

भारत हेवी इलेक्ट्रिकल्स लिमिटेड
(भारत सरकार का उपक्रम)

Bharat Heavy Electricals Limited

(A Govt. of India Undertaking)
Power Sector - Southern Region
New No.690 (Old No.474), Anna Salai,
Nandanam, Chennai-600 035.
Phone : 2433 0015 (10 Lines)
Grams : BHELPOWER



Corrigendum to NIT 6232

Sub: SCT 1336-Tender Notification for the work of Erection, testing and commissioning of HT/LT Electrical Package for Unit-5 of 1x 210 MW unit at Rayalaseema Thermal Power Plant (RTPP) Muddanur, AP

Ref : Tender Notification NIT 6232 dated 16.03.2009

In the tender specification Book, the BOM given from Page 155 to 199 (of the web pages) may kindly be **replaced with the revised bill of materials** – attached herewith,

All other details remain same.

While submitting your offer, you may kindly submit the tender along with the **revised BOM pages**

The due date of submission of tender remains same as indicated in NIT , i.e 08.04.2009.

Addl General Manager/SCT
02.04.2009

RAYALASEEMA TPP: STAGE III UNIT 5 (1 X 210 MW) ELECTRICAL (HT & LT) PACKAGE

BILL OF MATERIALS WITH RELEVANT CLAUSE REFERENCE

BOM Ref No:	Description	Qty	Clause Ref No:
A	<u>BHEL BHOPAL SCOPE</u>		
A1.0	TRANSFORMERS:		
A1.1	<p>240 MVA GENERATOR TRANSFORMER</p> <p>Description 240 MVA, 15.75/236 kV, Three phase, OFAF cooled, YNd1, Generator Transformer complete loose accessories like 2 Nos. of Radiator banks, on load tap changers, HV/LV/HVN bushings, bushing CTs, Turrets, conservators, cooler control cabinet, marshalling box, pipings, common KIOSK etc. Loose items like raise/lower P.Bs, tap changer indicators, facia windows, W.T.I. repeaters, buzzers, signal lamps, etc. shall be mounted and wired in control panel. Complete erection and integration of neutral formation and grounding, including fixing of porcelain insulators and conductors (copper bars), brazing of joints, painting of supports, repair of damaged surface, protection at brazed areas of copper bar if required, connection to ground grid etc., shall also be part of transformer erection. <u>Approximate Dimensions and weight of transformer</u> Shipping dimensions 7900 x 3400 x 3800 mm Overall dimensions 15430 x 8430 x 7420 mm Weight of Transformer Components Core & Winding 132000 Kg Oil 48700 Kg Total weight 248000 Kg Shipping weight 156000 Kg Total Oil Quantity 56000 Ltrs</p> <p>Ref: 3 459 0000 240 Sheet 1&2. * Lump sum rate shall be quoted including final painting</p>	1set*	6.3.1.1-A 6.3.1.2

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
A1.2	<p>31.5 MVA STATION TRANSFORMER</p> <p>Description 31.5 MVA, 220/ 7.1 KV, 3 Phase, YNdl ONAF Station Transformer with OLTC on HV side +7.5% to -12.5% in steps of (1.25 % in non auto mode, with bushing CTs radiators, cooling fans, conservator, cooler control panel, marshalling panels, piping etc.</p> <p>Loose items like raise/lower P.Bs, tap changer indicators, facia windows, W.T.I. repeaters, buzzers, signal lamps, etc. shall be mounted and wired in control panel</p> <p><u>Approx. Dimensions and Weight of Transformer:</u></p> <p>a. Overall Dimensions 10000 x 5130 x 7115mm b. Shipping Dimensions 5160 x 2600 x 3600mm c. Height for un tanking 8900mm</p> <p>a. Core & Winding 30000 kg b. Tank, Fittings 16535 kg c. Oil (26400 litres) 22970 kg d. Untanking weight 30000 kg e. Total weight 78000 kg f. Shipping weight(Gas filled) 45000 kg</p> <p>Ref: drg: 3458 0000 198, Sheet 1,2&4. * Lump sum rate shall be quoted, including final painting.</p>	1 set*	6.3.1.1-B 6.3.1.2

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
A2.0	HT SWITCHGEAR		
A2.1	<p>Unit 5 Turbine Switchboard 5CA 6.6 KV, indoor, metal clad, vacuum break switchgears with 2 Nos. Incomer, 5 Nos. outgoing feeders, 1 No tie feeder, 3 No. PT Cubicle along with associated loose items. 5CA consists of 11 Panels in suitable shipping sections</p> <p>Dimension of each Panel: 820 (W) x 2695 (H) x2360 (Max-Depth) mm.</p> <p>Weight of Shipping section for 1 Panel: 1500 kg Weight of Shipping section for 2 Panels: 3000 kg</p> <p><i>*Lump sum rate to be quoted</i></p>	1 set*	6.3.2
A2.2	<p>Unit –5 Turbine Switchboard 5CB 6.6 KV, indoor, metal clad, vacuum break switchgears with 2 No. Incomer, 4 Nos. outgoing feeders, 1 No 1600 A tie feeder, 3 No. PT Cubicle along with associated loose items.</p> <p>5CB consists of 10 Panels in suitable shipping sections</p> <p>Dimension of each Panel: 820 (W) x 2695 (H) x2360 (Max-Depth) mm.</p> <p>Weight of Shipping section for 1 Panel: 1500 kg Weight of Shipping section for 2 Panels: 3000 kg</p> <p><i>*Lump sum rate to be quoted</i></p>	1 set*	6.3.2

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
A2.3	<p><u>Station Switchboard 0CA</u> 6.6 KV, indoor, metal clad, vacuum break switchgears with 2 No. 2500A incomer and 11 nos outgoing feeders, 3 No. PT Cubicle along with associated loose items.</p> <p>OCC consists of 16 Panels in suitable shipping sections</p> <p>Dimension of each Panel: 820 (W) x 2695 (H) x2360 (Max-Depth) mm.</p> <p>Weight of Shipping section for 1 Panel: 1500 kg Weight of Shipping section for 2 Panels: 3000 kg</p> <p><i>*Lump sum rate to be quoted</i></p>	1 set*	6.3.2
A2.4	<p><u>Station Switchboard 0CB</u> 6.6 KV, indoor, metal clad, vacuum break switchgears with 2 No. 2500A incomer 10 nos outgoing feeders, 3 No. PT Cubicle along with associated loose items.</p> <p>OCD consists of 15 Panels in suitable shipping sections</p> <p>Dimension of each Panel: 820 (W) x 2695 (H) x2360 (Max-Depth) mm.</p> <p>Weight of Shipping section for 1 Panel: 1500 kg Weight of Shipping section for 2 Panels: 3000 kg</p> <p><i>*Lump sum rate to be quoted</i></p>	1 set*	6.3.2

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
A2.5	<p><u>Unit 5 Boiler Switchboard 5CC</u> 6.6 KV, indoor, metal clad, vacuum break switchgears with 1 No. Incomer, 14 Nos. outgoing feeders, 1 No tie feeder, 1 No. PT Cubicle along with associated loose items.</p> <p>5CC consists of 17 Panels in suitable shipping section</p> <p>Dimension of each Panel: 820 (W) x 2695 (H) x2360 (Max-Depth) mm.</p> <p>Weight of Shipping section for 1 Panel: 1500 kg Weight of Shipping section for 2 Panels: 3000 kg</p> <p><i>*Lump sum rate to be quoted</i></p>	1 set*	6.3.2
A2.6	<p><u>Unit 5 Boiler Switchboard 5CD</u> 6.6 KV, indoor, metal clad, vacuum break switchgears with 1 No. incomer, 13 Nos. outgoing feeders, 1no tie feeder, 1 No. PT Cubicle along with associated loose items.</p> <p>5CD consists of 16 Panels in suitable shipping sections</p> <p>Dimension of each Panel: 820 (W) x 2695 (H) x2360 (Max-Depth) mm.</p> <p>Weight of Shipping section for 1 Panel: 1500 kg Weight of Shipping section for 2 Panels: 3000 kg</p> <p><i>*Lump sum rate to be quoted</i></p>	1 set*	6.3.2

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
A2.7	<p>CW Pump House Switchboard 0CC 6.6 KV, indoor, metal clad, vacuum break switchgears with 2 Nos. Incomer, 10 Nos. outgoing feeders, 1 No. Trunking cum Bus PT Cubicle, 2 No. PT Cubicle along with associated loose items.</p> <p>0CE consists of 17 Panels in suitable shipping sections</p> <p>Dimension of each Panel: 820 (W) x 2695 (H) x2360 (Max-Depth) mm.</p> <p>Weight of Shipping section for 1 Panel: 1500 kg Weight of Shipping section for 2 Panels: 3000 kg</p> <p><i>*Lump sum rate to be quoted</i></p>	1 set*	6.3.2.
A2.8	<p>CW Pump House Switchboard 0CD 6.6 KV, indoor, metal clad, vacuum break switchgears with 2 Nos. incomer, 10 Nos. outgoing feeders, , 1 No. Trunking cum Bus PT Cubicle, 2 No. PT Cubicle along with associated loose items.</p> <p>0CF consists of 16 Panels in suitable shipping sections</p> <p>Dimension: 820 (W) x 2695 (H) x2360 (Max-Depth) mm.</p> <p>Weight of Shipping section for 1 Panel: 1500 kg Weight of Shipping section for 2 Panels: 3000 kg</p> <p><i>*Lump sum rate to be quoted</i></p>	1 set*	6.3.2
A2.9	<p>VFD Switchgear Panel 3.3 KV, indoor, metal clad, vacuum break switchgear panel 1 No. 1000A incomer fed from VFD transformer , Bus PT along with associated loose supplied items.</p> <p>VFD swgr consists of 2 Panels in suitable shipping sections. Dimension of each panel : 820 (W) x 2300 (H) x2360 (Max-Depth). Weight of Shipping section for 2 Panel: 1250 kg</p> <p><i>*Lump sum rate to be quoted</i></p>	4 nos	6.3.2

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
A2.10	EARTHING TRUCKS /BREAKERS - 2 No. per set of panels (Feeder earthing truck-1, busbar earthing truck-1) Earthing Breakers of size 950 x 1250 x 1300 mm	8 Nos.	6.3.2
A3.0	GENERATOR AND TRANSFORMER RELAY/CONTROL PANEL		
A 3.1	Generator Relay Panel Generator Transformer / Station transformer Protection and control / relay Panels with associated loose supplied items such as Disturbance recorder, PC, Printer, Interconnection cable etc. No. of Panels: 8 Nos. supplied in suitable shipping sections. Size of each Panel: 1000(w) x 1000 (d) x 2230(h) mm Approx. weight of each panel : 750 kg <i>* Lump sum rate shall be quoted.</i>	1 set*	6.3.2.3
A3.2	Bus Transfer scheme panel (BTS) Bus transfer panel along with associated loose supplied items such as measuring and protective relays, meters interconnection cable indicating switches etc. Approx dimensions & Weight: each panel. 800 x 800 x 2350 mm, 750kg <i>* Lump sum rate shall be quoted.</i>	2 Nos.	6.3.2.3

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
B	BHEL JHANSI SCOPE		
B1.0	<u>TRANSFORMERS:</u>		
B1.1	<p>16 MVA UAT TRANSFORMER (5A & 5B) <u>Specification:</u> 16 MVA 15.75 / 6.9 kv, 3 Phase, ONAF, Dd0, Z=7.5%, Station Transformer with OLTC +/-10% in steps of 1.25% non auto mode, on HV Side with bushing CTS radiators, cooling fans, conservator, cooler control panel, marshalling panels, piping etc. Loose items like raise/lower P.Bs, tap changer indicators, facia windows, W.T.I. repeaters, buzzers, signal lamps, etc. will be supplied loose, to be mounted and wired in control panel <u>Approx Dimensions and Weight of Transformer :</u></p> <p>Overall Dimensions 6900x5400x4900 mm. Shipping Dimensions 5400x2700x2800 mm.</p> <p>Core & Winding 16000 kg. Tank, Fittings, radiators 14000 kg. Oil 10200 kg. Untanking weight 16000 kg. Total weight 40000 kg. Shipping weight (gas filled) 24000 kg. Total Oil Quantity (Litres) 11000 L.</p> <p><i>* Lump sum rate shall be quoted, including final painting.</i></p> <p>Final painting as per spec and approval of BHEL</p>	2 sets*	6.3.1.1-C 6.3.1.2

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
B1.2	<p>2500 KVA UNIT SERVICE TRANSFORMER (EPT-5A&5B)</p> <p>Description 2500 KVA, 6.6KV/433 V, AN, 3 phase, 50 Hz, Dyn11, dry type cast resin Transformer, HV bushings rated for 12 kV, Marshalling Box, HV Cable box , LV Bus duct connections, other accessories etc.</p> <p>Approximate dimensions and Weight of Transformer</p> <p>Overall dimensions: 3000 x 2065 x 2900 mm.</p> <p>Core Coil Assembly 7500 Kg Enclosure 800 Kg Total Shipping 8300 Kg NGR: 1A, 350Ω; Size: 450 x 325 x 820mm; Weight: 45kg. <i>* Lumpsum rate to be quoted including final painting.</i></p>	2 sets*	6.3.1.1-D 6.3.1.2
B1.3	<p>2000 KVA STATION SERVICE TRANSFORMER (CWT3A, 3B, CLWT 2 A, 2B)</p> <p>Description 2000 KVA,6.61KV/433 V, AN, 3 phase, 50 Hz, Dyn11, dry type cast resin Transformer, HV bushings rated for 12 kV, Marshalling Box, HV Cable box , LV Bus duct connections, other accessories etc.</p> <p>Approximate dimensions and Weight of Transformer</p> <p>Overall dimensions : 2800 x 2065 x 2750 mm</p> <p>Core Coil Assembly 6,200 Kg Enclosure 800 Kg Total Shipping weight 7,000 Kg NGR: 1A, 350Ω; Size: 450 x 325 x 820mm; Weight: 45kg. <i>* Lump sum rate to be quoted including Final painting .</i></p>	4 sets*	6.3.1.1-E 6.3.1.2

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
B1.4	<p>1600 KVA UNIT SERVICE TRANSFORMER (UST5A(B) , 5B(B) ,SST 3A,3B ,3C,3D, ACT- 3A,3B)</p> <p>Description 1600 KVA, 6.6KV/433 V, AN, 3 phase, 50 Hz, Dyn11, dry type cast resin Transformer, HV bushings rated for 12 kV, Marshalling Box, HV Cable box , LV Bus duct connections, other accessories etc.</p> <p>Approximate dimensions and Weight of Transformer</p> <p>Overall dimensions: 2800 x 2065 x 2750 mm</p> <p>Core Coil Assembly 5800 Kg Enclosure 800 Kg Total Shipping weight 6600 Kg NGR: 1A, 350Ω; Size: 450 x 325 x 820mm; Weight: 45kg.</p> <p><i>*Lumpsum rate to be quoted including final painting.</i></p>	8 sets*	6.3.1.1-F 6.3.1.2
B1.5	<p>1000 KVA STATION SERVICE TRANSFORMER (UST5A (T), 5B (T), DMCWT 3A,3B)</p> <p>Description 1000 KVA, 6.6KV/433 V, AN, 3 phase, 50 Hz, Dyn11, dry type cast resin Transformer, HV bushings rated for 12 kV, Marshalling Box, HV Cable box , LV Bus duct connections, other accessories etc.</p> <p>Approximate dimensions and Weight of Transformer</p> <p>Overall dimensions : 2200 x 1665 x 2500 mm</p> <p>Core Coil Assembly 3650 Kg Enclosure 600 Kg Total Shipping weight 4250 Kg</p> <p>NGR: 1A, 350Ω; Size: 450 x 325 x 820mm; Weight: 45kg.</p> <p><i>* Lump sum rate to be quoted including Final painting.</i></p>	4 sets*	6.3.1.1-G 6.3.1.2

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
B2	HT BUSDUCTS		
B2.0	IP BUS DUCT (15.75 KV)		
B2.1	<p>15.75 KV IP Bus duct along with support structures, LAVT Cubicle, NG Cubicle and other loose supplied items such as Seal off Bushings, CTs, Lightning Arrestor, Secondary resistor, Hot air blowing equipment, control Panel, flexible hoses from HAB System unit to Bus Duct, Control cabinet for HAB, Conduiting and wiring for space heaters, illumination, etc. CT/PT wiring & conduiting ,erection works includes making welded joints and flexible joint connection and fixing of rubber bellows & shunts etc comprising of the following</p> <p>a) 10000 A IP Bus Duct from 210 MW Generator to 240 MVA Three phase generator transformers, with 10000 A main run bus duct Size :Bus Round 465mm OD, 15 tk,Enclosure 1000mm OD, 6.35mm tk Approximate length of all phases: 150 Meters per set</p> <p>b) Tap off Bus Ducts 1500A- to 2 x 16 MVA Unit Auxiliary transformers Size :Bus Tubular 114.3mm OD,8.56 tk,Enclosure 680mm OD,4.78mm tk Approximate length of all phases:62 Meters per set</p> <p><u>Dimensions & Weights of bus duct</u></p> <p>a)App Weight of Bus duct- 32 MT. / per set d)Hot Air Blower :15120 cubicmeter / hour ,size 2600 x 1600 x 3105 mm, weight 1 ton approx Drg 35410051333-sheet no.6 e)NG Cubicle: 2000 x 1250 x 1355 mm; 1500 kg approx. Drg 25411051169 f)LAVT Cubicle: 3 Nos., each of size 800 x 2050 x 2400 mm and weight 1400 kg each Drg 24511051 168 g)Weight of Support Structure: 14 MT (approx.)</p> <p>A. Reference Layout of IPB Drg No. 05410051464. <i>* Lump sum rate shall be quoted including final painting.</i></p>	1set*	6.3.4.1 6.3.4.2 6.3.4.4

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
B2.2.0	<p>6.9 KV SP Bus ducts.</p> <p>The S.P bus duct will be supplied along with support structures and other loose supplied items like seal off bushings, Flexibles, Rubber bellows, Line C.Ts etc. The work includes mounting of space heater, breather, laying of conduit and fixing, wiring and providing support and erection of overall enclosure with proper support etc</p> <p>Reference Drg: 05410053307 R-02 Shts 1 to 2</p>		6.3.4.1 6.3.4.3 6.3.4.4
B2.2.1	<p>4000Amp Busduct between Station transformer tap off and Switch board = 600x 1600mm size. Wt: 100kg/m. Total length -8 Mtr</p> <p>Approximate weight of Structure- 5MT</p>	8.0 mtrs	
B2.2.2	<p>2500 Amp Busduct between SWBD OCC-1 and SWBD SA of stage-1 = 450 x 1350mm size. Wt: 85kg/m.- Total length-380 mtrs.</p> <p>Approximate weight of Structure-70 MT</p>	380 mtrs	
B2.2.3	<p>1600 Amp Busduct sections = 450 x 1350mm size rectangular box enclosure. Wt: 75kg/m. Total length -230 mtrs</p> <p>Approximate weight of Structure- 60 MT</p>	230 mtrs	
C	BHEL- PEM SCOPE		
C1.0	NEUTRAL GROUNDING RESISTOR		
C1.1	<p>Neutral Grounding Resistor (NGR), Indoor Type, 1100V, 1 A, 350 ohms, with mounting and connected accessories</p> <p>Size: 450 x 325 x 820 mm; Weight: 45 kg</p> <p><i>Separate rate will not be applicable for this item as the erection of the same is covered in the erection of the respective transformers in Sl.No.B1.2, B1.3, B1.4 and B1.5</i></p>	16 Nos.	6.3.1.1-J 6.3.1.2

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
C2.0	415V LOW VOLTAGE SWITCHGEAR/ CONTROL PANELS (Earthing trucks and breaker trolley to be transported and handed over in switchgear room.)		
C2.1	Turbine PCC (5DA) Approximate Dimension: 13402 x 1300 x 2400 mm Approximate weight: 7500 kg	1 Set*	6.3.3
C2.2	Turbine Valve MCC (5DD) Approximate Dimension: 13737 x 850x 2400 mm Approximate weight: 10,100 kg	1 Set*	6.3.3
C2.3	Boiler PCC (5DB) Approximate Dimension: 15387 x 1300 x 2400 mm Approximate weight: 9,500 kg	1 Set*	6.3.3
C2.4	Boiler Valve MCC (5DE) Approximate Dimension: 20982 x 850 x 2400 mm Approximate weight: 15,100 kg	1 Set*	6.3.3
C2.5	Station Service PCC (0DA) Approximate Dimension: 16112 x 1300 x 2400 mm Approximate weight: 10,700 kg	1 Set*	6.3.3
C2.6	Emergency MCC (0EA) Approximate Dimension: 14207 x 1300 x 2400 mm Approximate weight: 10,000 kg	1 Set*	6.3.3
C2.7	Station Service PCC (0DC) Approximate Dimension: 15222 x 1300 x 2400 mm Approximate weight: 9,600kg	1 Set*	6.3.3

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
C2.8	Ventilation MCC (0DH) Approximate Dimension: 5942 x 1300 x 2400 mm Approximate weight: 3,700 kg	1 Set*	6.3.3
C2.9	Ventilation MCC (0DI) Approximate Dimension: 5137 x 1300 x 2400 mm Approximate weight: 3,200 kg	1 Set*	6.3.3
C2.10	Air conditioning MCC (0DG) Approximate Dimension: 9417 x 1300 x 2400 mm Approximate weight: 6,600 kg	1 Set*	6.3.3
C2.11	ESP & Vent MCC (5DF) Approximate Dimension: 2467 x 850 x 2400 mm Approximate weight: 1,500 kg	1 Set*	6.3.3
C2.12	CW PCC (0DB) Approximate Dimension: 12167 x 1300 x 2400 mm Approximate weight: 7,300 kg.	1 Set*	6.3.3
C2.13	Fire fighting MCC (0DJ) Approximate Dimension: 9672 x 1300 x 2400 mm Approximate weight: 6,400 kg	1 Set*	6.3.3
C2.14	DMCW PCC (0DK) Approximate Dimension: 12302 x 1300 x 2400 mm Approximate weight: 8,200 kg	1 Set*	6.3.3
C2.15	Air Compressor PCC (0DL) Approximate Dimension: 9457 x 1300 x 2400 mm Approximate weight: 5,900 kg	1 Set*	6.3.3

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
C2.16	Filter water P/H MCC (ODM) Approximate Dimension: 8572 x 1300 x 2400 mm Approximate weight 5800 kg	1 Set*	6.3.3
C2.17	ACDB –12WAY Approximate Dimension: 1662 x 500x 2400 mm Approximate weight 1000 kg	8 sets*	6.3.3
C2.18	Turbine ACDB (5DG) Approximate Dimension: 4077 x 850 x 2400 mm Approximate weight: 2,500 kg	1 set*	6.3.3
C2.19	Boiler ACDB (5DH) Approximate Dimension: 4077 x 850 x 2400 mm Approximate weight: 2,500 kg	1 set*	6.3.3
C2.20	220V Unit DCDB (5FA) Approximate Dimension: 4382 x 1300 x 2400 mm Approximate weight: 3,400 kg	1 set*	6.3.3
C2.21	220V Station DCDB (0FA) Approximate Dimension: 4382 x 1300 x 2400 mm Approximate weight: 3,400 kg	1 Set*	6.3.3
C2.22	Electrical Control Boards for compressor, Cooling water pump and DMCP (To be erected in control room) Approximate Dimension: 1000 x 600 x 2300 mm Approximate weight: 600 kg	3 Nos*	6.3.3
C2.23	Local Starter Panel	51 Nos.	6.3.3

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
C2.24	ACDB / DCDB –20 WAY Approximate Dimension: 1662 x 500x 2400 mm Approximate weight 1000 kg	8 sets*	6.3.3
C2.25	ACDB / DCDB –24WAY Approximate Dimension: 1662 x 500x 2400 mm Approximate weight 1000 kg	8 sets*	6.3.3
C3.0	BATTERY & BATTERY CHARGERS:		
C3.1	220 V DC Battery Battery banks: 1395 AH, 208V, Plante Lead Acid battery and Float cum Boost charger panel along with fuse boxes. 104 Cells housed in 16 Nos. of single row single tier racks made of teak wood, along with inter cell connectors, inter row connector, inter bank connectors, rack insulators etc. Weight of each cell (with acid): 220 kg Size of each battery bank: 9776 x 2836 x 935 mm Approximate weight of batteries with rack: 24,600 kg	2 Sets*	6.3.6
C3.2	Dual float cum boost Battery Charger Each charger consists float & boost charger panels, dispatched in suitable shipping sections. Total Size of Charger (FC + FCB): 3350 x 1100 x 2200 mm Approximate Weight of charger: 2000 kg	3 Sets*	6.3.6
C4.0	HT CABLES		
	<i>6.35kV/ 11kV grade, Aluminum conductor, XLPE insulation, conductor and insulation screen, extruded PVC inner sheath, armour and extruded FRLS PVC overall sheath cables of the following sizes</i>		
C4.1	3C x 185 sq.mm	10000 Mtrs	6.3.8

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
C4.2	1C X 630 sq.mm	15000 Mt	6.3.8
	<i>3.3kV(Uneearthed) grade Aluminum conductor, XLPE insulated, unarmoured, FRLS PVC outer sheath, cable of the following sizes</i>		
C4.3	1C x 630 sq. mm	1500 Mtrs	6.3.8
C5.0	HT TERMINATION KITS/ JOINTING KITS		
	<i>Termination kits for 6.35/11 kV grade, XLPE insulated, Aluminium conductor cables of following sizes</i>		
C5.1	1c x 630 sq. mm (Indoor Type)	92 Nos.	6.3.8
C5.2	3c x 185 sq. mm (Indoor Type)	80 Nos.	6.3.8
	<i>6.6 kV Straight through jointing kits</i>		
C5.3	1c x 630 sq. mm	10 Nos.	6.3.8
C5.4	3c x 185 sq. mm	4 Nos.	6.3.8
	<i>Termination kits for 3.3/3.3 kV grade, XLPE insulated, Aluminium conductor cables of following sizes</i>		
C5.5	1c x 630 sq. mm (Indoor Type)	80 Nos.	6.3.8
C6.0	LT POWER CABLES		
	<i>1.1 kV grade, power cables with stranded Aluminum/ Copper conductor, XLPE insulated, PVC type ST2 extruded inner sheathed, galvanized steel round wire/ strip armoured overall PVC type ST2 FRLS Extruded outersheathed cables of following sizes</i>		6.3.8
C6.1	1 C X 630 sq. mm,Al, Armoured	12000 Mtrs	6.3.8
C6.2	2 C X 35 sq. mm, Al, Armoured	2500 Mtrs	6.3.8
C6.3	2 C X 16 sq. mm, Al, Armoured	3000 Mtrs	6.3.8
C6.4	3 C X 185 sq. mm, Al, Armoured	7000Mtr	6.3.8
C6.5	3 C X 95 sq. mm, Al, Armoured	4000 Mtrs	6.3.8
C6.6	3 C X 35 sq. mm, Al, Armoured	5000 Mtrs	6.3.8
C6.7	3 C X 16 sq. mm, Al, Armoured	7000Mtr	6.3.8
C6.8	3.5 C X 185 sq. mm, Al, Armoured	1000 Mtrs	6.3.8

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
C6.9	3.5 C X 95 sq. mm, Al, Armoured	3000 Mtrs	6.3.8
C6.10	3.5 C X 35 sq. mm, Al, Armoured	12000 Mtrs	6.3.8
C6.11	4 C X 16 sq.mm, Al, Armoured	12000 Mtr	6.3.8
C6.12	1 C X 630 sq. mm, Copper Armoured	1000 Mtrs	6.3.8
C6.13	1C X 70 sq. mm, Copper, Armoured	1000 Mtrs	6.3.8
C6.14	2 C X 95 sq. mm, Copper, Armoured	5000 Mtrs	6.3.8
C6.15	2 C X 70 sq. mm, Copper, Armoured	1000 Mtrs	6.3.8
C6.16	2 C X 6 sq. mm, Copper, Armoured	9000Mtr	6.3.8
C6.17	2 C X 2.5 sq. mm, Copper, Armoured	16 000Mtr	6.3.8
C6.18	3 C X 2.5 sq. mm, Copper, Armoured	73 000 Mtrs	6.3.8
C6.19	4 C X 2.5 sq. mm, Copper, Armoured	5000 Mtrs	6.3.8
C6.20	4 C X 6 sq. mm, Copper, Armoured	1000 Mtrs	6.3.8
C7.0	LT CONTROL CABLES		
	<i>1.1 kV grade, control cables with stranded Copper conductor, PVC insulated, PVC type ST1 extruded inner sheathed, galvanized steel wire/ strip armoured, overall PVC type ST1 FRLS Extruded outersheathed cables of following sizes</i>		
C7.1	3 C X 2.5 sq. mm	45000 Mtr	6.3.8
C7.2	5 C X 2.5 sq. mm	35000Mtr	6.3.8
C7.3	7 C X 2.5 sq. mm	27000 Mtr	6.3.8
C7.4	10C X 2.5 sq. mm	50 000 mtrs	6.3.8
C7.5	12 C X 2.5 sq. mm	25000Mtr	6.3.8
C7.6	16 C X 2.5 sq. mm	10,000Mtrs	6.3.8
C7.7	20 C X 2.5 sq. mm	7,000Mtrs	6.3.8

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
C 7.8	3 C X 1.5 sq.mm	5000 MTRS	6.3.8
C7.9	12C X 1.5 sq. mm	10,000 MTRS	6.3.8
C7.10	20 C X 1.5 sq. mm	10,000 MTRS	6.3.8
C7.11	1 C X 16 sq. mm	2000 MTRS	6.3.8
C7.12	19C X 1.5 sq. mm	300 Mtrs	6.3.8
C8.0	CABLE TRAYS COMPLETE WITH COUPLER PLATES, FASTENERS etc.		
C8.1	Ladder type, 600 mm wide	15000 Mtr	6.3.9
C8.2	Ladder type, 450 mm wide	4000 Mtr	6.3.9
C8.3	Ladder type, 300 mm wide	3500 Mtr	6.3.9
C8.4	Ladder type, 150 mm wide	6000 Mtr	6.3.9
C8.5	Perforated Type, 600 mm wide	700 Mtrs	6.3.9
C8.6	Perforated Type, 450 mm wide	200 Mtrs	6.3.9
C8.7	Perforated Type, 300 mm wide	150 Mtrs	6.3.9
C8.8	Perforated Type, 150 mm wide	2500 Mtrs	6.3.9
C8.9	Perforated Type, 100 mm wide	3500 Mtrs	6.3.9
C8.10	Perforated Type, 50 mm wide	3000 Mtrs	6.3.9
C9.0	STRUCTURAL STEEL FOR SUPPORT		
C9.1	Structural Steel for fabrication of supports (ISA - 50, ISMC – 100, ISMC - 150 etc.)	150T	6.3.11
C10.0	GALVANIZED MS RIGID CONDUITS		
C10.1	80 mm dia Conduit	50 Mtrs	6.3.9
C11.0	FLEXIBLE GI CONDUIT		
C11.1	50 mm dia Flexible Conduit	250 Mtrs	6.3.9

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
C12.0	GALVANIZED MS MARSHALLING BOX		
C12.1	6 way	3 Nos.	6.3.10
C12.2	12 way	2 Nos.	6.3.10
C13.0	LOCAL PUSH BUTTONS STATIONS		
C13.1	Local Push Button Station (Type –A)	325 Nos.	6.3.10
C13.2	Local Push Button Station (Type –B)	20 Nos.	6.3.10
C14.0	LIGHTNING PROTECTION SYSTEM		
C14.1	Galvanized Steel Flat, 25 X 4 mm	2500Mtrs	6.3.7
C14.2	20 mm dia GS Rod for Vertical Air Termination	35 Nos.	6.3.7
C14.3	Test Links	25 Nos.	6.3.7
C14.4	Excavation, laying of 40mm MS round rod and weld between lightning earth electrode and test link down conductor and reconditioning of earth	50 Mtrs	6.3.7
C15.0	ABOVE GROUND EARTHING MATERIALS		
C15.1	65 x 10 mm GS Flats	4200 Mtrs	6.3.7
C15.2	25 x 4 mm GS Flats	1300 Mtrs	6.3.7
C15.3	8 SWG GI Wire	1000 Mtrs	6.3.7
C15.4	Treated Earth pit Electrical & Electronic system earthing	50 sets*	6.3.7
C15.5	100 x 16 mm GI Flats	1500 Mtrs	6.3.7
C16.	LT POWER (AL) CABLE TERMINATION		
C16.1	1 C X 630 sq. mm,Al, Armoured	180 nos	6.3.8
C16.2	2 C X 35 sq. mm, Al, Armoured	6 Nos	6.3.8
C16.3	2 C X 16 sq. mm, Al, Armoured	22 Nos	6.3.8
C16.4	3 C X 185 sq. mm, Al, Armoured	120 Nos	6.3.8
C16.5	3 C X 95 sq. mm, Al, Armoured	80Nos	6.3.8

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
C16.6	3 C X 35 sq. mm, Al, Armoured	56 Nos	6.3.8
C16.7	3 C X 16 sq. mm, Al, Armoured	90 Nos	6.3.8
C16.8	3.5 C X 185 sq. mm, Al, Armoured	20 Nos	6.3.8
C16.9	3.5 C X 95 sq. mm, Al, Armoured	20 Nos	6.3.8
C16.10	3.5 C X 35 sq. mm, Al, Armoured	40 Nos	6.3.8
C16.11	4 C X 16 sq.mm, Al, Armoured	40 Nos	6.3.8
C16.12	1 C X 630 sq. mm, Copper Armoured	50 Nos	6.3.8
C16.13	1C X 70 sq. mm, Copper, Armoured	35 Nos	6.3.8
C16.14	2 C X 95 sq. mm, Copper , Armoured	200 Nos	6.3.8
C16.15	2 C X 70 sq. mm, Copper , Armoured	24 Nos	6.3.8
C17.0	COMMISSIONING of the following erected by Mechanical Contractor		
C17.1	LT Drives- Unidirectional (including DC Drives) PEM	280 Nos.	6.3.15
C17.2	LT Drives- Reversible –motorised valves	220 Nos.	6.3.15
C17.3	Hoists/cranes	12 Nos	6.3.15
C17.4	Control Panel for Hydrogen Dosing System	1 No.	6.3.15
C17.5	Control Panel for Ammonia Dosing System	1 No.	6.3.15
C17.6	Control Panel for Phosphate Dosing System	1 No.	6.3.15
D	BHEL TRICHY SUPPLY		
D1.0	LOW VOLTAGE SWITCHGEAR/ CONTROL PANELS.		
D1.1	Soot Blower MCC Approximate Size: 9700 x 1000 x 2450mm; Wt : 6000 kg	1 Set*	6.3.3

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
D1.2	FTP Local starter panels Size: 600 x 300 x 600 mm; Wt: 60 kg each	1 No.	6.3.3
D1.3	D.C. Starter panel for Scanner air fan Size: 900 x 375 x 1120, Wt :25 kg	3 Nos.	6.3.3
D2.0	JUNCTION BOXES		
D2.1	Junction Boxes 12 way	4 Nos.	6.3.10
D2.2	Junction boxes 24 way	4 Nos.	6.3.10
D3.0	LT POWER CABLES		
D3.1	3 C X 2.5 sq. mm, Cu, Armoured	10500 Mtrs	6.3.8
D3.2	2 C X 2.5 sq. mm, Cu, Armoured	500 Mtrs	6.3.8
D3.3	3 C X 6.0 sq. mm, Cu, Armoured	1000 Mtrs	6.3.8
D.4.0	LT CONTROL CABLES		
D.4.1	2 C X 2.5 sq. mm, Armoured, Control Cables	2000 Mtrs	6.3.8
D.4.2	3 C X 2.5 sq. mm, Armoured, Control Cables	1000 Mtrs	6.3.8
D.5.0	CABLE TRAYS		
D.5.1	Perforated Type, 100 mm tray	875 Mtrs	6.3.9
D6.0	COMMISSIONING of the following erected by Mechanical Contractor		
D6.1	Soot Blower Motors (WB, LRB, AH) Trichy	138 Nos.	6.3.15
D6.2	Hoists/cranes/monorail/elevator	1 No	6.3.15

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
E	BHEL - RANIPET SCOPE		
E1.0	ESP CONTROL PANELS/ MCC		
E1.1	L.T. Main Switch Board Size : 13000 x 1600 x 2400 mm Approximate Weight : 10,600 kg Earthing trucks and breaker trolley to be transported and handed over in switchgear room.	1 Set*	6.3.3
E1.2	Auxiliary Control Panel Size : 10500 x 1,600 x 2,400 mm (Incomer depth is1300mm) Approximate Weight : 8000 kg Earthing trucks and breaker trolley to be transported and handed over in switchgear room.	2 Nos.	6.3.3
E1.3	Electronic Control Panel with Bapcon controllers Size : 700 x 650 x 2,000 mm Weight : 300 kg Earthing trucks and breaker trolley to be transported and handed over in switchgear room.	32 Sets*	6.3.3
E1.4	IOS PC with monitor, printers and other accessories etc.	1 set*	6.3.3
E1.5	Rapper Control Panel- with Rapcon controllers Size : 1000 x 650 x 2,000 mm Approximate Weight : 600 kg Earthing trucks and breaker trolley to be transported and handed over in switchgear room.	2 Nos.	6.3.3
E1.6	Ash level indicator, along with accessories like 15 m each of flexible conduit, cable, wire, electronic unit and probe assembly Size of ALI: 900 x 100 x 100 mm; 10 kg each	64 Sets*	

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
E2.0	Heating elements		
E2.1	Testing and Termination and dressing of Heating Elements for Hopper	768 Nos.	6.3.15
E2.2	Testing Heating elements for support insulator heater	128 Nos.	6.3.15
E2.3	Testing Heating elements for shaft insulator heater	32 Nos.	6.3.15
E2.4	Testing Thermostats for hopper heaters.	16 Nos.	6.3.15
E2.5	Testing Thermostat for support insulators	2 Nos.	6.3.15
E3.0	Junction Boxes/ Local Start Stop Push Buttons		
E3.1	Local Start Stop Push Buttons (for Rapping Motors) Size: 160 x 150 x 200 mm; approximate wt 4 kg each	68 Nos.	6.3.10
E3.2	Power Junction Boxes for hopper heaters/ support insulator heaters/ shaft insulator heaters Size: 500 x 300 x 150 mm; approximate wt 50 kg per JB	45 Nos.	6.3.10
E3.3	Control Junction Boxes for hopper thermostat, start stop PBs, ALI Size: 500 x 300 x 150 mm; approximate wt 5 kg each	22 Nos.	6.3.10
E4.0	CABLE TRAYS COMPLETE WITH COUPLER PLATES, FASTENERS		
E4.1	Ladder type 600 mm wide	750 Mtrs	6.3.9
E4.2	Ladder type 450 mm wide	750 Mtrs	6.3.9
E4.3	Ladder type 300 mm wide	500 Mtrs	6.3.9
E4.4	Ladder type 150 mm wide	2000Mtrs	6.3.9
E5.0	LT POWER CABLES 1100 V grade, XLPE insulated, FRLS outer sheathed, Armoured, Al cables		
E5.1	3 C X 10 sq. mm	4200 Mtrs	6.3.8
E5.2	3 C X 35 sq. mm	550 Mtrs	6.3.8
E5.3	2 C X 120 sq.mm	12000 Mtr	6.3.8

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
E5.4	3 .5 C X 120 sq. mm	500 Mtrs	6.3.8
E6.0	LT CONTROL CABLES 1100 V grade, PVC insulated, armoured, PVC outer sheathed, Cu cables		
E6.1	2 C X 2.5 sq. mm	7000 Mtrs	6.3.8
E6.2	3 C X 2.5 sq. mm	10500Mtr	6.3.8
E6.3	7 C X 2.5 sq. mm	2000 Mtrs	6.3.8
E6.4	10C X 2.5 sq. mm	7750 Mtrs	6.3.8
E6.5	4C x 1.5 sq. mm, Cu, Screened cable	6500 Mtrs	6.3.8
E7.0	EARTHING MATERIALS		6.3.7
E7.1	GI Flat 50 x 6 mm	4000 Mtr	6.3.7
E7.2	GI Flat 30 x 5 mm	500 Mtr	6.3.7
E7.3	GI wire 8 SWG 3.15 mm dia	6000 Mtr	6.3.7
E8.0	STRUCTURAL STEEL FOR SUPPORT		6.3.11
E8.1	(ISMC 100, ISA 50x50x 6 etc.)	2.0 MT	6.3.11
E9.0	LT POWER CABLE TERMINATION		6.3.8
E9.1	3C x 10 sqmm	72 Nos	6.3.8
E9.2	3C x 35 sqmm	10 Nos	6.3.8
E9.3	2C x 120 sqmm	298 Nos	6.3.8
E9.4	3.5C x 120 sqm	40 Nos	6.3.8
E10.0	COMMISSIONING of the following erected by Mechanical Contractor)		
E10.1	LT Drives of /Ranipet	68 Nos.	6.3.15
E10.2	Hoists/cranes/monorail	2 Nos.	6.3.15

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
E10.3	<p>ESP Transformer Commissioning of High voltage rectifier transformer –95 kv, 800Ma</p> <p>The scope of work includes oil filtration, sample testing for dielectric strength, PPM etc., calibration of WTI, Bucholz relay etc Approximate Oil Quantity per transformer: 500 litres <i>Lump sum rate to be quoted including Final painting</i></p>	32 Nos.	6.3.1.1-I 6.3.15.2
F.	BHEL EDN SCOPE OF SUPPLY		
F1.0	DIGITAL AUTOMATIC VOLTAGE REGULATOR		
F1.1	<p>Digital AVR consisting of 1 No. Regulation cubicle, 1 No. Thyristor cubicle and 1 No. Field suppression cubicle. Overall size 3050 x 750 x 2295 mm Approximate wt: 1000 kg</p>	1 set*	6.3.2.3
F2.0	VFD FOR ID FANS		
F2.1	<p>VFD transformers 1600 KVA, 6.6/ 1.25 KV, 3f, ONAN, Dd0/Dyn11, dry type cast resin type transformer with HV, LV cable boxes, etc. Approximate dimensions Overall dimensions : 3000 x 2200 x 2665 mm Weight of Transformer Components Core Coil Assembly 5600 Kg Enclosure 900 Kg Total Shipping weight 6500 Kg <i>* Lump sum rate to be quoted including Final painting.</i></p>	4 sets*	6.3.1.1-H
F2.2	<p>DC Air cooled Reactor Floor/channel mounting type 1.8 KV grade, 7.0 mH, 800 A rated air cooled DC reactor housed in 3mm thick Aluminium cubicle with suitable input/output terminals Dimension: 2350 x 2250 x 1975 mm , Weight: 1350 kg</p>	4 sets*	6.3.5

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
F2.3	LCI Drive Panel: Comprising Control and Excitation Panel, Fan and Filter Panel with air duct for exhausting air, Bridge Panels-1&2, AC Input Panel and AC Output Panel. Size: 4182 x 1100 x 2420 mm; Weight: 5000 kg, dispatched in suitable shipping sections	4 sets*	6.3.5
F2.4	Control Panel for VFD Drives Size: 800 x 1100 x 2330 mm; weight: 400 kg	2 Nos.	6.3.5
F2.5	Contactoer Panel for VFD Drives Size: 750 x 1100 x 2330 mm; weight: 400 kg	4 Nos.	6.3.5
F2.6	MMI for VFD- Standalone PC with monitor, printer, power distribution box, computer table, interconnection power and control cables etc. for all the 4 Channels. The scope of work includes installation, integration of the system and testing	1 set*	6.3.5
F3.0	LT POWER CABLES		
F3.1	3C X 95 sq. mm, Al, Armoured	650 Mtrs	6.3.8
F3.2	3C X 25 sq. mm, Al, Armoured	1600 Mtrs	6.3.8
F3.3	2C X 2.5 sq. mm, Cu, Armoured	600 Mtrs	6.3.8
F4.0	LT CONTROL CABLES		6.3.8
F4.1	2 C X 1.5 sq mm, Cu, Armoured	3090 Mtrs	6.3.8
F4.2	4 C X 1.5 sq mm, Cu, Armoured	4400 Mtrs	6.3.8
F.4.3	Earthing Cable, 1 C x 16 sq .mm, PVC, Cu	2000 Mtrs	6.3.8
F5.0	SCREENED CABLES		
	PVC/FRLS, Armoured, Type 'F' (individually and overall shielded) cables		
F5.1	2P x 0.5 sqmm cable	200 Mtrs	6.3.8
F5.2	4P x 0.5 sqmm cable	500 Mtrs	6.3.8
F5.3	12P x 0.5 sqmm cable	300 Mtrs	6.3.8

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
	Type 'G' (Overall shielded) Cables		
F5.4	2P x 0.5 sqmm cable	1680Mtrs	6.3.8
F5.5	4P x 0.5 sqmm cable	2380Mtrs	6.3.8
F5.6	8P x 0.5 sqmm cable	2440Mtrs	6.3.8
F5.7	14P x 0.5 sqmm cable	800 Mtrs	6.3.8
F5.8	3C x 50 sq.mm screened copper cable	150 Mtrs	6.3.8
F5.9	3C x 2.5 sq.mm screened copper cable	100 Mtrs	6.3.8
F6.0	LT POWER CABLE TERMINATION		
F6.1	3C X 95 sq. mm, Al, Armoured	8 Nos.	6.3.8
F6.2	3C X 25 sq. mm, Al, Armoured	24 Nos.	6.3.8
F7.0	Control panels		
F7.1	Generator control panel(GCP)	1 No	6.3.2.3
F7.2	Unit auxiliary control board(UACB)	1 No	6.3.2.3
F7.3	Station auxiliary control board(SAB)	1 No	6.3.2.3
G.	BHEL-HARDWAR SCOPE		
G.1.0	STARTER CABINET WITH RESISTANCE		
G.1.1	D.C. Starter Cabinet with Resistance box for DC Seal Oil Motor Approximate size of s panel.: 1000 x 800 x 2200 mm; Wt :450 kg Approximate size of resistance box.: 600 x 600 x 500 mm;	1Set*	6.3.3
G.1.2	D.C. Starter Panels For EOPs , JOP Approximate size & Wt.: 800 x 800 x 2280 mm; 450 kg each	2 Sets*	6.3.3
G.1.3	Lub Oil Purification Equipment Panel Approximate size: 1000 x 800 x 2280 mm;	1Set*	6.3.3

SIGNATURE OF THE TENDERER

BOM Ref No:	Description	Qty	Clause Ref No:
G.2.0	COMMISSIONING of the following erected by Mech contractor		
G.2.1	Exciter drier/heater	1 set*	6.3.15
G.2.2	Generator Air Drier	1 set*	6.3.15
G.2.3	210 MW Generator H.V. testing, meggering of Bushings & Accessories, resistance measurement, meggering including dry out of generator.	1 No.	6.3.15
G.2.4	6.6 KV Motors (BFP, PA Fan, ID Fan, CE Pump, Mills, FD, CWP, ACWP, Hydrant Main Pump, Spray Main Pump)	26 Nos.	6.3.15

GENERAL NOTES:

THE SCOPE OF WORK SPECIFIED UNDER CLAUSE NO 6.3 FOR VARIOUS ITEMS / EQUIPMENTS /
HARDWARE SHALL
ALSO COVERS THE FOLLOWING COMMON CLAUSE

- ❖ REFER CLAUSE 6.3.12 FOR PAINTING
- ❖ REFER CLAUSE 6.3.14. FOR CIVIL WORKS
- ❖ REFER CLAUSE 6.3.13 FOR TESTING AND CALIBRATION
- ❖ REFER CLAUSE 6.3.16 FOR PRE COMMISSIONING

SIGNATURE OF THE TENDERER