



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN - 02

Ref: PSER:SCT: PAL-E1213:TCN-02

Date: 20-06-2011

Sub	Tender change notice (TCN) 02.	
Job	Erection, testing, commissioning etc of GT, ST, UAT, misc transformer, bus-duct, HT/ LT SWGR panel, misc panel, cabling etc for 2x363.3 MW CCPP at Palatana, Tripura.	
Ref	1.0	PSER:SCT:PAL-E1213:11.
	2.0	BHEL's NIT, vide reference no PSER:SCT:PAL-E1213:2422, dated 30-05-2011.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:PAL-E1213:TCN-01, dated 16-06-2011.
	4.0	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 A, Rev-1 attached. Bidder shall quote as per this revised Volume-III A, Rev-1 only.
- 2.0 Revised 'No deviation certificate' as per enclosed Annexure-2. Bidder shall submit no deviation certificate as per enclosed format only.
- 3.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

Engineer (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-1	
Erection, testing, commissioning etc of GT, ST, UAT, misc transformer, bus-duct, HT/ LT SWGR panel, misc panel, cabling etc for 2x363.3 MW CCPP at Palatana, Tripura.	
TENDER NO - PSER:SCT:PAL-E1213:11	
PREAMBLE	
1.0	This preamble forms part of tender document and schedule of items. The clauses under this preamble shall be read in conjunction with other applicable volumes of tender together with subsequent changes/modifications etc thereto as applicable as on date of submission of latest price offer.
2.0	The work shall be carried out strictly as per specifications, description of the items in these schedule and/or engineer's instructions.
3.0	Items of work provided in this schedule but not covered in this specification shall be executed strictly as per instruction of the engineer.
4.0	Unless specifically mentioned otherwise in tender document, the tenderer shall quote for the finished items and shall provide for 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, transport, layout, repairs, rectification, maintenance till handing over, supervisions, colonies, shops, establishments, overheads, profits & all incidental items not specifically mentioned but reasonably implied & necessary to complete work according to the tender and this schedule.
5.0	The price/ rates quoted shall be inclusive of cleaning of site of any vegetation, dressing 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.
6.0	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.
7.0	All works item wise shall be measured upon completion and paid for at the rates quoted & accepted.
8.0	The tenderer shall be deemed to have visited site and made themselves 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 themselves of the conditions prevailing at site.
9.0	Engineer's decision shall be final and binding on the vendor/ contractor regarding clarification of items in the schedule with respect to the other sections/ volumes of the contract.
10.0	Unless otherwise specified & except for tender on lumpsum basis, for all item rate based tenders, the quantities of the various items mentioned in price schedule are approximate, based on very preliminary information and may vary to any extent or to be deleted altogether. The quoted/ accepted rates shall remain firm and valid as long as variation in total value of work executed under this contract including extra items, but excluding any price escalation, remains within +/- 30% (thirty percent) of the contract price given in the I OI/ WO.

VOLUME-III A		
PRICE SCHEDULE, REV-1		
Erection, testing, commissioning etc of GT, ST, UAT, misc transformer, bus-duct, HT/ LT SWGR panel, misc panel, cabling etc for 2x363.3 MW CCPP at Palatana, Tripura.		
TENDER NO - PSER:SCT:PAL-E1213:11		
SCH-1 - TOTAL PRICE		
SL NO	DESCRIPTION	AMOUNT (₹)
1.0	TOTAL PRICE OF SUPPLY PART (AS PER SCH-2).	
2.0	TOTAL PRICE OF SERVICE PART (AS PER SCH-3).	
3.0	GRAND TOTAL PRICE	
NOTE		
1.0	Bidder's quoted grand total price at sl no 3.0 above shall be taken into account for evaluation and awarding and hence, shall be complete in all respect for the full scope defined in specification and in accordance with all terms & conditions of tender.	
2.0	Bidder shall specifically note that VAT & Service Tax (On service part) shall be paid extra at actual as per tender provision. As such, bidder's price shall be exclusive of these 2 components and evaluation of bidders total price will be done on this basis.	
3.0	Separate orders for supply/ service will be placed based on corresponding price components.	
4.0	Bidder shall furnish item-wise break-up of above grand total price in the respective schedule as per following. Total of prices of various schedules shall match with above grand total price.	
4.1	SCH-2 - Supply price break-up (Total shall match with sl no 1.0 above).	
4.2	SCH-3 - Service price break-up (Total shall match with sl no 2.0 above).	
5.0	If freight component is not specifically indicated, 2 % of total amount will be considered as freight component against each item for further processing of the tender.	
6.0	Price format shall not be changed by bidder in any case, since it may lead to cancellation of offer.	
7.0	Any item as per scope of work if not included in the price quoted above and shown separately will not be taken cognizance of and the offer shall be liable for rejection.	
8.0	Offer is liable to be rejected in case bidder fail to furnish item-wise break-up as desired in various schedules and submit price bid complete in all respects.	

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

**Erection, testing, commissioning etc of GT, ST, UAT, misc transformer, bus-duct, HT/ LT SWGR panel, misc panel, cabling etc for 2x363.3 MW
CCPP at Palatana, Tripura.**

TENDER NO - PSER:SCT:PAL-E1213:11

SCH-2 - SUPPLY BREAK-UP

SL NO	DESCRIPTION OF ITEM	QUANTITY		RATE (₹)				AMOUNT (₹)					
				BASIC	CST (AS PER TENDER)	FREIGHT	TOTAL	BASIC	CST (AS PER TENDER)	FREIGHT	TOTAL		
1.0	Rigid galvanised conduit.												
1.1	50 mm diameter (14 SWG).	1200	MTR										
1.2	80 mm diameter.	1200	MTR										
1.3	25 mm diameter GI flexible conduit.	30	MTR										
2.0	Indoor termination kits for 6.35/ 11 KV, XLPE insulated, armoured, Aluminium cable.												
2.1	1C x 630 sqmm.	10	NO										
2.2	3C x 185 sqmm.	8	NO										
3.0	Straight through jointing kits for 6.35/ 11 KV, XLPE insulated, armoured, Aluminium cable.												
3.1	1C x 630 sqmm.	4	NO										
3.2	3C x 185 sqmm.	2	NO										
4.0	Galvanised steel flat.												
4.1	50 x 6 mm.	2	MT										
4.2	25 x 3 mm.	1	MT										
4.3	35 x 6 mm.	1	MT										
5.0	Lightning protection system material.												
5.1	20 dia (1000 mm long) GS rod for vertical air termination.	25	NO										
5.2	Test link with 150 x 50 x 6 thick GS flat.	25	NO										
5.3	Lightning mast (as per typical lightning protection details).	3	NO										

SL NO	DESCRIPTION OF ITEM		QUANTITY		RATE (₹)				AMOUNT (₹)				
					BASIC	CST (AS PER TENDER)	FREIGHT	TOTAL	BASIC	CST (AS PER TENDER)	FREIGHT	TOTAL	
6.0	Double compression heavy duty brass cable glands.												
	Above (mm)	Up to (mm)											
6.1	--	15	800	NO									
6.2	15	18	1700	NO									
6.3	18	21	700	NO									
6.4	21	24	100	NO									
6.5	24	27	400	NO									
6.6	27	30	200	NO									
6.7	30	33	350	NO									
6.8	33	36	80	NO									
6.9	36	39	130	NO									
6.10	39	42	150	NO									
6.11	42	46	200	NO									
6.12	46	50	60	NO									
6.13	51	54	50	NO									
6.14	54	58	85	NO									
7.0	Anchor bolt (M10), HLC type, HILTI make or equivalent (complete with nut & lock washers).												
7.1	Anchor bolt (M10).		1000	NO									
TOTAL													

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

**Erection, testing, commissioning etc of GT, ST, UAT, misc transformer, bus-duct, HT/ LT SWGR panel, misc panel, cabling etc for 2x363.3 MW
CCPP at Palatana, Tripura.**

TENDER NO - PSER:SCT:PAL-E1213:11

SCH-3 - SERVICE BREAK-UP

SL NO	DESCRIPTION OF ITEM	QUANTITY	RATE ()	AMOUNT ()
1.0	CABLE TRAY AND SUPPORT			
1.1	Erection of galvanised ladder type cable tray complete with coupler plates, fasteners, clamps and fixing hardwares etc.			
1.1.1	600 mm wide.	28800	MTR	
1.1.2	450 mm wide.	3330	MTR	
1.1.3	300 mm wide.	1800	MTR	
1.1.4	150 mm wide.	2080	MTR	
1.2	Erection of galvanised perforated type cable tray complete with coupler plates, fasteners, clamps and fixing hardwares etc.			
1.2.1	300 mm wide.	9400	MTR	
1.2.2	150 mm wide.	1950	MTR	
1.3	Cable tray accessories.			
1.3.1	Erection of ladder type horizontal 90 deg bend-600 mm radius.			
1.3.1.1	600 mm wide.	100	NO	
1.3.1.2	450 mm wide.	84	NO	
1.3.1.3	300 mm wide.	76	NO	
1.3.1.4	150 mm wide.	18	NO	
1.3.2	Erection of perforated type Horizontal 90 deg bend-600 mm radius.			
1.3.2.1	300 mm wide.	43	NO	
1.3.3	Erection of ladder type vertical 90 deg bend-600 mm radius (inside).			
1.3.3.1	600 mm wide.	53	NO	
1.3.3.2	450 mm wide.	22	NO	
1.3.3.3	300 mm wide.	6	NO	
1.3.4	Perforated type vertical 90 deg bend-600 mm radius (inside).			
1.3.4.1	300 mm wide.	61	NO	
1.3.5	Erection of ladder type vertical 90 deg bend-600 mm radius (outside).			
1.3.5.1	600 mm wide.	63	NO	

SL NO	DESCRIPTION OF ITEM	QUANTITY	RATE ()	AMOUNT ()
1.3.5.2	450 mm wide.	12	NO	
1.3.5.3	300 mm wide.	6	NO	
1.3.6	Erection of perforated type vertical 90 deg bend-600 mm radius (outside).			
1.3.6.1	300 mm wide.	41	NO	
1.3.7	Ladder type tees -600 mm radius.			
1.3.7.1	600 mm wide.	194	NO	
1.3.7.2	450 mm wide.	63	NO	
1.3.7.3	300 mm wide.	18	NO	
1.3.7.4	150 mm wide.	18	NO	
1.3.8	Erection of perforated type tees -600 mm radius.			
1.3.8.1	300 mm wide.	43	NO	
1.3.8.2	150 mm wide.	20	NO	
1.3.9	Erection of ladder type cross -600 mm radius.			
1.3.9.1	600 mm wide.	28	NO	
1.3.9.2	450 mm wide.	11	NO	
1.3.9.3	300 mm wide.	6	NO	
1.3.9.4	150 mm wide.	4	NO	
1.3.10	Erection of perforated type cross -600 mm radius.			
1.3.10.1	300 mm wide.	4	NO	
1.3.11	Erection of ladder type reducers (50% LHS/ 50 % RHS).			
1.3.11.1	600-450 mm wide.	49	NO	
1.3.11.2	600-300 mm wide.	44	NO	
1.3.11.3	450-300 mm wide.	19	NO	
1.3.11.4	300-150 mm wide.	7	NO	
1.3.12	Erection of perforated type reducers (50% LHS/ 50 % RHS).			
1.3.12.1	600-450 mm wide.	12	NO	
1.3.12.1	600-300 mm wide.	17	NO	
1.4	Erection of cable tray covers 2.0 mm thick complete with formed channel, pipe, GS flat, bolt with nuts & washers & fixing hardware.			
1.4.1	600mm wide.	7200	MTR	
1.4.2	450mm wide.	724	MTR	
1.4.3	300mm wide.	362	MTR	

SL NO	DESCRIPTION OF ITEM	QUANTITY	RATE ([₹])	AMOUNT ([₹])
1.4.4	150 mm wide.	724 MTR		
1.5	Erection of above ground earthing and lightning protection material.			
1.5.1	65 ∅ 8 GS flat.	30 MT		
1.5.2	50 ∅ 6 GS flat.	25 MT		
1.5.3	25 ∅ 6 GS flat.	5 MT		
1.5.4	25 ∅ 3 GS flat.	4 MT		
1.5.5	20 mm dia 1000 mm long GS rod.	108 NO		
1.6	Cable tray supports.			
1.6.1	Erection of cable tray support - single channel SC1 (in standard length of 6m per piece. Clamps & fittings with required hardwares will be provided free of charges).	12500 MTR		
1.6.2	Erection of cable tray support - double channel DC1 (in standard length of 6m per piece. Clamps & fittings with required hardwares will be provided free of charges).	1500 MTR		
1.6.3	Erection of cantilever arm each complete with 2 nos - M12 hex bolt & washer 2 nos - M12 spring nuts 2 nos - M6 pan head screws & washer.			
1.6.3.1	For 600mm wide cable trays.	27000 NO		
1.6.3.2	For 450mm wide cable trays.	3200 NO		
1.6.3.3	For 300mm wide cable trays.	2000 NO		
1.6.3.4	For 150mm wide cable trays.	1300 NO		
SUB-TOTAL (CABLE TRAY AND SUPPORT, 1.0)				
2.0	CABLING			
2.1	ALUMINIUM CONDUCTOR, ARMOURED CABLES (Laying of 1.1 KV grade, power cables with stranded compacted Aluminium conductor, XLPE insulated, PVC type ST2 extruded inner sheathed (no inner sheath for single core cables), galvanised steel single layer round wire/ strip (non magnetic hard drawn aluminium single layer round wire H4 grade for single core cables) and extruded PVC type ST2 outer sheath with FRLS properties, generally conforming to IS:7098 (Part-1) and BHEL specification. Laying covers supply of cable lugs as applicable, cable dressing, binding with wire/ clamping using trefoil clamps as applicable)			
2.1.1	3C x 10 sqmm (Al).	4000 MTR		
2.1.2	3C x 25 sqmm (Al).	7000 MTR		
2.1.3	3C x 50 sqmm (Al).	5000 MTR		
2.1.4	3C x 95 sqmm (Al).	6000 MTR		
2.1.5	3C x 185 sqmm (Al).	5000 MTR		
2.1.6	3.5C x 25 sqmm (Al).	20000 MTR		

SL NO	DESCRIPTION OF ITEM	QUANTITY	RATE ([₹])	AMOUNT ([₹])
2.1.7	3.5C x 50 sqmm (Al).	25000	MTR	
2.1.8	3.5C x 95 sqmm (Al).	2000	MTR	
2.1.9	3.5C x 185 sqmm (Al).	1000	MTR	
2.1.10	2C x 16 sqmm (Al).	4000	MTR	
2.1.11	2C x 50 sqmm (Al).	2000	MTR	
2.1.12	2C x 95 sqmm (Al).	1000	MTR	
2.1.13	1C x 400 sqmm (Al).	6000	MTR	
2.1.14	1C x 630 sqmm (Al).	18000	MTR	
2.2	COPPER CONDUCTOR, ARMOURED CABLES (Laying of 1.1 kV grade, power cables with stranded compacted annealed Copper conductor (untinned), XLPE insulated, PVC type ST2 extruded inner sheathed (no inner sheath for single core cables), galvanised steel single layer round wire/ strip (non magnetic hard drawn Aluminium single layer round wire H4 grade for single core cables) and extruded PVC type ST2 outer sheath with FRLS properties, generally conforming to IS:7098 (Part-1) and BHEL specification. Laying covers supply of cable lugs as applicable, cable dressing, binding with wire/ clamping using trefoil clamps as applicable)			
2.2.1	2C x 2.5 sqmm (Cu).	35000	MTR	
2.2.2	3C x 2.5 sqmm (Cu).	75000	MTR	
2.2.3	1C x 25 sqmm (Cu).	4000	MTR	
2.2.4	1C x 70 sqmm (Cu).	4000	MTR	
2.2.5	2C x 50 sqmm (Cu).	1000	MTR	
2.2.6	1C x 630 sqmm (Cu).	1000	MTR	
2.3	SCREENED CONTROL CABLE (1100V grade, instrumentation twisted paired cable with stranded tinned Copper conductor, 0.5 sqmm, PVC insulation (Type-A), Individual and overall screened with extruded ST1 type PVC inner sheath, armoured with galvanised steel strip/ round wire, with overall FRLS (ST1 Type) PVC outer sheath generally conforming to IS:694 & IS: 1554 Part-I. Laying covers supply of cable lugs as applicable, cable dressing, binding with wire/ clamping using trefoil clamps as applicable)			
2.3.1	4 pair, 0.5mm ² (Cu).	75000	MTR	
2.3.2	8 pair, 0.5mm ² (Cu).	30000	MTR	
2.3.3	12 pair, 0.5mm ² (Cu).	10000	MTR	
2.3.4	20 pair, 0.5mm ² (Cu).	12000	MTR	

SL NO	DESCRIPTION OF ITEM	QUANTITY	RATE ()	AMOUNT ()
2.4	PVC CONTROL CABLE (1.1 kV grade, control cables with stranded plain annealed Copper conductor, PVC (Type-A) insulated, PVC type ST1 extruded innersheathed, galvanized steel single layer steel round wire/ strip armoured, overall PVC type ST1 FRLS extruded outersheathed cables generally conforming to IS-1554, Part-I & as per technical specification. Laying covers supply of cable lugs as applicable, cable dressing, binding with wire/ clamping using trefoil clamps as applicable)			
2.4.1	5C x 2.5 sqmm (Cu).	30000	MTR	
2.4.2	7C x 2.5 sqmm (Cu).	10000	MTR	
2.4.3	12C x 2.5 sqmm (Cu).	22000	MTR	
2.4.4	19C x 2.5 sqmm (Cu).	5000	MTR	
2.5	FIRE SURVIVAL CABLE (Laying of 6600 volts unearthed (6.35/ 11 KV) grade single or multicore, stranded Aluminium conductor of following cable sizes. Laying covers supply of cable lugs as applicable, cable dressing, binding with wire/ clamping using trefoil clamps as applicable)			
2.5.1	1C x 630 sqmm.	1200	MTR	
2.5.2	2C x 35 sqmm.	500	MTR	
2.5.3	2C x 95 sqmm.	500	MTR	
2.6	HT CABLE (Complete laying of 6600 volts unearthed (6.35/ 11 KV) grade single or multicore, stranded Aluminium conductor H4 grade, screened by triple extruded semi conducting compound, triple extruded, cross linked poly ethylene insulated, cores screened by triple extruded semi conducting compound in combination with coppert tape laid up inner sheath with extruded PVC compound type ST 2, armoured with galvanized wire or strip for multicore cables and Aluminium wire armoured for single core cables and overall sheath with extruded FRLS PVC (type ST-2) cable complying with IS 7098 (Part-2). Laying covers supply of cable lugs as applicable, cable dressing, binding with wire/ clamping using trefoil clamps as applicable)			
2.6.1	3C x 185 sqmm.	10000	MTR	
2.6.2	1C x 630 sqmm.	11000	MTR	
2.7	Cable termination charges using 6.35/ 11 KV indoor termination kits for 6.35/ 11 KV, XLPE insulated, armoured, Aluminium cable.			
2.7.1	1C x 630 sqmm.	74	NO	
2.7.2	3C x 185 sqmm.	72	NO	
2.8	Cable jointing using straight through joints for 6.35/ 11 KV, XLPE insulated, armoured, Aluminium cable.			
2.8.1	1C x 630 sqmm.	9	NO	

SL NO	DESCRIPTION OF ITEM	QUANTITY	RATE ()	AMOUNT ()
2.8.2	3C x 185 sqmm.	2	NO	
SUB-TOTAL (CABLING, 2.0)				
3.0	BATTERY			
3.1	Erection of 170 cells, 220V Ni-Cd, high discharge battery of two strings of min 570 AH rating 1.14 ECV of 5 hrs discharge rate with all accessories (as per list enclosed in Annexure –A) & MS racks with anti-corrosive paint.	1	SET	
3.2	Erection of 170 cells, 220V Ni-Cd, high discharge battery of min 640 AH rating 1.14 ECV of 5 hrs discharge rate with all accessories (as per list enclosed in Annexure –A) & MS racks with anti-corrosive paint.	2	SET	
SUB-TOTAL (BATTERY, 3.0)				
4.0	BATTERY CHARGER			
4.1	300A, 220V DC Float-cum- boost chargers.	6	SET	
4.2	Battery fuse box of adequate rating (as per load duty cycle enclosed) in sheet steel enclosure with fiber glass window along with supporting structure for 220V, two strings of 570AH Ni-Cd batteries.	1	SET	
4.3	Battery fuse box of adequate rating (as per load duty cycle enclosed in technical specification) in sheet steel enclosure with fiber glass window along with supporting structure for 220V, 640AH Ni-Cd batteries.	2	SET	
4.4	Suitable common discharge resistor for two strings (in partial) of 2 x 570 AH NI-CD high discharge battery as well as for 640 AH NI-CD High discharge battery suitable for 5 hours discharge rate shall be supplied.	2	SET	
SUB-TOTAL (BATTERY CHARGER, 4.0)				
5.0	HT SWITCHGEAR			
5.1	6.6 KV unit switch borad (SWBD 1CA, 16 nos of Panels).	1	BOARD	
5.2	6.6 KV unit switch board (SWBD 1CB, 15 nos of Panels).	1	BOARD	
5.3	6.6 KV unit switch board (SWBD 2CB, 15 nos of Panels).	1	BOARD	
5.4	6.6 KV station switch board (SWBD OCA, 28 nos of Panels).	1	BOARD	
5.5	Placement of 6.6 KV busbar earthing truck.	5	NO	
5.6	Placement of 6.6 KV feeder earthing truck.	5	NO	
5.7	6.6 KV fast bus transfer panel.	2	NO	
SUB-TOTAL (HT SWITCH GEAR, 5.0)				
6.0	LV SWITCHGEAR AND NGR WITH ACCESSORIES			
6.1	415 V, 2500 A STG PMCC # 1 & 2 (IDB/ 2DB).	2	NO	
6.2	415 V, 400 A STG MCC # 1 & 2 (1KA/ 2KA).	2	NO	

SL NO	DESCRIPTION OF ITEM	QUANTITY	RATE ()	AMOUNT ()
6.3	415 V, 250 A HRSG MCC # 1 & 2 (1HA/ 2HA).	2	NO	
6.4	415 V, 3000 A station service SWGR (ODA).	1	NO	
6.5	415 V, 2500 A raw water SWGR (ODB).	1	NO	
6.6	415 V, 2500 A water treatment SWGR (ODC).	1	NO	
6.7	415 V, 2500 A CT PMCC (2DC/ 2DC).	2	NO	
6.8	415 V, 1600 A gas station PMCC (ODD).	1	NO	
6.9	415 V, 1600 A DG PCC (ODE).	1	NO	
6.10	415 V, 400 A air conditioning MCC (OSA).	1	NO	
6.11	415 V, 400 A misc service MCC # 1 & 2 OSD/ OSE).	2	NO	
6.12	415 V, 400 A ventilation MCC # 1 & 2 OSB/ OSC).	2	NO	
6.13	415 V, 250 A administrative building MCC OSF).	1	NO	
6.14	415 V, 400 A hydrogen plant MCC (OSG).	1	NO	
6.15	415 V, 630 A ETP MCC (OWA).	1	NO	
6.16	415 V, 630 A DM plant MCC (OWB).	1	NO	
6.17	415 V, 400 A fire water MCC (OWC).	1	NO	
6.18	220 V, 630 A module # 1 & 2 DCDB (1FA/ 2FA).	2	NO	
6.19	220 V, 800 A station DCDB (OFA).	1	NO	
6.20	Local motor starter [Upto 5.5 KW].	100	NO	
6.21	Local push button station.			
6.21.1	Type-A.	200	NO	
6.21.2	Type-B.	10	NO	
6.21.3	Type-C.	50	NO	
6.22	6.6 KV NGR, 13.28 ohm, 300 A for 10 sec (Along with hot dip galvanised supporting structure, insulator & foundation hardwares).	4	NO	
SUB-TOTAL (LV SWITCHGEAR AND NGR WITH ACCESSORIES, 6.0)				
7.0	GENERATOR PROTECTION & RELAY PANEL			
7.1	Generator Protection & Relay Panels for Gas Turbine Generator	2	SET	
7.2	Generator Protection & Relay Panels for Steam Turbine Generator	2	SET	
SUB-TOTAL (GENERATOR PROTECTION & RELAY PANEL, 7.0)				
8.0	LT TRANSFORMER			
8.1	All inclusive erection and commissioning price for 2000kVA, 6.6kV/433V, 3 phase, 2 winding, outdoor, ONAN, Z= 10.0%, Dyn11, OFF Circuit taps ±5% in steps of 2.5%	2	NO	

SL NO	DESCRIPTION OF ITEM	QUANTITY	RATE ()	AMOUNT ()
8.2	All inclusive erection and commissioning price for 1600kVA, 6.6kV/433V, 3 phase, 2 winding, outdoor, ONAN, Z= 8.0%, Dyn11, OFF Circuit taps ±5% in steps of 2.5%	18	NO	
SUB-TOTAL (LT TRANSFORMER, 8.0)				
9.0	LT BUSDUCT FOR OIL FILLED TRANSFORMER			
9.1	3000A.	2	NO	
9.2	2500A.	16	NO	
9.3	1600A.	2	NO	
SUB-TOTAL (LT BUSDUCT FOR OIL FILLED TRANSFORMER, 9.0)				
10.0	POWER TRANSFORMER			
10.1	All inclusive erection and commissioning price for 230 MVA, 420 KV/ 15.75 KV, 3 phase, 2 winding, outdoor, with ONAF/ ONAN cooling, Z= 11.8%, OFF circuit taps ±10% in steps of 1.25% - generator transformer for gas turbine generator.	2	NO	
10.2	All inclusive erection and commissioning price for 150 MVA, 420 KV/ 15.75 KV, 3 phase, 2 winding, outdoor, with ONAF/ ONAN cooling, Z= 11.6%, OFF circuit taps ±10% in steps of 1.25% - generator transformer for steam turbine generator.	2	NO	
10.3	All inclusive erection and commissioning price for 16/ 12 MVA with ONAF/ ONAN cooling, 15.75/ 6.9 KV, 3 phase, 2 winding, outdoor, Z = 10%, OFF circuit taps ± 5 % in steps of 2.5% - unit auxiliary transformer.	2	NO	
10.4	All inclusive erection and commissioning price for 25/ 20 MVA with ONAF/ ONAN cooling, 132/ 6.9 KV, 3 phase, 2 winding, outdoor, Z = 12%, OFF circuit taps +7.5 % to -12.5 % in steps of 1.25 % - station transformer.	2	NO	
SUB-TOTAL (POWER TRANSFORMER, 10.0)				
11.0	BUSDUCT AND ASSOCIATED EQUIPMENT			
11.1	INTEGRATED PHASE BUS DUCT (IPBD)			
11.1.1	GTG # 1 IPBD (Main).	172	MTR	
11.1.2	GTG # 1 IPBD (Tap-off).	97	MTR	
11.1.3	GTG # 2 IPBD (Main).	172	MTR	
11.1.4	GTG # 2 IPBD (Tap-off).	97	MTR	
11.1.5	STG #1 IPB (Main).	217	MTR	
11.1.6	STG #1 IPB (Tap-off).	15	MTR	
11.1.7	STG #2 IPB (Main).	208	MTR	
11.1.8	STG #2 IPB (Tap-off).	15	MTR	
11.2	SEGRAGATED PHASE BUS DUCT (SPBD)			
11.2.1	Tie 2CB(11) to 2CA(14).	23	MTR	

SL NO	DESCRIPTION OF ITEM	QUANTITY	RATE (₹)	AMOUNT (₹)
11.2.2	Tie OCA(8) to 1CA(1).	27 MTR		
11.2.3	Tie OCA(23) to 1CB(1).	29 MTR		
11.2.4	Tie OCA(20) to 2CA(1).	142 MTR		
11.2.5	Tie OCA(28) to 2CB(1).	138 MTR		
11.2.6	UAT # 1 to SWGR panels.	71 MTR		
11.2.7	UAT # 2 to SWGR panels.	68 MTR		
11.2.8	ST # 1 to SWGR panels.	69 MTR		
11.2.9	ST # 2 to SWGR panels.	66 MTR		
SUB-TOTAL (BUSDUCT AND ASSOCIATED EQUIPMENT, 11.0)				
12.0	DG SET			
12.1	750 KVA, 50 Hz, 415 V, 1500 rpm, complete with engine KTA 38-G2 (890BHP) & aalternator of Stamford make with AVR & engine mounted control panel suitable for electric starting with engine mounted radiator on common base frame having AMF feature with foundation bolt or AVMS.	2 SET		
12.2	Fuel tank of 990 ltr capacity with interconnecting fuel pipes, gauges, level sensor and required hardwares.	2 SET		
12.3	Automotive maintenance free lead acid battery of 24 V, 200A H with lead and wooden stand.	2 SET		
12.4	Exhaust piping (300mm) with insulation, hangers & support structure.	100 MTR		
SUB-TOTAL (DG SET, 12.0)				
13.0	MISCELLANEOUS			
13.1	Drying out, Testing of HT Motors (MOTOR ERECTION BY OTHERS)	20 NO		
13.2	Drying out, Testing of LT Motors (MOTOR ERECTION BY OTHERS)	50 NO		
13.3	Mounting of CTs (Supplied losse) for HT Motors/Panels. This includes Drilling/Tapping etc. required for mounting.	10 NO		
13.4	Mounting of Modules inside LT panels. This may require some modification like putting brackets, mounting rails etc.	10 NO		
13.5	Fabrication of base frames for Switchgear, Control panel, LCC / LPB / Starter, Fuse Board etc. , cross channel, etc. from MS structural items (Angle, Channel, flat, plate etc.for) including providing of all required consumables, Paints. Required Steel will be supplied by BHEL free of any charges.	10 MT		
13.6	Fabrication & Installation of Chequered Plates 6 to 8 mm thick (material by BHEL as free issue) for covering up leftover floor cutout/ trench around switchgear/ panels (inclusive of all consumables, paints).	1 MT		
13.7	Fabrication of Insert Plates by gas cutting / grinding, from 6 to 8 mm thick MS plates, Angle / Flats etc. (MS Materials by BHEL as free issue) and its installation by grouting on wall.	0.5 MT		

SL NO	DESCRIPTION OF ITEM	QUANTITY	RATE ()	AMOUNT ()
13.8	Installation of heavy duty Galvanised friction anchor fasteners of Hilti / Bosch make of dia 16 mm and 100 mm length in concrete (minimum grade M20) including supply of anchor fasteners material, consumables and providing tools, scaffolding etc.)	500	NO	
13.9	Fabrication and installation of canopies from 2 mm thick GI sheet (free issue by BHEL) for protection of outdoor LPBs / Starters etc.(inclusive of supply of all consumables / paints)	20	SQM	
13.10	Supply and Installation of 6 mm thick chequered Rubber Mat of appropriate voltage class , Size 1m (W) x 2m (L) each , for laying in front of switchgears upto 6.6 KV (as required under IE Rule). The make of the same got to approved by BHEL/OTPC before supply of the item.	120	NO	
13.11	Supply and installation of Electric Shock Treatment Display board as per IE Rules, Laminated on hardboard material (size : 2.5 ft x 3.5 ft) and mounted on wooden frame) for switchgear rooms / substations	100	NO	
SUB-TOTAL (MISCELLANEOUS, 13.0)				
14.0	SPECIALISED COMMISSIONING SERVICE			
14.1	COMMISSIONING SERVICES FOR TESTING & COMMISSIONING OF PROTECTION RELAYS, CTs, PTs ETC OF ELECTRICAL EQUIPMENTS BY DEPLOYING SPECIALISED TECHNICAL MANPOWER (including special testing kits for the pupose, including Omichron Kit) AT BHEL PALATANA SITE IN MAN-MONTHS	30	MAN-MONTH	
TOTAL (1.0 ~ 14.0)				

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 GT, ST, UAT, misc transformer, bus-duct, HT/ LT SWGR panel, misc panel, cabling etc for 2x363.3 MW CCPP at Palatana, Tripura.	
Ref	1.0	Tender no PSER:SCT:PAL-E1213:11.
	2.0	BHEL's NIT, vide reference no PSER:SCT:PAL-E1213:2422, dated 30-05-2011.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:PAL-E1213:TCN-01, dated 16-06-2011
	4.0	BHEL's TCN-02, vide reference no PSER:SCT:PAL-E1213:TCN-02, dated 20-06-2011
	5.0	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 offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

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