



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN – 01

Ref: PSER:SCT:HLD-E1804:TCN-01

Date: 02-02-2017

Sub	Tender change notice (TCN) 01	
Job	Erection, Testing, Commissioning, etc of Electrical and C&I system for unit #2 of 3x150 MW unit at IPCL Haldia, TPP, W.B.	
Ref	1.0	Tender no PSER:SCT:HLD-E1804:17.
	2.0	BHEL's NIT, vide reference no PSER:SCT:HLD-E1804:5438, Dated 27-01-2017.
	3.0	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 Revised Price Schedule, VOLUME-III-R-01 attached superseding PRICE SCHEDULE VOLUME-III-R-00 issued earlier along with NIT. Bidder shall quote as per this revised Volume-III, Rev-01 only. Bidders are also requested to submit a declaration in techno-commercial offer that they have submitted their price bid as per REVISED price schedule format (VOLUME-III- PRICE SCHEDULE, REV-01).
(For uploading Revised/Latest price schedule format in E-procurement Portal, contact Mjunction.)
- 2.0 The clarification to bidder queries are attached at Annexure-A.
- 3.0 Revised 'No deviation certificate' as per enclosed Annexure-2. Bidder shall submit no deviation certificate as per enclosed format only.
- 4.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

Sr. ENGR (SCT)

Encl

1.0 As above.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION, DJ-9/1, SECTOR-II, SALT LAKE CITY, KOLKATA - 700 091

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**VOLUME-III
PRICE SCHEDULE, REV-01**

JOB: Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for Unit#2 of 3x150 MW IPCL HALDIA

TENDER NO - PSER:SCT:HLD-E1804:17

PREAMBLE

1	This preamble forms part of tender document and schedule of items. The tenderer should read this preamble carefully before filling in rates for various items. Clauses under this preamble shall be read in conjunction with Volume-1A, IB, 1C, 1D, 1E, 1F, II and other tender sections (as applicable as per NIT) and shall have precedence over any contrary statement mentioned anywhere in this document. The tenderer shall sign & stamp all the pages of the tender document as a token of their acceptance. Submission of unfilled formats with sign & stamp shall be construed as acceptance of the contents of the same.
2	The work shall be carried out strictly as per specifications, description of the items in these schedule and / or engineer's instructions. Drawings enclosed with the tender are only preliminary and for guidance/ tender purposes giving some idea of the work involved. The work is to be executed as per terms & conditions of the tender and actual drawings/ documents, which shall be furnished during execution.
3	Items of work provided in this schedule but not covered in this specification shall be executed strictly as per instruction of the engineer.
4	Unless specifically mentioned otherwise in the tender document, the tenderer shall quote for the finished items and shall provide for the complete cost towards power, fuel, tools, tackles, equipment, constructional plants, temporary works, labour, dismantling of all temporary piping, structures, valves, pumps, tanks & other misc. equipment, strengthening of roads/culverts/bridges etc. including arranging all clearances etc. required for carrying out different activities & tests, materials, levies, taxes (except service tax), transport, layout, repairs, rectification, maintenance till handing over, supervisions, colonies, shops, establishments, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the work according to the complete tender document and this schedule.
5	The quantities of the various items mentioned in this schedule of items are approximate, based on very preliminary information and may vary to any extent or be deleted altogether. The quoted rates of each item will remain firm throughout the period of execution including extension, for reasons whatsoever, as long as variation in the total value of work executed under any part of this contract including extra items, if any but excluding any price variation remains, within fifteen percent ($\pm 15\%$) of the awarded price as per LOI.
6	Prior written approval of BHEL shall be sought by the contractor in case quantity variation of any item crosses +50% (plus fifty percent) limit during execution and approval to be obtained before execution of further quantity for this item.
7	In case Sealed /Paper Price Bids are opened for finalisation of the tender, for any Item Rate/BOQ based service contract, possibility of variation of quantity/ addition/deletion of items can not be ruled out. Under such circumstances, after execution of work, if it is observed that standing as L-1 is changed based on actual quantity executed, the bidder shall give suitable rebate to maintain your standing as L-1. Since this aspect can be assessed at the end of execution, necessary adjustment will be effected at the end of execution in final bill. This condition shall not be applicable where the tender is finalised through Reverse Auction.
8	BHEL reserve the right to rationalize the rates, quoted by L-1 bidder against unit rate items and/ or other optional items with respect to item-wise lowest rates (amongst the participating bidders), before placement of order. The rates of unit rate/optional items shall remain valid till execution of the order, if the job/work is awarded to the bidder.
9	The rates quoted shall be inclusive of cleaning of site of any vegetation, dressing, clearing of old structures and leveling 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.

**VOLUME-III
PRICE SCHEDULE, REV-01**

JOB: Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for Unit#2 of 3x150 MW IPCL HALDIA

TENDER NO - PSER:SCT:HLD-E1804:17

PREAMBLE

10	Rates shall be quoted in figures and in words in clear legible writing. No overwriting is allowed. All scoring and cancellations should be countersigned and in case of illegibility the interpretation of engineer shall be final. All entries shall be in English language.
11	All works item wise shall be measured upon completion and paid for at the rates quoted and accepted as per BHEL approved payment schedule/billing break-up.
12	The tenderer shall be deemed to have visited site and made himself aware of all the site conditions, studied the specifications and details of work to be done within the time schedule attached and to have acquainted himself of the conditions prevailing at site before submission of his bid/offer.No claim whatsoever due to lack of knowledge of site conditions shall be entertained after award of the work.
13	No splitting of the job is envisaged unless the same is specifically indicated in the TCC/Vol-1F. Decision of BHEL in this regard shall be final and binding to the bidders.
14	Bidders are not allowed to alter the Price Schedule format including item description,quantity etc. and the offer is liable for rejection if the bidders submit their prices in Price Schedules modified by them.BHEL reserves the right to reject the offers of bidders who submit offers in Price Formats which are modified/alterd by them. Also putting any comments instead of rates/price in the designated column of the rate schedule shall make the offer liable for rejection.
15	Bidders to note that for Civil &/Structural packages, against a particular item against a ST No. appearing in more than one schedule of the BOQ, same rate must be quoted in all schedules for that particular items with same descriptions. If by error, different rates are quoted in different schedules for same ST No.(i.e. item with same description), then the higher of the rates shall be considered for evaluation but awarding shall be done with the lower rate ,if the bidder becomes L-1.The same modality shall be applicable for other item rate service contracts where item with same description is repeated in different schedules.
16	For Lumpsum Service Contract : The items/components indicated in the tender is indicative and may vary to any extent. No compensation shall be payable in case of any variation in the items/components listed in the bill of quantities if the executed weight remains within the variation limit. However, in case of deletion of any item or addition of new items over and above the items listed or variation of existing quantity beyond variation limit specified, adjustment (i.e. Payment or recovery as the case may be) shall be done on pro-rata basis based on the Rate per MT worked out from the quoted lump-sum Price and the total weight of components listed /indicated in price schedule plus 15% weight variation limit.
17	Engineer's decision shall be final and binding on the contractor regarding clarification of items in the schedule with respect to the other sections/volumes of the contract.
18	In case of tender for Civil and/or Structural works,if the Non-schedule items are not quoted by the bidder, it will be treated at par with rate of corresponding item of CPWD/PWD/DSR schedule as prescribed in the tender/BOQ cum Rate Schedule. PVC/escalation is not payable for these Non-scheduled items.
19	No interest, whatsoever, shall be payable by BHEL on the security deposit, any bank guarantee submitted or any amount due to successful bidder/contractor. No idling charge whatsoever (either for labour or any other resources) is payable by BHEL for any reason whatsoever.
20	Size and weights of various items are mentioned in the attached BOQ cum rate/price schedule for reference purpose only & these shall not be taken into consideration for quoting/calculating amount in the rate schedule. These shall be utilised as per relevant sections of tender. Bidders shall quote for each item in the rate column, taking unit as mentioned in the quantity column. Rates shall be filled in both figures and words. Amount shall be calculated based upon these rates multiplied by the mentioned quantity for the respective items.

**VOLUME-III
PRICE SCHEDULE, REV-01**

JOB: Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for Unit#2 of 3x150 MW IPCL HALDIA

TENDER NO - PSER:SCT:HLD-E1804:17

PREAMBLE

21	Bidder's GRAND Total price shall be considered for evaluation unless stated otherwise.
22	In case of BOP packages, if Bidder does not quote/indicate the price for freight chages against indicated rate schedule, the same shall be considered as 2% of basic price and adjusted with the total quoted price against each item keeping the total quoted price unaltered.

**VOLUME-III
PRICE SCHEDULE, REV-1**

JOB: Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for Unit#2 of 3x150 MW IPCL HALDIA

TENDER NO - PSER:SCT:HLD-E1804:17

SCH-1- TOTAL PRICE

SL NO	ITEM/SCHEDULE	TOTAL AMOUNT (₹)
1	RATE SCHEDULE,PART-A - ELECTRICAL HANDLING AT SITE/ STORAGE YARD, TRANSPORTATION TO SITE OF WORK, PRE-ASSEMBLY, ERECTION, TESTING, COMMISSIONING AND HANDING OVER OF ELECTRICAL FOR BOILER & TG SETS FOR Unit#1 of 3x150 MW IPCL HALDIA (AS PER SCH-2)	
2	RATE SCHEDULE,PART-B - C&I HANDLING AT SITE/ STORAGE YARD, TRANSPORTATION TO SITE OF WORK, PRE-ASSEMBLY, ERECTION, TESTING, COMMISSIONING AND HANDING OVER OF CONTROL & INSTRUMENTATION OF BOILER & TG SETS FOR Unit#1 of 3x150 MW IPCL HALDIA (AS PER SCH-3)	
GRAND TOTAL (Rs) (PART-A + PART-B)		
NOTE		
1	Based on the itemwise percentage allocations, the amount for the individual items of the Bill of Quantity shall be arrived at. The rates of individual items shall be derived from the amount against each items after rounding off upto 9 decimal places. However, RA bill payment shall be done after rounding off the gross amount to two decimal places. The item rates so derived shall remain firm till execution of the work under scope of this tender.	

VOLUME-III PRICE SCHEDULE, REV-1				
JOB: Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for Unit#2 of 3x150 MW IPCL HALDIA				
TENDER NO - PSER:SCT:HLD-E1804:17				
SCH-2- ELECTRICAL (PART-A)				
SL NO	EQUIPMENT DESCRIPTION	TOTAL QUANTITY	UNIT	ALLOTTED PERCENT (%)
1.00	ESP PANEL/ RECTIFIERS/MISC. EQUIPMENT			
1.10	AUXILIARY CONTROL PANEL (7200 L X 450 W x 2400 H)	2	SET	1.285400
1.20	RAPPER CONTROL PANEL (INTELLI RELAY CONTROL PANEL) (700 L x 550 W x 1900 H) (INCLUDING INTELLIRAP)	2	NOS	0.771300
1.30	LT MAIN SWITCH BOARD (10800(L)X1600(W)X2400(H))	1	NOS	5.413200
1.40	EC PANEL (700(L)X650(W)X2000(H)) (INCLUDING FITTINGS OF LOOSE ITEMS /CONTROLLER ETC)	14	NOS	2.879400
1.50	MICROPROCESSOR BASED CONTROLLER (BAPCON)	14	NOS	1.684100
1.60	IOS/DATA LAGGER PC WITH COLOUR MONITOR WITH ALL ACCESSORIES (1220 L x 762 D) WITH PRINTER	3	SET	1.089300
1.70	DISCONNECTING SWITCH (1200X1100X750)	14	NOS	0.359900
1.80	THERMOSTAT FOR HOPPER HEATER & SUPPORT INSULATOR HEATER	16	NOS	0.658100
1.90	PC TERMINATION BOX WITH INTERFACING CABLE AND AUXILIARIES	1	NOS	0.048000
1.10	HEATING ELEMENTS FOR SUPPORT INSULATORS	56	NOS	0.589700
1.11	HEATING ELEMENTS FOR SHAFT INSULATOR HEATERS	16	NOS	0.331500
1.12	HEATING ELEMENTS FOR HOPPER	336	NOS	3.538200
1.13	ASH LEVEL INDICATOR (HIGH) (900 L x 100 D x 100 H)	28	NOS	0.202100
1.14	TRANSFORMER (DRY TYPE , 2000 KVA) for VFD	2	NOS	1.164400
1.15	VARIABLE FREQUENCY DRIVE (690 V , IGBT BASED LV DRIVE) HAVING BRAKING RESISTER (180 KW) PANEL AND BREAKER PANEL ALONG WITH ALL OTHER PANEL AND ACCESSORIES	2	NOS	7.630900
1.16	LOCAL CONTROL PANEL FOR DOSING SKID	3	NOS	0.083600
1.17	DC STARTER Panel for SCANNER Air Fan/EOP/JOP	3	NOS	0.387200
1.18	DAVR (4053 L X 800 W X 2415 H) suit of 3 panels.	1	set	2.502100
2.00	JUNCTION BOX			
2.1	FRP JUNCTION BOX FOR HOPPER HEATERS (VAR.01) (450 L x 150 D x 300 H)	14	NOS	0.606300
2.2	FRP JUNCTION BOX FOR SHAFT INSULATOR HEATERS – (VAR.P1) (450 L x 150 D x 300 H)	2	NOS	0.086600
2.3	FRP JUNCTION BOX FOR SUPPORT INSULATOR HEATER (VAR-P2) (250 L x 150 D x 400 H)	4	NOS	0.173200
2.4	WIRELESS CONTROLLER JUNCTION BOX FOR START STOP PUSH BUTTON (250 L x 150 D x 400 H)	4	NOS	0.173200
2.5	WIRELESS CONTROLLER JUNCTION BOX FOR HOPPER THERMOSTAT (250 L x 150 D x 400 H)	2	NOS	0.086600
2.6	WIRELESS CONTROLLER JUNCTION BOX FOR ASH LEVEL INDICATOR (HIGH LEVEL) (250 L x 150 D x 400 H)	4	NOS	0.173200
2.7	SOOT BLOWER MCC (Length 12000mm x Height 2400mm x Depth 900mm)	1	NOS	2.570900
2.8	LOCAL START STOP PUSH BUTTON FOR RAPPING MOTOR (180 L x 100 D x 250 H)	30	NOS	0.875500

VOLUME-III PRICE SCHEDULE, REV-1				
JOB: Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for Unit#2 of 3x150 MW IPCL HALDIA				
TENDER NO - PSER:SCT:HLD-E1804:17				
SCH-2- ELECTRICAL (PART-A)				
SL NO	EQUIPMENT DESCRIPTION	TOTAL QUANTITY	UNIT	ALLOTTED PERCENT (%)
3.00	LT POWER CABLES LAYING, GLANDING & TERMINATION TO THE RESPECTIVE EQPT. (GLANDS AND LUGS ABOVE 2.5 SQMM SHALL BE SUPPLIED BY BHEL) .			
3.10	2C-120 SQ.MM AR, AL.XLPE	2900	MTR	2.093100
3.2	3.5 C-120 SQ.MM AR, AL XLPE	300	MTR	0.265000
3.3	3C-10 SQ.MM AR, AL XLPE	2000	MTR	0.481300
3.4	3C-35 SQ.MM AL.XLPE	500	MTR	0.249700
3.50	3C-2.5 SQ.MM, AR, CU	7400	MTR	2.848500
3.6	2C-2.5 SQ.MM UN- AR, CU	7000	MTR	2.159500
3.7	3C-16 SQ.MM, AL.XLPE	2000	MTR	0.866100
4.0	LT CONTROL CABLES LAYING, GLANDING & TERMINATION TO THE RESPECTIVE EQPT.GLANDS AND LUGS (ABOVE 2.5 SQMM)SHALL BE SUPPLIED BY BHEL .			
4.1	10C-2.5 SQ.MM, AR, CU	2300	MTR	1.195200
4.2	LT SCREENED CABLE, 4C-1.5 SQ MM, AR, CU	3800	MTR	1.819300
4.3	PTFE SHIELED SIG CABLE	560	MTR	0.216900
4.4	1SQMM,PVC, CU WIRE	560	MTR	0.214200
5.0	Miscellaneous Structural steel including frames for Panels/Racks/Instruments, supports for cable tray/pipes/tubes, Canopies etc	59	MT	22.752200
5.1	GI FLAT 50 MM x 6 MM	1167	MTR	1.681800
5.2	GI FALT 30 MM x 5 MM	535	MTR	0.682200
5.3	GI WIRE IS280-8WG	400	MTR	0.529300
6.00	CABLE TRAYS & EARTHING MATERIALS (HOT DIP GALVANISED CABLE TRAY COMPLETE WITH COUPLER PLATES, FASTENERS, CLAMPS AND FIXING HARDWARE (LADDER TYPE) (INCLUDING FABRICATION OF IRREGULAR TRAY & ACCESSORIES TO SUIT LAYOUT AS REQUIRED)			
	600 MM wide Ladder type	300	MTR	1.089300
6.10	450 MM WIDE LADDER TYPE	700	MTR	2.202900
6.20	300 MM WIDE LADDER TYPE	315	MTR	0.876900
6.30	150 MM WIDE LADDER TYPE	480	MTR	1.103900
7.00	ONLY TESTING & COMMISSIONING RATE TO BE QUOTED FOR FOLLOWING ITEMS.			
7.1	GEARED MOTOR FOR COLLECTING ELECTRODE RAPPING 0.5 KW, 1.1RPM (950 L x 350 D x 400 H)	14	NOS	1.016700
7.2	GEARED MOTOR FOR GD SCREEN RAPPING MOTOR 0.5KW, 1.1RPM (950 L x 350 D x 400 H)	2	NOS	0.145200
7.3	GEARED MOTOR FOR EMITTING ELECTRODE RAPPING MOTOR 0.5KW, 2.5 RPM (950 L x 350 D x 400 H)	14	NOS	1.016700
7.4	LT MOTOR	208	NOS	12.588500
7.5	HT MOTOR	15	NOS	2.178700
7.6	ELECTRICALLY OPERATED HOIST 3T (EOH)	2	NOS	0.164600
7.7	MOTOR/ROTOR HANDLING SYSTEM WITH STARTER FOR ID/FD/PA FAN	10	NOS	0.823100
7.8	LUBE OIL HEATER WITH THERMOSTAT	6	NOS	0.246800

VOLUME-III PRICE SCHEDULE, REV-1				
JOB: Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for Unit#2 of 3x150 MW IPCL HALDIA				
TENDER NO - PSER:SCT:HLD-E1804:17				
SCH-2- ELECTRICAL (PART-A)				
SL NO	EQUIPMENT DESCRIPTION	TOTAL QUANTITY	UNIT	ALLOTED PERCENT (%)
7.9	HIGH VOLTAGE RECTIFIER TRANSFORMER (Approx (137.23 KVA, 1400 mA)) including oil filtration.	14	NOS	1.684100
7.10	CABLE GLANDING ONLY FOR CUSTOMER LAID CABLE	500	NOS	0.827400
7.11	OIL PURIFIER UNIT	2	NOS	0.617000
TOTAL -- PART-A - ELECTRICAL				100.000000

**VOLUME-III
PRICE SCHEDULE, REV-1**

**Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for
Unit#2of 3x150 MW IPCL HALDIA**

TENDER NO - PSER:SCT:HLD-E1804:17

SCH-3- C&I (PART-B)

1.00	Cable tray and Accessories	UOM	QTY	ALLOTTED PERCENT (%)
1.01	Perforated/Ladder Type cable tray and accessories (with or without cover) 50mm	Meter	2000	1.699177
1.02	Perforated/Ladder Type cable tray and accessories (with or without cover) 100mm	Meter	3350	3.130813
1.03	Perforated/Ladder Type cable tray and accessories (with or without cover) 150mm	Meter	3725	4.272235
1.04	Perforated/Ladder Type cable tray and accessories (with or without cover) 300mm	Meter	600	0.815595
1.05	Perforated/Ladder Type cable tray and accessories (with or without cover) 450mm	Meter	150	0.219193
2.00	Cable laying including dressing glanding , termination etc . GLANDS AND LUGS (ABOVE 2.5 SQMM)SHALL BE SUPPLIED BY BHEL .			
2.01	Screened Copper Cable 1P-2P/2C,3C,4C up to 2.5 sqmm armoured / unarmoured/Overall Shielded	Meter	12000	1.530164
2.02	Screened Copper Cable 4P x 0.5 sqmm armoured / unarmoured	Meter	4000	0.577977
2.03	Screened Copper Cable 8P x 0.5 sqmm armoured / unarmoured	Meter	1000	0.144494
2.04	Screened Copper Cable 10P / 12P x 0.5 sqmm armoured / unarmoured	Meter	750	0.121106
2.05	Screened Copper Cable 20P x 0.5 sqmm armoured / unarmoured	Meter	500	0.089228
2.06	4P X 0.5 SQ.MM. SHIELDED CABLE	Meter	5000	0.654232
2.07	6P X 0.5 SQMM SHIELDED INST. CABLE	Meter	2000	0.261693
2.08	8P X 0.5 SQMM SHIELDED INST. CABLE	Meter	7500	0.981347
2.09	12P X 0.5 SQ.MM. OVER ALL SHIELDED CABLE	Meter	4000	0.588769
2.10	2C X 2.5 SQ.MM. CU CABLE	Meter	4200	0.638870
2.11	3C up to 2.5 SQ.MM. CU CABLE	Meter	5000	0.760559
2.12	7C X 2.5 SQ.MM. CONTROL CABLE	Meter	8300	1.262528
2.13	10C X 2.5 SQ.MM. CONTROL CABLE	Meter	8600	1.315668
2.14	19C X 2.5 SQ.MM. CONTROL CABLE	Meter	3000	0.564171
2.15	3CX6 SQ.MM COPPER POWER CABLE	Meter	1100	0.186875

VOLUME-III PRICE SCHEDULE, REV-1				
Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for Unit#2of 3x150 MW IPCL HALDIA				
TENDER NO - PSER:SCT:HLD-E1804:17				
SCH-3- C&I (PART-B)				
2.16	4P upto 1.5 sqmm ,SHIELED INST. CABLE	Meter	17000	2.456403
2.17	5C, 2.5 sq.mm, power / control cable	Meter	6700	1.081351
2.18	2PX1.5 sqmm, ATC, I&OA, Arm, Inst	Meter	7000	0.963137
2.19	T/C Comp. Cable 2 Pair,16 AWG Kx/Rx/Sx type/2P,0.5 SQMM T/C EXTENSION//COMP. CABLE Kx/Rx/Sx type	Meter	12000	1.530164
2.20	4 PAIR/6 PAIR,0.5 SQMM T/C EXTENSION/COMP. KX/RX/K TYPE CABLE/4 PAIR/6 PAIR 16AWG, TC EXTENSION CABLE	Meter	12000	1.733932
2.21	FEEDER FIELD INTERCONNECTING EQPTS SHIELED CABLES (2 Pair x 1.5 sqmm Pair shielded and overall shielded insulated cable)	Meter	13200	2.008923
2.22	2 Traid/ multitriad cable upto 2.5 sqmm	Meter	1000	0.127514
2.23	4C-6C/multicore Fiber Optic Cable laying (except termination) with /without HDPE conduit	Meter	3000	0.634632
2.24	4P UTP /Ethernet cable	Meter	7500	1.402095
2.25	Flame Scanner cable with double/multiple shield, core size upto 2.5sqmm	Meter	3000	0.433483
3.00	Junction box/Push Button station			
3.01	MS JUNCTION BOX - 6 Way	No	16	0.098113
3.02	MS JUNCTION BOX - 12 Way	No	22	0.215849
3.03	MS JUNCTION BOX - 24 Way	No	32	0.598278
3.04	MS JUNCTION BOX - 36 Way	No	4	0.081583
3.05	MS JUNCTION BOX - 48 Way	No	7	0.154668
3.06	MS JUNCTION BOX - 64 Way	No	1	0.023795
3.07	FSSS Local Oil Gun Maintenance Switch Box	No	12	0.098892
3.08	PUSH BUTTON BOX FOR AH BLOWER	No	2	0.018323
4.00	IMPULSE PIPE/ CU TUBE/CONDUIT(Including accessories and fittings like TEE, Valves, Nipples, Manifolds,SYPHON,Condensate Pots/Glycerine seal pot etc.)			
4.01	Impulse pipe CS (16 x 2.6 mm)	Meter	600	1.172761
4.02	Impulse pipe A335 P22 1/2" NB XXS	Meter	1000	1.274422
4.03	AS/CS Impulse pipe A106 GR C upto3/4" NB upto SCH 160	Meter	1400	2.426394
4.04	AS/CS /SS above 1.5" upto Pipe 2.5"	Meter	3000	16.061722
4.05	SS pipe 21.3 x 2.8 mm	Meter	250	0.486389
4.06	SS pipe 17.1 x 1.8 mm	Meter	50	0.073064
4.07	SS tube 1/4 inch	Meter	1500	1.343178

VOLUME-III PRICE SCHEDULE, REV-1				
Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for Unit#2of 3x150 MW IPCL HALDIA				
TENDER NO - PSER:SCT:HLD-E1804:17				
SCH-3- C&I (PART-B)				
4.08	Copper Tube/SS tube (upto 12 mm)	Meter	1000	1.204199
4.09	SS tube 12.7 x 2.1 mm	Meter	800	3.399306
4.10	GR B AS PIPE OD 21.3 X 3.73 - SA106	Meter	300	0.653628
4.11	P22 AS PIPE OD 21.3 X 3.73 SA335	Meter	500	1.147266
4.12	GI/PVC Conduit upto 1" (flexible & rigid)	Meter	300	0.241641
4.13	GI / PVC Conduit above 1" up to 2.5" (flexible & rigid)	Meter	300	0.295344
4.14	GR B PIPE OD 33.4 X 4.55 - SA106	Meter	600	1.307257
5.00	FABRICATION AND ERECTION			
5.01	Fab. & erection of Air header for SADC Power cylinder with 1/2" to 2" GI pipe, and valves etc. (1 I/L, 14 O/L, drain & vent).	Nos	5	0.509896
5.02	Fab. & erection of Air filter station for SADC Power cylinder with 1" GI pipe, and valves and air filter regulator	Nos	4	0.305938
5.03	Fab. & erection of dust collector / catch pot	Nos	2	0.002549
5.04	Fab. & erection of structural steel (Angle, Channel, flat, plate etc.)(Steel - free supply by BHEL)	Meter	10.5	1.849273
6.00	PANELS & SYSTEMS AND PLANT MONITORING SYSTEM (750MMX750MMX2415MM)			
6.01	Suite of single panel with Accessories (max/non max)	Nos	5	0.632943
6.02	Suite of two panel	Nos	23	4.279377
6.03	Suite of three panel	Nos	2	0.440087
6.04	Suite of four panel	Nos	1	0.262523
6.05	NETWORK PANEL FOR DCS (750MMX750MMX2415MM)	Nos	3	0.145840
6.06	HMI WITH PC, PRINTER AND ALL ACCESSORIES (1 Set=12 Nos.)	Set	1	1.741656
6.07	Modular Desk for HMI Control Desk(4 section)-	Nos	1	0.182770
6.08	Unit Control Panel	Nos	1	0.114727
6.09	HART MANAGEMENT SYSTEM (HMS SOFTWARE , HARDWARE /MODULE/PANEL) INCLUDING PC Printer and accessories.	Nos	3	0.637191
6.10	Local gauge board (approx. weight 650kg, 2200(L) x 300(B) x 1800(H) mm)	Nos	5	1.274383
6.11	GRAVI. FEEDER REMOTE CONTROL PANEL	Set	5	0.913308
6.12	Vibration monitoring system rack for TSI including cables,JBs, probes etc.	Nos	1	1.359722
6.13	Transmitter rack	Nos	2	0.271868
6.14	Local Instrument enclosures (LIE)	Nos	28	2.747173
6.15	Local Instrument Racks (LIR)	Nos	18	2.354719
6.16	EWLI System including local panel, probes and Remote display unit.	Nos	2	0.486152
6.17	Furnace Temperature probe including local panel/box and all accessories	Nos	2	0.029175
6.18	Master Slave clock System consisting of a panel, antenna and approx 20 nos of slave clocks to be fixed at different locations within the plant premises.	set	1	1.019792

VOLUME-III				
PRICE SCHEDULE, REV-1				
Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for				
Unit#2of 3x150 MW IPCL HALDIA				
TENDER NO - PSER:SCT:HLD-E1804:17				
SCH-3- C&I (PART-B)				
6.19	VMS CUBICLE 2416MMX750MMX750MM including pre-fab cables, mounting pad, JB, etc.	no	1	0.110477
7.00	Field Instruments			
7.01	HEA spark rod assembly with 240 volt exciter box.	No	12	0.407802
7.02	Burner tilt shear pin failure indication box with limit switch	No	4	0.077788
7.03	Air filter regulators / Lubricators (1/2", 1", 0-6KG, 0-10 KG)	No	35	0.101993
7.04	Pressure Switch / DP Switch / DP indicating switch	No	100	0.875075
7.05	Electronic Level Switch (with amplifier, etc), Capacitance or conductivity type	No	2	0.019439
7.06	Flow switch (Mechanical / Electronic)	No	5	0.048596
7.07	Electronic Pressure / DP / Flow (DP type) / Level -Transmitter	No	165	1.443874
	Guided wave radar type level transmitter.	No	10	0.297439
7.08	Flow Transmitter (Pulse / mass flow / target type) including flanges for LFO	No	1	0.036464
7.09	Pressure Gauge / DP gauge/DP Indicator	No	40	0.244750
7.10	Temperature Indicator /Temperature Gauge (all types)	SET	15	0.088570
7.11	Level Indicator / Level Gauge	Nos	10	0.339835
7.12	Level Switches	Nos	10	0.297356
7.13	Flow indicator / Flow Gauge / Flow meter/Acoustic flow meter (coal)	Nos	5	0.121534
7.14	THERMOCOUPLE (K type/ T type / R type / J type, with or without integrated metallic extension cable)/Thermocouple DRA 300/ Type A/Type-B/Type-C/TypeD /Duplex/Chromel Alumel Thermocouple/Thermocouple with/without Thermowell	Nos	90	0.380051
7.15	RTD (PRT, CRT, MINIATURE RTD, ETC.)/DUPLEX RTD(2WIRE//3 WIRE/4WIRE) with/without Thermowell.	Nos	41	0.173134
7.16	MTM Thermocouple of length upto 28 M length	Nos	58	1.478698
7.17	Flame Scanner Head Assembly including pig tail cable upto miniature JB	Nos	12	0.254948
7.18	O2 (OXYGEN) Analyzer System with Auto cal unit Detector and accessories.	set	4	0.509753
7.19	OPACITY MONITOR WITH accessories.	Nos	1	0.169918
7.20	Speed measuring loop/probe	Nos	6	0.152926
7.21	CONDENSATE POT/SYPHON	Nos	60	0.402956
7.22	E/P CONVERTOR	Nos	20	0.254877
7.23	Sight Flow Glass	Nos	12	0.096709
7.24	TSI Probes	Nos	84	0.713854
7.25	Proximitors	Nos	168	1.427709
8.00	Removal, calibration, re-mounting and commissioning of instruments for Skid. Each skid will have minimum of 05 no. instruments e.g. PG/PS/PT/TG/DPI/DPT /DPS/TS/RPM meter with probe/LS/LG /FS/FI /FTetc. Dressing of capillary & cables if any, repair of Cu-tube/impulse pipe, if any, changing of terminals of JB. if any, is also included.	Nos	12	0.634642
9.00	CALIBRATION/ COMISSIONING (Erection excluded)			
9.01	Power Cylinder (on-off type) including Erection & commissioning of limit switch	Nos	10	0.140923

VOLUME-III PRICE SCHEDULE, REV-1				
Erection, testing, commissioning & handing over of Electrical & C&I system for boiler, ESP, TG Sets for Unit#2of 3x150 MW IPCL HALDIA				
TENDER NO - PSER:SCT:HLD-E1804:17				
SCH-3- C&I (PART-B)				
9.02	Power Cylinder(Regulating type) INCLUDING position Transmitter,l/P converter etc.	Nos	20	0.352307
9.03	Solenoid operated ON-OFF type valve	Nos	12	0.081051
9.04	Control valves (Regulating)/Control valve(Pneumatically operated) including position transmitter	Nos	25	0.637370
9.05	Extraction NRV / Spray water control valve	Nos	5	0.127474
9.06	Gland steam control valve	Nos	2	0.050990
9.07	HPBP Pr. & Temp. control valve	Nos	4	0.101979
9.08	HPBP spray block valve	Nos	1	0.025495
9.09	Limit Switches	Nos	25	0.148678
9.10	Actuator /Motorised valve	Nos	50	0.981133
9.11	ERV CONTROL STATION including pressure switch, solenoidand accessories.	Nos	2	0.067967
TOTAL -- PART-B - C&I				100.000000

ANNEXURE – A TO TCN-01

FORMAT FOR SEEKING CLARIFICATION

JOB	Erection, Testing, Commissioning, etc of Electrical and C&I system for unit #2 of 3x150 MW unit at IPCL Haldia, TPP, W.B.
TENDER NO	PSER:SCT:HLD-E1804:17

Sl no	Reference clause of tender document	Existing provision	Bidder's query	BHEL's clarification
01	TENDER NO - PSER:SCT:HLD-E1804:17. VOLUME-III PRICE SCHEDULE, REV-00	Quantity not mentioned for Items 5.03, 6.06 and 9.01 of SCH-3 C&I (PART-B)	Whether unit rates are to be provided against these items and will not be taken into consideration for calculating total price.	REFER TCN-01

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

BHARAT HEAVY ELECTRICALS LIMITED,
Power Sector - Eastern Region,
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Erection, Testing, Commissioning, etc of Electrical and C&I system for unit #2 of 3x150 MW unit at IPCL Haldia, TPP, W.B.	
Ref	1.0	Tender no PSER:SCT:HLD-E1804:17.
	2.0	BHEL's NIT, vide reference no PSER:SCT:HLD-E1804:5438, Dated 27-01-2017.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:HLD-E1804:TCN-01, dated 02-02-2017.
	4.0	All other pertinent issues till date.

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted/uploaded offer/documents in accordance with tender instructions with acceptance of the terms & conditions of the tender by us and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized
representative of the bidder)

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 : 23211691, 23211798, 23211796