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TENDER NO. BHEL/NR/SCT/ CHHABRA (3 & 4)/ C & I/ 839

TENDER SPECIFICATIONS

FOR

“Erection, Testing, Commissioning, Trial Operation and handing over of all C&I equipments of unit no. 3 & 4 of 2x250 MW stage II, Chhabra TPS, Rajasthan.”

PART II – PRICE BID



Bharat Heavy Electricals Limited
(A Govt. Of India Undertaking)
Power Sector – Northern Region,
Plot No. 25 , Sector - 16A ,
Distt. Gautam Budh Nagar, NOIDA – 201 301 (INDIA)



ISO 9001, ISO 14001 and
OHSAS 18001 & SA 8000
certified company
SubContract and Purchase
Deptt.

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(A Govt. Of India Undertaking)
Power Sector – Northern Region,
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THIS TENDER SPECIFICATION ISSUED TO:

M/S-----

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RATE SCHEDULE

SL NO	ITEM DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
	PANELS/RACKS/CONSOLES				
1	DCS Panel for SG,TG 750X750X2415 mm	No.	102		
2	HMI Panel 750X750X2415 mm	No.	04		
3	Generator instrumentation Cabinet 1000X800X2200 mm	No.	04		
4	SOOT BLOWER MCC 9700x2450x1000 mm	No.	02		
5	Gas Analyser cabinet 1200x800x2110 mm	No.	02		
6	DAVR Panel 1200X1200X2315 mm	No.	02		
7	VMS CABINET 800X800X2415 mm	No.	10		
8	MILL VMS Local Cabinet 400x300x300 mm	No.	02		
9	TUBE MILL GREASING SYSTEM BOX (1400L X 1500H X 800W)	No.	06		
10	TUBE MILL DELTA PANEL (1600LX2000HX600W)	No.	06		
11	MILL FIRE PROTECTION PANEL (755L X 1345H X 340W)				
12	EWLI ASSERTOR PANEL 600x600x350 mm	No.	04		
13	GRAVIMETRIC FEEDER PANEL 1200X600X2315 mm	No.	12		
14	SEAL OIL SYSTEM CONTROL PANELS 1000L X 2200H X 800W)	No.	02		
15	FTP LOCAL STARTER 650x300x300 mm	No.	02		

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SL NO	ITEM DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
16	DC SCANNER AIR FAN STARTER 900x1120x375 mm	No.	02		
17	DC Seal oil Pump series resistance 900x480x500 mm	No.	02		
18	DC EOP/JOP CONTROL PANELS 1000x800x2200 mm	No.	04		
19	DC EOP / JOP SERIES RESISTANCE BOX - 1350L X 750H X 840W)	No.	04		
20	Open Type Instrument Rack	No.	48		
21	Closed Type Instrument Rack	No.	26		
22	LARGE VIDEO SCREEN(67") ,resolution 1400x1050 pixels	No.	04		
	INSTALLATION,CALIBRATION & COMMISSIONING OF LOCAL/FIELD INSTRUMENTATION/EQUIPMENT				
23	Temperature gauges/Pressure gauges/ Diff. Pressure gauge	No.	780		
24	Temp. Transmitter /Pressure Transmitters / Differential pressure/position transmitters	No.	184		
25	Level Transmitter/Level gauge	No.	22		
26	Temp. switches/Pressure switches /DP switches/level switch	No.	442		
27	Electronic/Guided Wave Radar type level Transmitters	No.	44		
28	Limit switches	No.	12		
29	Heavy duty Limit Switches (for BTPS)	No.	11		
30	EWLI /DWLG for drum	No.	08		
31	Flame scanner head assy.	No.	56		
32	Electromagnetic relief valve controller box	No.	04		
33	Hardwired Consoles with push buttons and indicating lamps for SG / EAST / GEN.systems	No.	24		
34	UCB mounted instrument / indicator / recorder / control station	No.	100		

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SL NO	ITEM DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
35	Thermocouples/RTD's	No.	435		
36	MTM Thermo Couple (Simplex/duplex)	No.	244		
37	Air Filter Regulators	No.	100		
38	I/P Converters	No.	130		
39	Vibration pick up	No.	220		
40	Relative expansion sensors	No.	4		
40	Solenoid Valves	No.	150		
41	Speed pick up	Nos	24		
42	Axial shift sensors	No.	6		
43	Erection, commissioning of Pneumatic Power cylinders:				
a	On/Off type with sol. & limit switches	No.	50		
b	Regulating type with positioner, PFT etc (Bore x Stroke - 6"x8" / 8"x8" / 8"x6")	No.	174		
c	Regulating type with positioner, PFT etc (Bore x Stroke - 12x6" / 14"x16")	No.	4		
44	Pneumatic indicating controller with accessories	No	2		
45	Temperature controller with accessories	No	8		
46	Printers	No	14		
47	PC set with monitor / keyboard / power supply unit	No	26		
48	Reverse rotation monitor including respective probes / interconnecting leads	No	6		
	CONTROL/SIGNAL/SCREENED/POWER CABLES LAYING,DRESSING,CLAMPING & TERMINATION	UNIT	QTY		
49	2 Core / 1 Pair Cable (armoured / un-armoured) Core size upto 2.5 Sq. mm	MTRS	9600		
50	3 Core / 1 Triad Cable (armoured / un-armoured) Core size upto 2.5 Sq. mm	MTRS	78900		
51	4 Core / 2 Pair Cable (armoured / un-armoured) Core size upto 2.5 Sq. mm	MTRS	72600		

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SL NO	ITEM DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
52	5 Core Cable (armoured / un-armoured) Core size upto 2.5 Sq. mm	MTRS	7300		
53	7 / 8 Core / 4 Pair / 2 Triad Cable (armoured / unarmoured) Core size upto 2.5 Sq. mm	MTRS	107350		
54	10 - 16 Core / 8 Pair Cable (armoured / unarmoured) Core size upto 2.5 Sq. mm	MTRS	101000		
55	17 - 24 Core / 12 Pair Cable (armoured / unarmoured) Core size upto 2.5 Sq. mm	MTRS	13200		
56	25 - 48 Core / 16-24 Pair Cable (armoured / unarmoured) Core size upto 2.5 Sq. mm	MTRS	1200		
57	3C x 6-16 Sq.mm Cable (armoured / un-armoured)	MTRS	2400		
58	Pre-fabricated cable (upto 50 M length)	MTRS	50		
59	4P UTP E-CAT CABLE	MTRS	21500		
	CABLE TRAY & Accessories(including supports fabrication/erection)				
60	Ladder/ Perforated type Cable tray, W=50mm including 60 mm wide cable duct with cover	MTRS	240		
61	Ladder/ Perforated type Cable tray, W=100mm	MTRS	4850		
62	Ladder/ Perforated type Cable tray, W=150mm including 180 mm wide cable duct with cover	MTRS	2545		
63	Ladder/ Perforated type Cable tray, W=300mm including 250 mm wide cable duct with cover	MTRS	200		
	INSTALLATION & FABRICATION OF STRUCTURAL STEEL				
64	ANGLE ,ISM, PLATES etc	MT	20		
65	IMPULSE PIPES/ TUBES ALONG WITH FITTINGS				
66	Copper Tube-6mm/8mm	MTRS	1750		
67	6mm SS Tube	MTRS	2000		
68	1/2",3/4" CS impulse pipe	MTRS	3100		
69	1/2",3/4" AS impulse pipe	MTRS	1660		
70	1/2",3/4" SS impulse pipe	MTRS	500		

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SL NO	ITEM DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
71	GI pilica conduit with fittings(up to 1" size)	MTRS	50		
72	GI pilica conduit with fittings(above 1" size)	MTRS	50		
73	GI Rigid conduit up to 1"	MTRS	50		
74	GI pipe 15 NB	MTRS	1600		
	JUNCTION BOXES/INDICATION BOXES/LOCAL CONTROL STATIONS				
75	JB up to 12 ways/ local gun maintenance switch box/local PBs	No.	150		
76	JB up to 24 way 340x280x145	No.	311		
77	JB 25-64 way 480x280x145	No.	78		
78	Junction boxes with cold junction compensation (SUV -13)	No.	29		
	COMMISSIONING/CALIBRATION/TESTING of control valves, on/off valves, electrical/pneumatic valves, actuators, solenoid valves, power cylinders etc.				
79	Callibration of SOV operated pneumatic trip Valves	No.	332		
80	Callibration / commissioning of regulating Control Valves with positioners / LS / PFT	No.	50		
81	Commissioning of motorised actuators	No.	10		
82	Callibration / commissioning of Power cylinder (erected by other agency or equipment mounted)	No.	80		

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