

TENDER SPECIFICATION

NO: BHE/PW/PUR/AMRT PH I-RENO/1010

**RENOVATION/RESTORATION OF DAMAGED CLOSED SHEDS & SEMI
CLOSED SHEDS AND LEFT OVER WORKS OF INTERNAL
ELECTRIFICATION OF STORAGE SHEDS**

**AT
5X270 MW (PHASE – I)**

**INDIABULLS AMRAWATI TPP
ELENA POWER & INFRASTRUCTURE LIMITED
DISTT. - AMRAWATI
MAHARASHTRA**

VOLUME II - PRICE BID



BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

POWER SECTOR - WESTERN REGION

345, KINGS WAY - NAGPUR 440 001

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EARNEST MONEY DEPOSIT: Refer Notice Inviting Tender

LAST DATE FOR TENDER SUBMISSION : Refer Notice Inviting Tender

THESE TENDER SPECIFICATION DOCUMENTS CONTAINING VOLUME-I, VOLUME- II AND Vol I BCD Rev 01 ARE ISSUED TO:

M/s.

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THESE TENDER SPECS DOCUMENTS ARE NOT TRANSFERABLE.

For Bharat Heavy Electricals Limited

DY. GENERAL MANAGER (Purchase)

Place: Nagpur

Date:

VOLUME II- PRICE BID (RATE SCHEDULE)
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BHEL:PSWR:NAGPUR

BOQ FOR RENOVATION OF CLOSED & SEMI CLOSED SHEDS AND COMPLETION OF LEFT OVER WORKS OF INTERNAL ELECTRIFICATION OF STORAGE SHEDS

PART A **RENOVATION WORKS OF CLOSED AND SEMI CLOSED SHEDS**

RENOVATION OF 1 NO. - CLOSED STORAGE SHED (60 M X 15 M) AT 5 x 270 MW AMRAWATI (PHASE 1), MAHARASHTRA

SECTION	SL.NO	DESCRIPTION OF WORK	UNIT	QTY.	RATE (In Rs)		AMOUNT (In Rs)
					IN FIGURES	IN WORDS	
Sec. A	1	PROVIDING BRICK WORK IN CM 1:6 (1 CEMENT & 6 COARSE SAND) USING OPC GRADE 43/53 AND LOCALLY AVAILABLE BURNT CLAY BRICKS (MIN STRENGTH 35 KG/CM ²) AS PER DRAWING AND SPECIFICATION FOR SUPER STRUCTURE INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, CURING, AT ALL ELEVATIONS AND LEVELS , RAKING OUT JOINTS ETC. COMPLETE AND AS DIRECTED BY ENGINEER . EXCLUDING PLASTERING & PAINTING.	M3	3			
Sec. A	2	MODIFICATION/REPAIRS AND ERECTION OF ALREADY EXISTING TUBULAR TRUSSES (BY USING CLASS B, MEDIUM QUALITY PIPE) AS PER BHEL DRAWING WITH AC SHEETS AND WIND TIES (USING FLAT OF SIZE 40X5MM) TO BE PLACED ABOVE SHEETS AND FIXING BASE PLATES WITH HOLDING DOWN BOLTS ON RCC COLUMNS, GUSSETS, RIBS, PINS, SPLICES ETC. AS REQUIRED INCLUDING TRANSPORT, LOADING, UNLOADING CHARGES FROM FABRICATION SHOP TO SITE ETC. COMPLETE. RATE IS INCLUSIVE OF LOADING & UNLOADING, MODIFICATION/REPAIRS, FIXING IN POSITION, LABOUR CHARGES, T&Ps AND COST OF RED OXIDE PRIMER AT FACTORY AND TWO COATS OF SYNTHETIC ENAMEL PAINTS (OVER PRIMER COAT OF RED OXIDE) OF APPROVED COLOUR AND QUALITY AT SITE. HALLOW TRUSS (OUTER MAIN FRAME EXCEPT VERTICAL & CROSS BRACING/TUBES/CROSS STUD) SHALL BE PROVIDED ON BOTH SIDE OF GABLE END TO FIX THE PURLINS AND ROOFING MATERIAL.	MT	15.00			
Sec. A	3	PROVIDING AND FIXING 6/7MM THICK AC CORRUGATED SHEETS WITH RIDGE CAPS FOR ROOFING INCLUDING GALVANISED IRON J OR L HOOK , BOLTS, BITUMINOUS WASHERS, GI CRAMP BOLTS, NUTS,SCAFOLDING ETC. COMPLETE, ALL AS PER LATEST IS 459, 3307 AND 730.	M2	940.00			
Sec. A	4	PROVIDING AND FIXING OF TRANSLUCENT RMP/FRP (FIBRE GLASS REINFORCED PLASTIC) SHEETS - 2.00 MM THICK OF APPROVED MAKE INCLUDING COST OF GI J OR L HOOKS, BOLTS, NUTS, WASHERS, BITUMEN WASHERS,SCAFOLDING ETC. COMPLETE SO AS TO MATCH WITH AC CORRUGATED SHEETS.	M2	65.00			

VOLUME II- PRICE BID (RATE SCHEDULE)
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SECTION	SL.NO	DESCRIPTION OF WORK	UNIT	QTY.	RATE (In Rs)		AMOUNT (In Rs)
					IN FIGURES	IN WORDS	
Sec. A	5	PROVIDING PLASTERING WITH CEMENT MORTAR -1:6 (1 CEMENT & 6 COARSE SAND) USING OPC GRADE 43/53 OVER BOTH INTERNAL AND EXTERNAL FACES OF BRICKWORK AT ALL LEVELS INCLUDING PREPARING THE SURFACE, RAKING JOINTS, SCAFFOLDING, CURING, COST OF ALL MATERIALS, LABOUR ETC. COMPLETE.					
Sec. A		(i) EXTERNAL PLASTERING - 18MM THICK	M2	15.00			
Sec. A	6	MANUFACTURING, SUPPLYING AND FIXING OF 20 GAUGE MS ROLLING SHUTTERS OF SIZE 4.6 M X 4.7 M AS PER I.S. SPECIFICATIONS, COMPLETE, MECHANICALLY OPERATED FROM IN AND OUTSIDE BOTH AS INSTRUCTED BY BHEL ENGINEER INCLUDING TWO COATS OF SYNTHETIC ENAMEL PAINT OF APPROVED COLOUR AND QUALITY OVER ONE COAT OF RED OXIDE PRIMER LOCKING ARRANGEMENT. RATE SHALL BE INCLUSIVE OF ALL THE ABOVE COMPLETE.	M2	23.00			
Sec. A	7	CHIPPING OF CONCRETE OF EXISTING RCC COLUMNS AND EXPOSING REINFORCEMENT, CLEANING ETC. FOR PROPER FIXING OF ANCHOR BOLTS INCLUDING REMOVING OF DEBRIS.	CUM	1.00			
Sec. A	8	SUPPLY, FABRICATION, TRANSPORTATION. DELIVERY AT SITE AND ERECTION, INSTALLATION AND ALLIGNMENT OF MILD STEEL BOLT ASSEMBLY CONFIRMING TO IS:2062 AND GRADE 1 OF IS:432 IN CONCRETE ALONG WITH NUTS, LOCK NUTS (AS PER IS:1363, 1364 AND IS:3138), WASHERS, ETC. INCLUDING WELDING, CUTTING, GRINDING, THREADING, DRILLING ETC. AND TEMPLATE FOR FIXING BOLTS ALL COMPLETE. (TEMPLATE SHALL NOT BE PAID SEPARATELY)	KG	120.00			
Sec. A	9	PROVIDING AND LAYING IN POSITION CEMENT CONCRETE OF GRADE 1:1.5:3 (1 PART CEMENT, 1 AND 1/2 PARTS COARSE SAND, 4 PARTS GRADED STONE AGGREGATE 20 MM NOMINAL SIZE) INCLUDING THE COST OF CENTERING AND SHUTTERING ETC. ALL COMPLETE.	CUM	1.00			
RENOVATION OF 3 No. - STRUCTURAL SHED (60 M X 15 M) AT 5 x 270 MW AMRAWATI (PHASE 1), MAHARASHTRA							
Sec.B	1	PROVIDING BRICK WORK IN CM 1:6 (1 CEMENT & 6 COARSE SAND) USING OPC GRADE 43/53 AND LOCALLY AVAILABLE BURNT CLAY BRICKS (MIN STRENGTH 35 KG/CM ²) AS PER DRAWING AND SPECIFICATION FOR SUPER STRUCTURE INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, CURING, AT ALL ELEVATIONS AND LEVELS, RAKING OUT JOINTS ETC. COMPLETE AND AS DIRECTED BY ENGINEER. EXCLUDING PLASTERING & PAINTING.	M3	50.00			

**VOLUME II- PRICE BID (RATE SCHEDULE)
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SECTION	SL.NO	DESCRIPTION OF WORK	UNIT	QTY.	RATE (In Rs)		AMOUNT (In Rs)
					IN FIGURES	IN WORDS	
Sec.B	2 (A)	MODIFICATION/REPAIRS AND ERECTION OF ALREADY EXISTING TUBULAR TRUSSES (BY USING CLASS B ,MEDIUM QUALITY PIPE) AS PER BHEL DRAWING WITH AC SHEETS AND WIND TIES (USING FLAT OF SIZE 40X5MM) TO BE PLACED ABOVE SHEETS AND FIXING BASE PLATES WITH HOLDING DOWN BOLTS ON RCC COLUMNS, GUSSETS, RIBS, PINS, SPLICES ETC. AS REQUIRED INCLUDING TRANSPORT, LOADING, UNLOADING CHARGES FROM FABRICATION SHOP TO SITE ETC. COMPLETE. RATE IS INCLUSIVE OF LOADING & UNLOADING, MODIFICATION/REPAIRS, FIXING IN POSITION, LABOUR CHARGES, T&Ps AND COST OF RED OXIDE PRIMER AT FACTORY AND TWO COATS OF SYNTHETIC ENAMEL PAINTS (OVER PRIMER COAT OF RED OXIDE) OF APPROVED COLOUR AND QUALITY AT SITE.	MT	15.00			
Sec.B	2 (B)	MODIFICATION/REPAIRS AND ERECTION OF ALREADY EXISTING DISMANTELLED STRUCTURAL COLUMNS (OF 4.5M HEIGHT FIXING OVER RCC PEDESTAL) AS PER BHEL DRAWING. FIXING BASE PLATES WITH HOLDING DOWN BOLTS ON RCC PEDESTALS, GUSSETS, RIBS, PINS, SPLICES ETC. AS REQUIRED. RATE IS INCLUSIVE OF LOADING & UNLOADING, REPAIRS, TRANSPORTATION, FIXING IN POSITION, LABOUR CHARGES , T&Ps AND COST OF RED OXIDE PRIMER AT FACTORY AND TWO COATS OF SYNTHETIC ENAMEL PAINTS (OVER PRIMER COAT OF RED OXIDE) OF APPROVED COLOUR AND QUALITY AT SITE.	MT	32.50			
Sec.B	2 (C)	STRUCTURAL WORK FOR AC SHEET SIDE CLADDNG BY USING 65MM DIA TUBULAR SECTION OF CLASS B-MEDIUM QUALITY AS PER BHEL DRAWING .RATE IS INCLUSIVE OF ALL MATERIALS, LOADING & UNLOADING, FABRICATION, FIXING IN POSITION, LABOUR CHARGES, T&Ps AND COST OF RED OXIDE PRIMER AT FACTORY AND TWO COATS OF SYNTHETIC ENAMEL PAINTS (OVER PRIMER COAT OF RED OXIDE) OF APPROVED COLOUR AND QUALITY AT SITE.	MT	9.00			
Sec.B	3 (A)	PROVIDING AND FIXING 6/7MM THICK AC CORRUGATED SHEETS WITH RIDGE CAPS FOR ROOFING INCLUDING GALVANISED IRON J OR L HOOK , BOLTS, BITUMINOUS WASHERS, GI CRAMP BOLTS, NUTS,SCAFOLDING ETC. COMPLETE, ALL AS PER LATEST IS 459, 3307 AND 730.	M2	3040.00			
Sec.B	3 (B)	FOR SIDE CLADDING (APPROX-3.60 M FROM TRUSS BOTTOM LEVEL)	M2	1650.00			
Sec.B	4	PROVIDING AND FIXING OF TRANSLUCENT RMP/FRP(FIBRE GLASS REINFORCED PLASTIC) SHEETS - 2.00 MM THICK OF APPROVED MAKE INCLUDING COST OF GI J ,OR L HOOKS , BOLTS, NUTS, WASHERS, BITUMEN WASHERS,SCAFOLDING ETC. COMPLETE SO AS TO MATCH WITH AC CORRUGATED SHEETS.	M2	200.00			

VOLUME II- PRICE BID (RATE SCHEDULE)
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SECTION	SL.NO	DESCRIPTION OF WORK	UNIT	QTY.	RATE (In Rs)		AMOUNT (In Rs)
					IN FIGURES	IN WORDS	
Sec.B	5	PROVIDING PLASTERING WITH CEMENT MORTAR -1:6 (1 CEMENT & 6 COARSE SAND) USING OPC GRADE 43/53 OVER BOTH INTERNAL AND EXTERNAL FACES OF BRICKWORK AND CONCRETE SURFACES, PARTITION WALLS ETC. AT ALL LEVELS INCLUDING PREPARING THE SURFACE, RAKING JOINTS, SCAFFOLDING, CURING, COST OF ALL MATERIALS, LABOUR ETC. COMPLETE.					
Sec.B		(i) EXTERNAL PLASTERING - 18MM THICK	M2	900.00			
Sec.B		(ii) INTERNAL PLASTERING -12MM THICK	M2	500.00			
TOTAL OF RENOVATION WORKS							
PART B	LEFT OVER WORK OF ELECTRIFICATION OF CLOSED SHEDS (4 NOS.) & SEMI-CLOSED SHEDS (3 NOS.)						
INTERNAL ELECTRIFICATION OF STRUCTURAL SHEDS (60M X 15M) -- 3 Nos. AT 5 x 270 MW AMRAWATI, MAHARASHTRA							
	1	SUPPLYING & INSTALLING POWER DISTRIBUTION BOARD COMPLETE WITH: 1) INCOMING MCB TPH 100 AMPS. - 1 NO. 2) OUTGOING MCB TPH 32 AMPS. -3NOS. 3) RCCB DP 25/20 AMPS. - 3NOS. 4) OUTGOING MCB SP 6 AMPS - 6NOS. All RCCBs, MCBs SHALL BE MDS/INDO KOPP MAKE. DISTRIBUTION BOARDS SHALL BE SIEMENS / MDS / INDO KOPP MAKE WITH INTERNAL BUSBARS, INTERNAL WIRING, 2 NOS. EARTHING TERMINALS, EARTH CONNECTIONS, INCLUDING GLANDS AND LUGS.	Set	1.00			
Sec.C	2	PROVIDING & FIXING ALUMINIUM DISPERSIVE LUMINAIRE ENAMELED GREEN AND WHITE WITH CAST ALUMINIUM FLANGE AND NIPPLE SUITABLE FOR USE WITH GLS LAMP, DOME 12" DIAMETER, WITH HANGING BRACKET AND 200W GLS LAMP OF CROMPTON OR EQUIVALENT BAJAJ / PHILIPS MAKE, COMPLETE.	Nos.	105.00			
Sec.C	3	WIRING WITH 2.5 SQ MM ISI MARK COPPER WIRE FOR ABOVE IN PVC CONDUIT ALONG WITH GI EARTH WIRE INCLUSIVE OF ALL MATERIAL, LABOUR ETC. COMPLETE	Per Point	105.00			

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					IN FIGURES	IN WORDS	
Sec.C	4	SUPPLYING & FIXING WALL MOUNTING TYPE LIGHTING PANELS , EACH WITH : (1) INCOMING MCB TPN -32 AMPS - 1NO. (2) RCCB DP 32 AMPS - 3NOS (3) MCB SP 6AMPS - 30 NOS. ALL MCBS AND RCCBS SHALL BE OF MDS / INDO KOPP MAKE LIGHTING PANEL SHALL BE SIEMENS/MDS/INDO KOPP MAKE WITH INTERNAL BUSBARS, 2 NOS. EARTHING TERMINALS, EARTH CONNECTIONS, INCLUDING GLANDS, LUGS & WIRING FROM MAIN DB.	Sets.	3.00			
Sec.C	5	PROVIDING EARTH PITS WITH 2" DIA., 2.5 MTR. LONG GI PIPES WITH FLANGE AND 8 SWG GI WIRE WITH CHARCOAL, SALT AND AS PER IS 3043. RATE SHALL BE INCLUSIVE OF ALL MATERIAL, LABOUR ETC. COMPLETE. A BRICK WALL CHAMBER WITH CI COVER FOR ALL EARTH PITS SHALL BE PROVIDED.	NOS.	3.00			
INTERNAL ELECTRIFICATION WORK OF CLOSED SHEDS 60M X 15M -- 4Nos. AT 5 x 270 MW AMRAWATI, MAHARASHTRA							
Sec. D	SL.NO	DESCRIPTION OF WORK	UNIT	QTY.	RATE		AMOUNT
					IN FIGURES	IN WORDS	
	1	Supplying & Installing Power Distribution Board complete as below: 1) Incoming MCB TPH 100 Amps. - 1 No. 2) Outgoing MCB TPH 32 Amps. -4Nos.. 3) RCCB DP 25/20 Amps. - 4Nos. 4) Outgoing MCB SP 6 Amps - 8Nos. All RCCBs, MCBs shall be MDS/INDO KOPP make Distribution Boards shall be SIEMENS / MDS / INDO KOPP make with internal busbars, internal wiring, 2 nos. earthing terminals, earth connections, including Glands, Lugs	Set	1			
Sec. D	2	PROVIDING & FIXING ALUMINIUM DISPERSIVE LUMINAIRE ENAMELED GREEN AND WHITE WITH CAST ALUMINIUM FLANGE AND NIPPLE SUITABLE FOR USE WITH GLS LAMP, DOME 12" DIAMETER, WITH HANGING BRACKET AND 200W GLS LAMP OF CROMPTON OR EQUIVALENT BAJAJ / PHILIPS MAKE, COMPLETE.	Nos.	140.00			
Sec. D	3	WIRING WITH 2.5 SQ MM ISI MARK COPPER WIRE FOR ABOVE IN PVC CONDUIT ALONG WITH GI EARTH WIRE INCLUSIVE OF ALL MATERIAL, LABOUR ETC. COMPLETE	Per Point	140.00			

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					IN FIGURES	IN WORDS	
Sec. D	4	SUPPLYING & FIXING WALL MOUNTING TYPE LIGHTING PANELS , EACH WITH : (1) INCOMING MCB TPN -32 AMPS - 1NO. (2) RCCB DP 32 AMPS - 3NOS (3) MCB SP 6AMPS - 30 NOS. ALL MCBS AND RCCBS SHALL BE OF MDS / INDO KOPP MAKE LIGHTING PANEL SHALL BE SIEMENS/MDS/INDO KOPP MAKE WITH INTERNAL BUSBARS, 2 NOS. EARTHING TERMINALS, EARTH CONNECTIONS, INCLUDING GLANDS, LUGS & WIRING FROM MAIN DB.	Sets.	4			
Sec. D	5	PROVIDING EARTH PITS WITH 2" DIA., 2.5 MTR. LONG GI PIPES WITH FLANGE AND 8 SWG GI WIRE WITH CHARCOAL, SALT AND AS PER IS 3043. RATE SHALL BE INCLUSIVE OF ALL MATERIAL, LABOUR ETC. COMPLETE. A BRICK WALL CHAMBER WITH CI COVER FOR ALL EARTH PITS SHALL BE PROVIDED.	NOS.	4.00			
PART	TOTAL					AMOUNT in Rs	
A	AMOUNT FOR PART A (RENOVATION OF SHEDS) (In Rs)						
B	AMOUNT FOR PART B (ELECTRIFICATION) (In Rs)						
	GRAND TOTAL (PART A +PART B) IN RS.						
	IN WORDS (Rs.ONLY)						