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TENDER SPECIFICATION

TENDER NO. BHEL/NR/SCT/PARBATI-II/FIRE FIGHTING/1009

FOR

"ERECTION & COMMISSIONING WORK OF FIRE FIGHTING SYSTEM PACKAGES INCLUDING RECEIPT & LOADING OF MATERIALS FROM BHEL STORES, LOCAL TRANSPORTATION FROM BHEL STORES TO POWER HOUSE/WORK SITE , PERFORMANCE TESTING AT SITE, FINAL PAINTING OF EQUIPMENTS AT SITE AND HANDING OVER OF FIRE FIGHTING SYSTEMS TO CUSTOMER AT 4X200 MW, PARBATI-II HEP SITE, DISTT. KULLU, HIMACHAL PRADESH."

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,
OHSAS 18001 & SA 8000
certified company
Sub Contract Deptt.**

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IMPORTANT NOTE

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THIS TENDER SPECIFICATION ISSUED TO:

M/S-----

Annexure - A**RATE SCHEDULE**

Job:-ERECTION & COMMISSIONING WORK OF FIRE FIGHTING SYSTEM PACKAGES INCLUDING RECEIPT & LOADING OF MATERIALS FROM BHEL STORES,LOCAL TRANSPORTATION FROM BHEL STORES TO POWER HOUSE/WORK SITE ,PERFORMANCE TESTING AT SITE,FINAL PAINTING OF EQUIPMENTS AT SITE AND HANDING OVER OF FIRE FIGHTING SYSTEMS TO CUSTOMER AT 4X200 MW, PARBATI-II HEP SITE, DISTT. KULLU, HIMACHAL PRADESH.

Sl. No.	Description of Works	Lump sum Price ("A") in Rupees (In Figures and word) are to be quoted.
1	<p>Lumpsum price for the work of "ERECTION,TESTING&COMMISSIONING WORK OF FIRE FIGHTING SYSTEM & FIRE ALARM SYSTEM PACKAGES OF 4X200MW PARBATI-II HEP INCLUDING RECEIPT & LOADING OF MATERIALS FROM BHEL STORES, LOCAL TRANSPORTATION FROM BHEL STORES TO POWER HOUSE/WORK SITE, PERFORMANCE TESTING AT SITE, FINAL PAINTING OF EQUIPMENTS AT SITE AND HANDING OVER OF FIRE FIGHTING SYSTEMS TO CUSTOMER. Refer:- Chapter-II-(Scope of work)of this tender."</p>	

Note:-The rates of different items for the entire scope shall be worked out & awarded as per Annexure 'B'.

BOQ CUM RATE SCHEDULE ITEMS

SCOPE OF WORK :- ERECTION ,TESTING & COMMISSIONING WORK OF FIRE FIGHTING SYSTEM PACKAGES OF 4X200MW PARBATH-II HEP INCLUDING RECEIPT OF MATERIALS FROM BHEL STORES ,LOCAL TRANSPORTATION FROM BHEL STORES TO POWER HOUSE/WORK SITE ,PERFORMANCE TESTING AT SITE,FINAL PAINTING OF EQUIPMENTS AT SITE AND HANDING OVER OF FIRE FIGHTING SYSTEMS TO CUSTOMER.

SL.No		DESCRIPTION OF WORK	UNIT	TOTAL QTY (Q)	FACTOR (F)	RATE (Rs.) = FACTOR (F) * A / 100000 (Rounded off to two places after decimal)	AMOUNT (Rs.) = RATE *QUANTITY
I	SECTION-A	Pump House					
1	A1	Tank Filling Pumps (350m3 / 88 MWC)	Nos.	2	202.7079		
2	A2	Bore Well Pumps (350m3 / 88 MWC) (1 working + 1 spare)	Nos.	2	247.7541		
3	A3	Booster Pumps (280m3 / 35 MWC) - Motor Driven	Nos.	1	196.2012		
4	A4	Booster Pumps (280m3 / 35 MWC) - Diesel Engine Driven	Nos.	1	221.2269		
5	A5	Relay Based Panel	Nos.	2	144.8986		
6	A6	Pressure switch with Needle valve	Nos.	5	2.9211		
7	A7	Pressure Gauges with Needle valve	Nos.	5	2.9211		
8	A8	Level Switches for Fire Water Tank	Nos.	10	42.3935		
9	A9	Level Gauge Side mounted for Diesel Tank	Nos.	2	28.2039		
10	A10	Diff. Pressure Switch	Nos.	2	14.0818		
11	A11	C.I. Gate Valve					
12	A11.1	250 NB	Nos.	20	22.6034		
13	A11.2	200 NB	Nos.	20	18.0707		
14	A11.3	150 NB	Nos.	15	13.5580		
15	A11.4	100 NB	Nos.	50	9.0253		
16	A11.5	80 NB	Nos.	80	6.7689		
17	A11.6	50 NB	Nos.	10	4.5126		
18	A11.7	25 NB	Nos.	10	2.2563		
19	A12	C.I. Non-return Valve					
20	A12.1	250 NB	Nos.	5	22.6034		
21	A12.2	200 NB	Nos.	5	18.0707		
22	A12.3	80 NB	Nos.	5	6.7689		
23	A13	Simplex Basket type Strainer	Nos.	5	22.6034		
24	A14	M.S. T- Strainer -250 NB	Nos.	5	22.6034		
25	A15	Piping - ERW, MS Black as per IS:1239 Medium / IS:3589					
26	A15.1	250 NB	Mts.	300	15.9554		
27	A15.2	200 NB	Mts.	600	12.7522		
28	A15.3	150 NB	Mts.	1000	9.5692		
29	A15.4	100 NB	Mts.	240	6.3660		
30	A15.5	80 NB	Mts.	1500	4.7745		
31	A15.6	50 NB	Mts.	1000	3.1830		
32	A15.7	25 NB	Mts.	500	1.5915		
	TOTAL VALUE OF SECTION-A						
II	SECTION-B	Hydrant System and Yard Piping For Hydrant & Spray System					
33	B1	MS Pipe					
34	B2	250 NB	Mts.	100	15.9554		
35	B3	200 NB	Mts.	100	12.7522		
36	B4	150 NB	Mts.	300	9.5692		
37	B5	100 NB	Mts.	300	6.3660		
38	B6	Single Headed Hydrant Valve	Nos.	50	2.6592		
39	B7	Branch pipe with nozzle	Nos.	50	1.3296		
40	B8	Hose Pipe	Nos.	100	1.3296		
41	B9	Hose Box	Nos.	50	6.6481		
42	B10	C.I. Gate Valve					
43	B11	200 NB	Nos.	5	22.6034		
44	B12	150 NB	Nos.	5	18.0707		
	TOTAL VALUE OF SECTION-B						

III	SECTION-C	Fire Escape Hydrant System					
45	C1	MS Pipe					
46	C1.1	150 NB	Mts.	50	9.5692		
47	C1.2	100 NB	Mts.	50	6.3660		
48	C1.3	80 NB	Mts.	100	4.7745		
49	C2	Fire Escape Hydrant	Nos.	20	7.1824		
50	C3	Hose Box	Nos.	20	6.6481		
51	C4	Branch pipe with nozzle	Nos.	20	1.3296		
52	C5	Hose Pipe	Nos.	20	1.3296		
53	C6	Gun Metal Valve	Nos.	20	2.2563		
54	C7	Air release valve	Nos.	5	2.2563		
55	C8	Hose Reel	Nos.	20	6.6481		
	TOTAL VALUE OF SECTION-C						
IV	SECTION-D	High Velocity Water Spray System (HVWS)					
56	D1	GI Pipe					
57	D1.1	200 NB	Mts.	700	12.7522		
58	D1.2	150 NB	Mts.	350	9.5692		
59	D1.3	100 NB	Mts.	150	6.3660		
60	D1.4	50 NB	Mts.	600	3.9888		
61	D1.5	40 NB	Mts.	800	2.3772		
62	D1.6	25 NB	Mts.	2500	1.5915		
63	D2	MS Pipe					
64	D2.1	100 NB	Mts.	150	6.3660		
65	D2.2	50 NB	Mts.	100	3.1830		
66	D2.3	25 NB	Mts.	500	1.5915		
67	D3	Spray Nozzle - Stainless Steel	Nos.	800	0.6648		
68	D4	Deluge Valve					
69	D4.1	100 NB	Nos.	15	53.1846		
70	D4.2	80 NB	Nos.	10	39.8884		
71	D5	Q.B Detector - 79 °	Nos.	600	2.6592		
72	D6	Y- Type Strainer -100 NB	Nos.	20	9.0253		
74	D7	C.I. Gate Valve -100 NB	Nos.	50	9.0253		
76	D8	Pressure Switch	Nos.	40	2.9211		
77	D9	Solenoid Valve	Nos.	40	26.5923		
78	D10	Local Control panel for Deluge Valve	Nos.	35	13.2961		
79	D11	Butterfly Valve -100 NB	Nos.	40	9.0253		
	TOTAL VALUE OF SECTION-D						
V	SECTION-E	Sprinkler System					
81	E1	MS Pipe -150 NB	Mts.	200	9.5692		
82	E2	GI Pipe					
83	E2.1	150 NB	Mts.	200	9.5692		
84	E2.3	80 NB	Mts.	100	4.7745		
85	E2.4	50 NB	Mts.	100	3.1830		
86	E2.5	25 NB	Mts.	100	1.5915		
87	E3	Alarm Valve -80 NB	Nos.	10	39.8884		
88	E4	Sprinkler Head	Nos.	600	0.6648		
89	E5	C.I. Gate Valve -100 NB	Nos.	5	9.0253		
90	E6	Flow Switch	Nos.	5	30.1782		
	TOTAL VALUE OF SECTION-E						
VI	SECTION-F	Fire Detection & Alarm System					
91	F1	Addressable, Microprocessor based Panel	Nos.	2	132.9614		
92	F2	Repeater Panel	Nos.	1	132.9614		
93	F3	Graphic Software	Nos.	1	132.9614		
94	F4	Multisensor Detector with Base	Nos.	150	2.6592		
95	F5	Aspiration Type Detectors	Nos.	50	2.6592		
96	F6	Manual Call Point (MCP)					
97	F6.1	Indoor (IP 24)	Nos.	50	26.5923		
98	F6.2	Outdoor (IP 52)	Nos.	30	26.5923		
99	F7	Hooter	Nos.	50	2.6592		
100	F8	Flasher	Nos.	50	2.6592		
101	F9	IO Module	Nos.	100	2.6592		
102	F10	Response Indicator	Nos.	50	1.3296		
103	F11	Exit Sign	Nos.	50	2.6592		

104	F12	LHS Cable	Mts.	5000	0.5238		
105	F13	Control Cable -2C x 2.5 sqmm	Mts.	5000	0.3828		
106	F14	Power Cable -2C x 2.5 sqmm	Mts.	5000	0.3828		
107	F15	Computer and Printer	Nos.	1	13.2961		
108	F16	Siren	Nos.	1	26.5923		
TOTAL VALUE OF SECTION-F							
VII	SECTION-G	Fire Extinguishers					
109	G1	9 Kg capacity DCP type Fire Extinguisher	Nos.	54	4.1543		
110	G2	4.5 Kg capacity CO2 type Fire Extinguisher	Nos.	54	3.6788		
111	G3	9 Ltrs. capacity Portable type Foam Extinguisher	Nos.	10	4.4045		
TOTAL VALUE OF SECTION-G							
VIII	SECTION-H	SUPPORT ITEMS					
112	H1	STEEL ANGLES/CHANNELS ECT	MT	15	275.7829		
GRAND TOTAL (SECTION -A + SECTION-B + SECTION -C + SECTION-D+ SECTION -E+SECTION-F+ SECTION -G+ SECTION -H)							