

TENDER SPECIFICATION

No. BHE/PW/PUR/KLT-CNI/461

FOR

HANDLING AT SITE STORES/STORAGE YARD, TRANSPORTATION TO SITE OF WORK, COMPLETE ERECTION, CHECKING OF CALIBRATION, TESTING, ASSISTANCE FOR COMMISSIONING, TRIAL OPERATION, FINAL PAINTING AND HANDING OVER OF CONTROL & INSTRUMENTATION WORKS FOR 1X315 TPH CFBC BOILER, ITS AUXILIARIES, 1x75 MW TG AND AUXILIARIES AND BALANCE OF PLANT FOR UNIT #4

AT

KUTCH LIGNITE TPS EXTENSION

GUJARAT STATE ELECTRICITY CORPORATION LIMITED

VILL-PANANDHRO, TALUKA- LAKHPAT

DISTT-KUTCH, GUJARAT

PART –II (Price Bid)



BHARAT HEAVY ELECTRICALS LIMITED

(A GOVERNMENT OF INDIA UNDERTAKING)

POWER SECTOR: WESTERN REGION

345-KINGSWAY, NAGPUR-440 001

BHARAT HEAVY ELECTRICALS LIMITED

(A GOVERNMENT OF INDIA UNDERTAKING)
POWER SECTOR - WESTERN REGION
SHREEMOHINI COMPLEX
345-KINGSWAY, NAGPUR-440 001

HANDLING AT SITE STORES/STORAGE YARD, TRANSPORTATION TO SITE OF WORK, COMPLETE ERECTION, CHECKING OF CALIBRATION, TESTING, ASSISTANCE FOR COMMISSIONING, TRIAL OPERATION, FINAL PAINTING AND HANDING OVER OF CONTROL & INSTRUMENTATION WORKS FOR 1X315 TPH CFBC BOILER, ITS AUXILIARIES, 1x75 MW TG AND AUXILIARIES AND BALANCE OF PLANT FOR UNIT #4

AT

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GUJARAT STATE ELECTRICITY CORPORATION LIMITED

EARNEST MONEY DEPOSIT : Please see Special Conditions of Contract (Section-15)

LAST DATE FOR TENDER SUBMISSION: Please obtain updated information from web page "<http://www.bhel.com>" → Tender Notifications → View Corrigendums.

THESE TENDER SPECIFICATION DOCUMENTS CONTAINING PART-I AND PART- II (PRICE BID), ARE ISSUED TO:

M/s.

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PLEASE NOTE:
THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.
BIDDER SHALL NOTE THAT THEIR OFFER WILL BE CONSIDERED SUBJECT TO THE APPROVAL OF BHEL'S CUSTOMER.

For Bharat Heavy Electricals Limited

Dy. General Manager (Purchase)
Place: Nagpur
Date:

Bharat Heavy Electricals Limited: PSWR: Nagpur
Tender Specification No. BHE/PW/PUR/KLT -CNI/461 (Part-II: Price Bid)
Schedule of Rates and Quantities (Page 1 of 12)

SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
A-1	Control Panel (approx L1000 X B1000 X H2500, 400Kg) - one panel	00008	Nos		
A-2	Control Panel (approx L1001 to 1500 X B1000 X H2500, 800 Kg) - suit of two panels	15	Nos		
A-3	Control Panel (approx L1501 to 2250 X B1000 X H2500, 1200 Kg) - suit of three panels	1	No		
A-4	Control Panel (approx L2251 to 3000 X B1000 X H2500, 1600 Kg) - suit of four panels	1	No		
A-5	Unit Control Panel (approximate L2168x1000x2355)	1	Set		
A-6	Electrical Control Panel approx 1900x1000x2355	1	Set		
A-7	Master and Slave Clock system	1	Set		
A-8	Transducer Panel	1	No		
A-9	220/240 VAC UPS (55KVA, with ACDB and Batteries)	1	Set		

Date:

Signature & Official Seal of Bidder

Bharat Heavy Electricals Limited: PSWR: Nagpur
Tender Specification No. BHE/PW/PUR/KLT -CNI/461 (Part-II: Price Bid)
Schedule of Rates and Quantities (Page 2 of 12)

SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
A-10	Load Cell Panel (600x600x1800)	1	Set		
A-11	VFD Control Panel (lime stone and lignite) (1000x1000x1800)	6	Nos		
A-12	Air Heater Rotor Stoppage Alarm Box	1	Set		
A-13	Vibration monitoring system for main turbine (Rack mounted Bentley Nevada 3500, with Vibration, axial Shift pick up, proximeters etc.)	1	Set		
A-14	Local Instrument enclosures and Racks	15	Nos		
A-15	Electronic Water Level Indicator (EWLI)	2	Sets		
A-16	SWAS Sample handling system with racks & Sample conditioning panel with chiller	1	Set		
A-17	Conductivity Analyzer	1	Set		
A-18	Dissolved Oxygen Analyzer	1	Set		

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Bharat Heavy Electricals Limited: PSWR: Nagpur
Tender Specification No. BHE/PW/PUR/KLT -CNI/461 (Part-II: Price Bid)
Schedule of Rates and Quantities (Page 3 of 12)

SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
A-19	Hydrazine Analyzer	1	Set		
A-20	pH Analyzer	1	Set		
A-21	Silica Analyzer (Multi channel)	1	Set		
A-22	Analyzer Panel	1	Set		
A-23	Annunciation Panel	1	Set		
B-1	Direct Water Level Gauge	2	Sets		
B-2	Solenoid valves (3 way, AC/DC, 1/4", 1/2", 1", NPT/BSP, single/dual coil)	15	Nos		
B-3	Igniter system	2	Sets		
B-4	Flame Scanner Head Assembly	2	Sets		

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SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
B-5	Air filter regulators / Lubricators (1/2", 1", 0-6KG, 0-10 KG)	30	Nos		
B-6	Speed Regulators / Air lock valves in oil gun corner rack	2	Nos		
B-7	max Engineering / operator / storian / LAN / WAN / Shift in charge / stn in charge / gateway / interface PC / HART etc., PC/Server Station with ASCII Keyboard, Mouse & 21" Colour Monitor, individual UPS	10	Sets		
B-8	Printers (80/132 col Dot Matrix, A3 Inkjet, A3 Laserjet, etc)	5	Sets		
B-9	CO Analyzer (in situ type)	1	Set		
B-10	O ₂ (OXYGEN) Analyzer	2	Sets		
B-11	SO ₂ and NOX Analyzer (in situ type)	1	Set		
B-12	Opacity Monitor	1	Set		

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SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
C-1	Console inserts (to be mounted on Backup desk)	1	Set		
C-2	Vertical indicators (moving coil / bar graph)	5	Nos		
C-3	Digital / bargraph indicators	5	Nos		
C-4	Recorder 24 / 30 Channel	2	Nos		
C-5	Recorder 3 channel	2	Nos		
C-6	Pressure Switch / DP Switch / DP indicating switch	75	Nos		
C-7	Temperature Switch / Thermostat	2	Nos		
C-8	Float type Level Switch	25	Nos		
C-9	Electronic Level Switch (with amplifier, etc), Capacitance or conductivity type	6	Nos		

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Schedule of Rates and Quantities (Page 6 of 12)

SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
C-10	Flow switch (Mechanical / Electronic)	2	Nos		
C-11	Pressure Gauge / DP gauge/ Draft gauge	250	Nos		
C-12	Temperature Gauge (all types)	200	Nos		
C-13	Level Indicator / Level Gauge	15	Nos		
C-14	Flow indicator / Flow Gauge / Flow meter/Acoustic flow meter (coal)	2	Nos		
C-15	Pressure / DP / Flow (DP type) / Level - Transmitter	20	Nos		
C-16	Level Transmitter (displacer type)	2	Nos		
C-17	Flow Transmitter (Pulse / mass flow / target type) including flanges	3	Nos		
C-18	Thermocouple / RTDs with thermo-well (all types) along with converters wherever applicable	130	Nos		

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SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
C-19	MTM Thermocouple	34	Nos		
C-20	Thermocouple assy with 6 / 9 Cr-AI MI T/C along with integral JB	2	Nos		
C-21	I/P converters	25	Nos		
C-22	Pneumatic Pressure controller with accessories	1	No		
C-23	Pneumatic Temperature controller with accessories	1	No		
D-1	PA Fan Lube oil skid	2	Sets		
D-2	Pneumatic regulating drives (Control Valves)	30	Nos		
D-3	Pneumatic On/Off valves	8	Nos		
D-4	ERV Controller	1	No		

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SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
D-5	Corner valve/ Trip valves commissioning	8	Nos		
D-6	Open/Close type pneumatic gates / dampers / valves	10	Nos		
D-7	Only healthiness checking of embedded RTD / T/C	100	Nos		
D-8	Limit Switches (checking and adjusting only).	20	Nos		
E-1	Perforated / Ladder cable tray and accessories (with or without cover) 50mm	300	Mtrs		
E-2	Perforated / Ladder cable tray and accessories (with or without cover) 100mm	300	Mtrs		
E-3	Perforated / Ladder cable tray and accessories (with or without cover) 150mm	1000	Mtrs		
E-4	Cable duct 60 x 60 x 1000	100	Mtrs		
E-5	Cable duct 100 x 100 x 1000	50	Mtrs		

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Bharat Heavy Electricals Limited: PSWR: Nagpur
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SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
E-6	Cable duct 180 x 100 x 1000	50	Mtrs		
E-7	Cable duct 250 x 60 x 1000	30	Mtrs		
E-8	Screened Copper Cable 2P x 0.5 sqmm armoured / unarmoured	21000	Mtrs		
E-9	Screened Copper Cable 4P/ 6P x 0.5 sqmm armoured / unarmoured	25000	Mtrs		
E-10	Screened Copper Cable 8P x 0.5 sqmm armoured / unarmoured	15000	Mtrs		
E-11	Screened Copper Cable 10P / 12P x 0.5 sqmm armoured / unarmoured	12000	Mtrs		
E-12	Screened Copper Cable 10P / 12P x 0.5 sqmm armoured / unarmoured	2000	Mtrs		
E-13	Screened Copper Cable 24P x 0.5 sqmm armoured / unarmoured	4000	Mtrs		
E-14	Screened Copper Cable 1P/2C x 1.5 sqmm armoured / unarmoured	1800	Mtrs		

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Schedule of Rates and Quantities (Page 10 of 12)

SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
E-15	Screened Copper Cable 2P/4C x 1.5 sqmm armoured / unarmoured	2000	Mtrs		
E-16	Screened Copper Cable 5C/7C/4P x 1.5 sqmm armoured / unarmoured	8000	Mtrs		
E-17	Compensating cable 2P x 1.3 sqmm type Tx/Sx/Kx unarmoured/armoured	2600	Mtrs		
E-18	Compensating cable 4P x 1.3 sqmm type Tx/Sx/Kx unarmoured/armoured	500	Mtrs		
E-19	Copper Cable 1 or 2 or 3 triad, 0.5/1.5 sqmm armoured/unarmoured	500	Mtrs		
E-20	Copper Cable 6 triad, 0.5/1.5 sqmm armoured/unarmoured	200	Mtrs		
E-21	Laying, etc of Optical fibre cables on cable trays, conduits etc (termination supervision by other agency) with minor civil works	200	Mtrs		
E-22	Network UTP Cables (special termination using UTP connectors involved)	200	Mtrs		
F-1	Junction boxes upto 48 way	75	Nos		

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SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
F-2	Impulse pipe CS ½" SCH 40 (D21.3 x 2.76 mm)	50	Mtrs		
F-3	Impulse pipe CS ½" SCH 80 (D21.3 x 3.73 mm)	700	Mtrs		
F-4	Impulse pipe AS ½" SCH 40 (D21.3 x 2.76 mm)	2800	Mtrs		
F-5	Impulse pipe ASTM A 335 P22 1/2 " Sch 40	400	Mtrs		
F-6	Impulse pipe ASTM A 335 P22 3/4 " Sch 80/160	300	Mtrs		
F-7	Impulse pipe SS 1/4" (D12.7/13.5 x 2.1/2.6 mm)	430	Mtrs		
F-8	Impulse pipe SA 213 1/2" SCH 80/160	1000	Mtrs		
F-9	Copper tube ¼ " / 6mm/ 8mm, with or without sheath	100	Mtrs		
F-10	GI Pipe (1/2", 1") Heavy grade	75	Mtrs		

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Schedule of Rates and Quantities (Page 12 of 12)

SN	DESCRIPTION	QTY	UOM	UNIT RATE (Rs.)	TOTAL AMOUNT (Rs.)
F-11	GI Pipe (1.5 ", 2")	10	Mtrs		
F-12	Plant Control Desk / CRT desk	1	Set		
F-13	Computer furniture for all Servers, PCs, Printers	1	Set		
F-14	Structural steel for fabrication	10	Tons		
G-1	Lignite bunker level monitoring system	2			
Grand Total in Figures (Rs)					
Grand Total in words: Rupees					

Date:

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