variation of the final executed contract value is within the limits of Minus (-) 15% of awarded contract value. Also, no compensation becomes payable in case the contract gets	Compensation should be payable in case the final executed contract value reduces below 95% of awarded contract value	Shall remain as per tender
46	Clause 2.14.2 General Conditions of Contract	Variation in Individual Quantities of BOQ items The quantities given in the contract are tentative and may change to any extent (both in plus side and minus side). No compensation becomes payable in case the variation of the quantity of individual BOQ item(s) is within the limits of Plus (+) 100% of the quantity in the original price schedule	Compensation should be payable if any quantity of individual BOQ item is reduced below 85% of the quantity in the original price schedule	Shall remain as per tender
47	HSE Penalty Format	MEMO for Penalty for non-compliances in Safety and Fabrication Quality requirement.....	HSE penalty are very high. BIL request to reduce these penalties to 20% of penalty mentioned	Shall remain as per tender
48	Clause 1.27 Mandatory Spares Technical Specifications	MANDATORY SPARES FOR CHIMNEY ELEVATOR (Qty. indicated are for one (1) No. Chimney Elevator).....	Please remove Item No. I. 28 – Main drive motor with control system.	Shall remain as per tender

Tender no PSER:SCT:BAR-C2246:23 TCN-03 (ANNEXURE-A)				
Construction of 01 no 150 Meter high reinforced concrete single steel flue Chimney (including piling) with borosilicate glass block lining and other incidentals works all complete for FGD system of unit-2 at 3x660 MW Barh STPP Stage-I, Bihar.				
Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
49	Sr. No. – 15 Price Schedule	Supplying and applying two coats of bitumen grade 85/25 as per IS 702 (@ 1.7kg/sqm) with 1% antistripping compound conforming to IS 6241 in foundation, shell, pedestal etc on concrete surfaces exposed to soil / ash including surface preparation etc. all complete.	Please confirm that 1.7 Kg /SqM Qty is for total 2 coats of Bitumen grade 85/25 as per IS 702	Bidder's understanding is correct.
50	Sr. No. – F-26 Price Schedule	Design, supply and installation of borosilicate glass block lining system at all elevations, on ground or in erected position, with minimum 38 mm thick closed cell borosilicate glass block.....	We will be supplying 38 mm thick Closed cell Borosilicate Glass block . Please delete the word minimum	Shall remain as per tender
51	GA DRAWING	GA Drawing	Please note that Flue dia is 8482 mm ID & opening size shown is 7000 W x 10500 H . This will require rotation of flue can which involves lot of specialized equipment & takes more time. We request you to please increase the opening width to 9600 W .	Shall remain as per tender
52	BOQ Item SI no. 1 & 2A of Vol-III-Price Schedule-Rev00	1. Earth work in excavation in all types of soil including ash which can be excavated by any means including setting out, levelling, dewatering (but excluding special type of dewatering viz. well point method), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 1 km, spreading/levelling of disposed materials etc all complete for following depths below ground level including necessary men/women, materials, equipment, loading, transportation, unloading etc as per specification, drawing and as directed by engineer- incharge[Measurement of excavation shall be paid as per actual quantity at site as per direction of Engineer in charge) 2A. Extra over Item No. 1 for dewatering of ground water by well point method as per IS 9759.	As specialized dewatering will be required. You are requested to add special type of dewatering with Bell point method etc. in BOQ	Well point method is a specialized dewatering method applicable for Barh site.
53	BOQ Item SI no.2B of Vol-III-Price Schedule-Rev00	Extra over item no 1 for providing and installing special kind of shoring and strutting with temporary removable earth retaining structure using steel I/H sections with waler beam arrangement, including, design, necessary MS clamp, anchors (if required) etc for earth protection during excavation/concreting around foundation and demobilizing the same after completion of work for excavation up to following depth below ground level at specified locations and side as per drawing. (The design and scheme of earth retaining structure shall be submitted to BHEL for approval prior to construction. The design should take care of earth pressure due to overburden, surcharge due to adjacent structure/ facilities, earth moving machinery etc.). Mode of measurement: Area shall be the exposed structural shoring arrangement between ground level and bottom of excavation.	Is it similar to soldier pile?	It is not similar to soldier pile.
54	BOQ Item SI. no. 2500 of Vol-III-Price Schedule-Rev00	Piling works including all labour, material (unless otherwise specified in BOQ/contract specification), equipment etc. as per specification, drawings and as directed by engineer - in – charge for the following:-----	For installation of 300 nos. of pile provision of deployment of two nos. of hydraulic rig & one no. of tripod rig, is kept. But we feel due to space restriction it will not be possible to deploy three nos. of rig at a time. Moreover, it will increase the value of job. Kindly intimate the number & type of rig to be considered.	Mobilization of Rigs for piling work shall be suitably decided by BHEL site during execution as per requirement & front availability.

Tender no PSER:SCT:BAR-C2246:23 TCN-03 (ANNEXURE-A)				
Construction of 01 no 150 Meter high reinforced concrete single steel flue Chimney (including piling) with borosilicate glass block lining and other incidentals works all complete for FGD system of unit-2 at 3x660 MW Barh STPP Stage-I, Bihar.				
Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
55	BOQ Item Sl. no. A2511 & 2512 – Initial & Routine load test on piles	A2511. Conducting initial load test ----- following:----- 2512. Conducting routine load ----- following:-----	Kindly provide the value of safe load on which test shall be done.	Safe load on the 760mm dia pile is 190MT in vertical compression and 11 MT in lateral.
56	Please provide Bore Log Details (Soil Investigation Report) for assessment of soil condition for piling job.	Bore log details is enclosed with TCN-03.
57	BOQ Item Sl. no. C23 of Price Schedule	Extra over ST NO. A23 & B23 for blast cleaning of steel structures to near white metal surface conforming to Sa 2 ½ finish of ISO 8501-1 with surface profile 40-60 Micron and providing and applying two component moisture curing zinc (ethyl) silicate primer coat (having minimum 80% of metallic Zinc content in dry film, solid by volume minimum 60% ±2%) of minimum 70 micron DFT including the cost of all labour, material, equipments, protection of surface and cleaning, scaffolding, touch-up painting etc., complete as per drawings, specifications and instructions of the Engineer. Zinc dust composition and properties shall be Type-II as per ASTM D520- 00. Primer coat shall be applied in Shop immediately after blast cleaning by airless spray technique.	There is no item as A23 hence this should be read as Sl. No. 22 & B23.	Clause Shall be read as: Extra over ST NO. B23 for blast cleaning of steel structures to near white metal surface conforming to Sa 2 ½ finish of ISO 8501-1 with surface profile 40-60 Micron and providing and applying two component moisture curing zinc (ethyl) silicate primer coat (having minimum 80% of metallic Zinc content in dry film, solid by volume minimum 60% ±2%) of minimum 70 micron DFT including the cost of all labour, material, equipments, protection of surface and cleaning, scaffolding, touch-up painting etc., complete as per drawings, specifications and instructions of the Engineer. Zinc dust composition and properties shall be Type-II as per ASTM D520-00. Primer coat shall be applied in Shop immediately after blast cleaning by airless spray technique.
58	BOQ Item Sl. no. D23 of Price Schedule	Extra over ST NO. A23 & B23 for providing and applying (by airless spray technique) intermediate coat of two component polyamide cured epoxy with MIO Content (containing lamellar MIO minimum 30% on pigment, solid by volume minimum 80% ±2%) of minimum 100 micron DFT after an interval of minimum 24 hours (from the application of primer coat) and of approved make including the cost of all labour, material, equipments, protection and cleaning, scaffolding, touch-up painting etc. all complete as per drawing and specifications.	There is no item as A23 hence this should be read as Sl. No. 22 & B23.	Clause Shall be read as: Extra over ST NO. B23 for providing and applying (by airless spray technique) intermediate coat of two component polyamide cured epoxy with MIO Content (containing lamellar MIO minimum 30% on pigment, solid by volume minimum 80% ±2%) of minimum 100 micron DFT after an interval of minimum 24 hours (from the application of primer coat) and of approved make including the cost of all labour, material, equipments, protection and cleaning, scaffolding, touch-up painting etc. all complete as per drawing and specifications.
59	BOQ Item Sl. no. E23 of Price Schedule	Extra over ST NO. A23 & B23 for providing and applying Finish coat of two-pack aliphatic Isocyanate cured acrylic finish paint (solid by volume minimum 55% ±2%) with Gloss retention (SSPC Paint Spec No 36, ASTM D 4587, D 2244, D 523) of Level 2 (after minimum 1000 hours exposure, Gloss loss less than 30 and colour change less than 2.0 ΔE) and minimum 70 micron DFT over steel sections already having intermediate coats, including the cost of all labour, material, equipments, protection and cleaning, scaffolding etc. all complete as per drawing and specifications. This coat shall be applied after an interval of minimum 24 hours (from the application of sealer coat) and within six (6) months (from the completion of Intermediate coat). Colour and shade of the coat shall be as approved by the Employer.	There is no item as A23 hence this should be read as Sl. No. 22 & B23.	Clause Shall be read as: Extra over ST NO. B23 for providing and applying Finish coat of two-pack aliphatic Isocyanate cured acrylic finish paint (solid by volume minimum 55% ±2%) with Gloss retention (SSPC Paint Spec No 36, ASTM D 4587, D 2244, D 523) of Level 2 (after minimum 1000 hours exposure, Gloss loss less than 30 and colour change less than 2.0 ΔE) and minimum 70 micron DFT over steel sections already having intermediate coats, including the cost of all labour, material, equipments, protection and cleaning, scaffolding etc. all complete as per drawing and specifications. This coat shall be applied after an interval of minimum 24 hours (from the application of sealer coat) and within six (6) months (from the completion of Intermediate coat). Colour and shade of the coat shall be as approved by the Employer.

Tender no PSER:SCT:BAR-C2246:23 TCN-03 (ANNEXURE-A)				
Construction of 01 no 150 Meter high reinforced concrete single steel flue Chimney (including piling) with borosilicate glass block lining and other incidentals works all complete for FGD system of unit-2 at 3x660 MW Barh STPP Stage-I, Bihar.				
Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
60	22.0 CONSTRUCTION SCHEDULE	26.1 INITIAL MOBILIZATION:	Please change the Sr.no. 26.1 to 22.1	Clause no. 26.1 shall be read as 22.1 under clause no. 22 of TCC,VOL-IF-CML.
61	33.0 OVER RUN CHARGES(ORC)	Not applicable for this tender.	ORC should be applicable	Shall remain as per tender
62	Clause 30.1	Any increase of above at any stage during execution of contract, including extension of the contract, shall have to be borne by successful bidder contractor. Bidder's quoted/ accepted rates/ price shall be inclusive of all such requirements.	Any increase in GST & other taxes at any stage during execution of contract, including extension of the contract, shall have to be borne by BHEL.	Shall remain as per tender
63	Clause No 4.0 of NIT	EMD	<p>EMD amount applicable for the subject NIT is ₹ 66,40,000.00.</p> <p>As per Clause No 4.0 of NIT, above EMD amount has to be deposited through Demand Draft / Pay Order.</p> <p>However, as per Clause No 1.9.1 (d) of GCC (Volume-IB), in case EMD amount is more than ₹ 2.0 Lakh, Bidder may deposit the EMD amount as below:</p> <p>(a) ₹ 2.00 Lakh by NEFT / DD / Pay Order (b) Remaining amount over & above ₹ 2.00 Lakh in the form Bank Guarantee from Scheduled Bank. (BG format is already available in Volume-IE of tender document).</p> <p>Please confirm whether we can deposit the EMD amount for subject tender as per above GCC provision i.e. partly by NEFT / DD / Pay Order and balance in the form of BG.</p>	Shall remain as per tender
64			<p>As per Volume-ID of specification, we understand that Cement and Reinforcement Steel are free issue items for the subject project.</p> <p>However, unlike previous BHEL chimney tenders, for the subject project supply of Borosilicate Glass Block Lining with adhesive paints & along with deputation of expert supervisor seems to be a part of Bidder's scope and will be not be free issued / arranged by BHEL. Kindly confirm whether our understanding is correct</p>	<p>Supply of Cement & Reinforcement steel is under Bidder's scope.</p> <p>Regarding borosilicate items, Bidder's understanding is correct.</p>
65		As per SI No 177 of Amendment No 3 to Technical Specification (Section VI), the chimney flue liner cladding can be of 2 mm thick Titanium (Grade 2 as per ASME SB265) or C-276 alloy over 8 mm thick (minimum) mild steel base metal of flue liner. Borosilicate glass block lining is an available alternative.	<p>Based on above kindly confirm whether we can consider 2 mm thick Titanium or C-276 alloy as liner instead of borosilicate glass block lining system (which is acceptable subject to a proven track record of minimum 2 years in at least 2 units located at different locations).</p> <p>In case "Yes", kindly furnish quantity for same along with revised price schedule incorporating this alternative</p>	Shall remain as per tender
66	Item No. 16 i a & 16 ii b of Volume-III Price Schedule	Item includes supply of Reinforcement Steel	<p>We request Payment bifurcation as mentioned below :</p> <p>a) Against Supply 85%, b) Against Cutting, Bending & Fixing 15%</p>	Shall remain as per tender
67	Item No. B23, A24 & A26 I of Volume-III Price Schedule	Item includes supply of Structural Steel	<p>We request Payment bifurcation as mentioned below :</p> <p>a) Against Supply : 75%, b) Against Fabrication : 15% c) Against Erection, Alignment, all complete-10%</p>	Shall remain as per tender

Tender no PSER:SCT:BAR-C2246:23 TCN-03 (ANNEXURE-A)				
Construction of 01 no 150 Meter high reinforced concrete single steel flue Chimney (including piling) with borosilicate glass block lining and other incidentals works all complete for FGD system of unit-2 at 3x660 MW Barh STPP Stage-I, Bihar.				
Sl. No.	Reference clause of Tender Document	Existing provision	Bidder's query	BHEL's Clarification
68	Item No. A26 vi of Volume-III Price Schedule	Item includes supply of titanium	We request Payment bifurcation as mentioned below : a) Against Supply : 85%, b) Against Fabrication, Erection & Alignment etc. all : 15%	Shall remain as per tender
69	Item No. A26 vii of Volume-III Price Schedule	Item includes supply of C276 material	We request Payment bifurcation as mentioned below : a) Against Supply : 85%, b) Against Fabrication, Erection & Alignment etc. all : 15%	Shall remain as per tender
70	Item No. 72 of Volume-III Price Schedule	Item includes supply of Elevator	We request Payment bifurcation as mentioned below : a) Against Supply : 90%, b) Against Installation : 15%	Shall remain as per tender

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 01 no 150 Meter high reinforced concrete single steel flue Chimney (including piling) with borosilicate glass block lining and other incidentals works all complete for FGD system of unit-2 at 3x660 MW Barh STPP Stage-I, Bihar.	
Ref	1.0	Tender no. PSER:SCT:BAR-C2246:23.
	2.0	BHEL's NIT, vide reference no. PSER:SCT:BAR-C2246:10061, Date: 16-08-2023.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:BAR-C2246:TCN-01, dated 25-08-2023.
	4.0	BHEL's TCN-02, vide reference no PSER:SCT:BAR-C2246:TCN-02, dated 05-09-2023.
	5.0	BHEL's TCN-03, vide reference no PSER:SCT:BAR-C2246:TCN-03, dated 06-09-2023.
	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/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 : 23211691, 23211798, 23211796