

7.00	ACSR Conductors of following sizes with Jointing sleeves, binding materials, PG clamps, bi-metallic conductor, hardware etc for overhead line and jumpers as required as per technical specification, approved drawings and scope of work									
7.01	6/4.09 + 1/4.09 mm (80 mm ² Al. Area) -	km								
7.02	6/4.72 mm+7/1.57 mm (100 mm ² Al.	km								
7.03	30/3.00 + 7/3.00 mm (200 mm ² Al. Area) - Panther	km								
8.00	33kV, 600A, 25kA, 3-ph, 3 Pin type, Horizontal / Vertical Mounting type (As desired by DISCOM), Gang Operated, AB Switch along with Support Insulators, Base Channel down Pipe, Arcing Horns etc. complete as per technical specifications, scope of works and approved drawings	Set								
9.00	33 KV LINE FOR UNDER GROUND RAILWAY CROSSING BY 2 Nos (INCLUDING ONE SPARE) 3Cx300 Sqmm XLPE Armoured Cable (0.3 km each) USING 150MM DIA GI PIPES (grade A for underground laying and grade B for pole support), OUTDOOR HEAT SHRINKABLE CABLE JOINTING KITS, 33 KV LIGHTENING ARRESTOR STATION CLASS 10KA (6 NOS.), LUGS, 4 Nos GI 3-Meters LONG PIPE EARTHING, 6 SWG GI WIRES, CABLE MARKERS, BI METALLICK CLAMPS, JUMPERING WITH 33 KV ARIAL BUNCHED CABLES 200 sqmm dia (10 mtr) etc AS REQUIRED AS PER TECHNICAL SPECIFICATIONS, DRAWINGS AND SCOPE OF THE WORK.	set								
	Total Ex-works									

% DISCOUNT, IF ANY: _____

Note:

5.00	36kV, 1250A, 25kA for 3 seconds, 3-ph, Outdoor type Vacuum Circuit breaker along with 36kV, 1-Phase, 200-100/5-5 Amps or 300-150/5-5 Amps 3 Nos outdoor type Current Transformers along with junction box (1 no junction box for 3 no of 1 phase CTs), Jumpers, earthing, supporting structures, bi-metallic clamps, permanent maintenance platform, marshalling box etc required as per technical specifications, scope of works and approved drawings	No								
6.00	33kV, Indoor, Control & Relay panel along with E/F & O/C relays, Mimic Diagram, Voltmeter, Ammeter, Annunciation Windows with annunciation relays and other components etc as per approved drawings, specifications and scope of works controlling:									
6.01	33 kV feeder VCB with Static Tri-Vector Energy Meter	No								
6.02	Power transformer 33 kV VCB with Static Tri-Vector Energy Meter	No								
7.00	36kV, 630A, 25kA for 3 seconds, 3-ph double break center rotating type (DBCR), Gang Operated, Isolator along with Support Insulators, Operating Mechanism, Base Channel down Pipe and all required accessories complete as per technical specifications, scope of works and approved drawings	Set								
8.00	30 kV, 10kA, 1-ph Station Class Lightning Arrester with mounting platform, jumpering from bus bar, hardware etc as required as per technical specifications, approved drawings and scope of the works.	No.								
9.00	9kV, 10kA, 1-ph Station Class Lightning Arrester with mounting platform, jumpering from bus bar, hardware, etc as required as per technical specifications, approved drawings and scope of the works.	No.								
10.00	24V, 80 AH Ni-Cd or Pb Acid battery (or as per state practice), battery stand made of teak wood duly painted with anti rusting paint, battery insulators, inter-battery wiring using 30 sqmm, 1.1 kv, copper single core multi strand cable, terminal connectors, & all other accessories and connectors as per technical specifications, approved drawings and scope of works.	Set								
11.00	24V, 40 Amp. Float-cum-Boost Battery Charger (or as per state practice) with full wave rectification for 230 V, 1 phase, 50 Hz AC Input Supply as per technical specifications, approved drawings and scope of works.	set								

21.01	3.5 Core 150 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	km								
21.02	3.5 Core 70 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	km								
21.03	2 Core 16 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	km								
22.00	LT Control cables including their termination materials like glands, lugs etc. as per technical specifications, approved drawings and scope of the work.									
22.01	2 Core 2.5 sqmm armoured, stranded copper conductor, PVC insulated and PVC sheathed cable	km								
22.02	6 Core 2.5 sqmm armoured, stranded copper conductor, PVC insulated and PVC sheathed cable	km								
22.03	10 Core 2.5 sqmm armoured, stranded copper conductor, PVC insulated and PVC sheathed cable	km								
23.00	Outdoor type Distribution Box for station transformer comprising 200 A switch fuse unit, 6 Nos SP MCCB– 90 A, 2 Nos 32 A SP MCCB, 3-ph, 63A, contactor controlled yard lighting timer unit, tri-vector electronic energy meter with suitable CT, control/power cabling and terminals, 1 No 20 A Industrial socket and switch for local power supply requirements, mounting channel, clamps and hardware as per scope of work, technical specifications and approved drawings,	Set								
24.00	12 kV, 800A, 25kA for 3 seconds, 3-ph double break centre rotating type (DBCR), Gang Operated Isolator along with Support Insulators, Operating Mechanism, Base Channel, down Pipe and all required accessories complete as per technical specifications, scope of works and approved drawings	Set								
25.00	12kV, 600A, 25kA for 3 sec, 3-Phase, 3 Pin type, Horizontal/Vertical Mounting type (as desired by DISCOM), Gang Operated, AB Switch, along with support insulators, Base Channel, down pipe, Arching Horns etc. and all complete accessories as per technical specifications, scope of works and approved drawings	Set								
26.00	36 kV, 3-pole, 1-Phase, 33kV/110 volt, Single core outdoor type Potential Transformer along with junction box (1 no junction box for 3 no of 1 phase PTs), bi-metallic clamp and required accessories etc., complete as per technical specifications, approved drawings and scope of	Set								
27.00	12 kV, 3-pole, 1-Phase, 11kV/110 volt, Single core outdoor type Potential Transformer along with junction box (1 no junction box for 3 no of 1 phase PTs), bi-metallic clamp and required accessories etc., complete as per technical specifications, approved drawings and scope of the works.	set								
B (I)	11 KV CAPACITOR BANK INCLUDING MOUNTING STEEL GALVANISED STRUCTURE AND ACCESSORIES AS REQUIRED AS PER DETAILED TECHNICAL SPECIFICATIONS, DRAWING AND SCOPE OF WORKS IN FOLLOWING ARRANGEMENTS:									
1.00	CAPACITOR BANK 600 KVAR - FIXED TYPE SUBSTATION MOUNTED WITH CAPACITOR SWITCH AND ASSOCIATED ACCESSORIES	Set								
2.00	CAPACITOR BANK 1200 KVAR - AUTO TYPE SUBSTATION MOUNTED WITH ALL ASSOCIATED EQUIPMENT LIKE 11 KV VCB, C&R PANEL, CTs, 11 KV 200A ISOLATORS WITH EARTH SWITCH, RVT, 11 KV STATION CLASS LA, RED OXIDE / ALUMINIUM PAINTING, 2.5 SQ.MM. PVC ARMoured STRANDED COPPER CONTROL CABLES, PROTECTION CIRCUIT AND EQUIPMENT, EARTHING, 16 MM DIA MS NUTS & BOLTS ETC AS REQUIRED AS PER APPROVED TECHNICAL SPECIFICATIONS, DRAWING AND SCOPE OF WORKS	Set								
3.00	CAPACITOR BANK 1500 KVAR - AUTO TYPE SUBSTATION MOUNTED WITH ALL ASSOCIATED EQUIPMENT LIKE 11 KV VCB, C&R PANEL, CTs, 11 KV 200A ISOLATORS WITH EARTH SWITCH, RVT, 11 KV STATION CLASS LA, RED OXIDE / ALUMINIUM PAINTING, 2.5 SQ.MM. PVC ARMoured STRANDED COPPER CONTROL CABLES, PROTECTION CIRCUIT AND EQUIPMENT, EARTHING, 16 MM DIA MS NUTS & BOLTS ETC AS REQUIRED AS PER APPROVED TECHNICAL SPECIFICATIONS, DRAWING AND SCOPE OF WORKS	Set								

B (IV)	Description of items needed for fully outdoor type 33/11 kV substation											
1.00	12 kV, 1250 A, 25kA for 3 seconds, 3-ph, Outdoor type Vacuum Circuit breaker along with 12 kV, 1-Phase, 600-300/5-5 or 300-150/5-5 or 200-100/5-5 3 Nos outdoor type Current Transformer along with junction box (1 no junction box for 3 no of 1-phase CTs), Jumpers, earthing, supporting structures, bi-metallic clamps, permanent maintenance platform, marshalling box, control cabling between VCB and indoor control panel and required accessories complete as per technical specifications, approved drawings and scope of the works.	No										
2.00	Indoor type control and relay panel as per technical specifications, approved drawings and scope of works:											
2.01	Indoor type control and relay panel for 11kV, 3phase, 1250 A VCB (Transformer Breaker) consisting of A-meter, volt-meter, Relays & accessories complete as per specifications for transformer breaker protection	No.										
2.02	Indoor type control and relay panel for 11 KV 3 phase, 1250 A VCB (Feeder Breakers) consisting of A-meter, volt-meter, Relays, energy meter (TVM) & accessories complete for feeder breaker protection as per technical specifications, approved drawings and scope of works.	No.										
B (V)	Description of items needed for partly outdoor type 33/11 kV substation											
1.00	12 kV, 1250 A, 25kA for 3 seconds, 3-ph, indoor type Vacuum Circuit breaker along with 12 kV, 1-Phase, 600-300/5-5 or 300-150/5-5 or 200-100/5-5 3 Nos indoor type Current Transformer, indoor mounting type control panel for Transformer breaker, control cabling between VCB and indoor control panel and required accessories, bi-metallic clamps, A-meter, volt-meter, Relay & accessories complete for transformer breaker protection as per technical specifications, approved drawings and scope of works.	No										
2.00	12 kV, 1250 A, 25kA for 3 seconds, 3-ph, indoor type Vacuum Circuit breaker along with 12 kV, 1-Phase, 300-150/5-5 or 200-100/5-5 3 Nos indoor type Current Transformer, indoor mounting type control panel for feeder protection, control cabling between VCB and indoor control panel and required accessories, bi-metallic clamps, A-meter, volt-meter, 3-phase electronic energy meter, Relay & accessories complete for feeder breaker protection as per technical specifications, approved drawings and scope of works.	Set										
3.00	12 kV, 1250 A, 25kA for 3 seconds, 3-ph, indoor type Vacuum Circuit breaker along with 12 kV, 1-Phase, 600-300/5-5 or 300-150/5-5 3 Nos indoor type Current Transformer, indoor mounting type control panel for bus coupler, control cabling between VCB and indoor control panel and required accessories, bi-metallic clamps, A-meter, volt-meter, 3-phase electronic energy meter, Relay & accessories complete as per specifications for bus coupler protection	Set										
4.00	11 KV, XLPE, 3 phase power cable armored, aluminium conductor, stranded, including their termination materials like glands, lugs, tagging etc as required as per technical specifications, approved drawings and scope of the works.											
4.01	3Cx 300 sqmm	km										
4.02	3Cx 185sqmm	km										
4.03	3Cx35 Sqmm	km										
5.00	Cable termination kit suitable for termination in transformer cable box/ breaker panel/ outdoor 11 KV terminals complete with all accessories etc. as per technical specifications, approved drawings and scope of the works.											
5.01	3Cx 300 sqmm	set										
5.02	3Cx 185sqmm	set										
5.03	3Cx35 Sqmm	set										
6.00	12 kV, 3-pole, 1-Phase, 11kV/110 volt, Single core Indoor type Potential Transformer along with required accessories etc., complete as per technical specifications, approved drawings and scope of the works.	Set										
	Total Ex-works											

% DISCOUNT, IF ANY: _____

Note:

7.01	6/2.59 + 1/2.59 mm (30 mm ² Al. Area) - Weasel	km							
7.02	6/3.35 + 1/3.35 mm (50 mm ² Al. Area) - Rabbit	km							
7.03	6/4.09 + 1/4.09 mm (80 mm ² Al. Area) - Raccoon	km							
7.04	6/4.72 mm+7/1.57 mm (100 mm ² Al. Area) - Dog	km							
8.00	12kV, 600A, 25kA for 3sec, 3-ph, 3 Pin type, Horizontal/Vertical Mounting type (as desired by DISCOM), Gang Operated, AB Switch along with Support Insulators, Base Channel down Pipe, Arcing Horns etc. complete as per technical specifications, scope of works and approved drawings	Set							
9.00	11 LV Line overhead crossing and underground railway crossing ensuring statutory clearances								
9.01	11 KV LINE FOR UNDER GROUND RAILWAY CROSSING BY 2 Nos (INCLUDING ONE SPARE) 3Cx185 Sqmm XLPE Armoured Cable (0.3 km each) USING 150MM DIA GI PIPES (grade A for underground laying and grade B for pole support), OUTDOOR HEAT SHRINKABLE CABLE JOINTING KITS, 11 KV LIGHTENING ARRESTOR STATION CLASS 10KA (6 NOS.), LUGS, 4 Nos GI 3-Meters LONG pipe EARTHING, 6 SWG GI WIRES, CABLE MARKERS, BI METALLICK CLAMPS, JUMPERING WITH 11 KV ARIAL BUNCHED CABLES 200 sqmm dia(10 mtr) etc AS REQUIRED AS PER TECHNICAL SPECIFICATIONS, DRAWINGS AND SCOPE OF THE WORK.	set							
9.02	11 KV LINE FOR UNDER GROUND RAILWAY CROSSING BY 2 Nos (INCLUDING ONE SPARE) 3Cx300 Sqmm XLPE Armoured Cable (0.3 km each) USING 150MM DIA GI PIPES (grade A for underground laying and grade B for pole support), OUTDOOR HEAT SHRINKABLE CABLE JOINTING KITS, 11 KV LIGHTENING ARRESTOR STATION CLASS 10KA (6 NOS.), LUGS, 4 Nos GI 3-Meters LONG PIPE EARTHING, 6 SWG GI WIRES, CABLE MARKERS, BI METALLICK CLAMPS, JUMPERING WITH 11 KV ARIAL BUNCHED CABLES 200 sqmm dia(10 mtr) etc AS REQUIRED AS PER TECHNICAL SPECIFICATIONS, DRAWINGS AND SCOPE OF THE WORK.	set							
Total Ex-works									

% DISCOUNT, IF ANY: _____

Note:

7.00	Outdoor mounting type Distribution box made of MS sheet of thickness not less than 18 SWG CRCA sheet by deep drawn method, dust and moisture vermin, weather proof with degree of protection with suitable bus bars, earthing bus, earthing terminals, box illumination, front door operated with proper locking arrangement, lugs, mounting channel frame, internal wiring with FRLS cables, danger plate, numbering, back clamps, hardware as per scope of the work, technical specifications and approved drawings suitable for following transformer:									
7.01	1 Ph 10 KVA transformer 45 A SPN MCCB (incomer) and 2 Nos. 32 A SP MCCB (outgoing)	No								
7.02	1 Ph 16 KVA transformer 80 A SPN MCCB (incomer) and 2 Nos. 50 A SP MCCB (outgoing)	No								
7.03	3 Ph 16 KVA transformer 25 A TPN MCCB (incomer) and 6 Nos. 16 A SP MCCB (outgoing)	No								
7.04	3 Ph 25 KVA transformer 40 A TPN MCCB (incomer) and 6 Nos. 25 A SP MCCB (outgoing)	No								
7.05	3 Ph 63 KVA Transformer having 200 A TPN isolator, 100 A HRC fuse (incomer) and 6 Nos. 60 A SP MCCB (outgoing)	No								
7.06	3 Ph 100 KVA Transformer having 200 A TPN isolator, 160A HRC fuse (incomer) and 6 Nos. 90 A SP MCCB (outgoing)	No								
7.07	3 Ph 200 KVA Transformer having 600 A TPN isolator, 315 A HRC fuse (incomer) and 9 Nos. 120 A SP MCCB (outgoing)	No								
7.08	3 Ph 315 KVA Transformer having 600 A TPN isolator, 500 A HRC fuse (incomer) and 12 Nos. 120 A SP MCCB (outgoing)	No								
8.00	11 KV Distribution Class Lightening Arrester for DT as per technical specification, approved drawings and scope of work.	No								
9.00	11 kV, 3-ph, 200 A, 3 Pin type, Horizontal/Vertical Mounting type (as desired by DISCOM), Gang Operated, AB Switch along with Support Insulators, Base Channel, down Pipe, Arcing Horns etc. complete as per technical specifications, scope of works and approved drawings	Sets								
10.00	11 kV, 3-ph, Drop Out fuse units (set of 3 units) along with Support Insulators, Base Channel, fuse barrel etc. complete as per technical specifications, scope of works and approved drawings	Sets								
11.00	3 Nos pipe earthing using 40mm dia GI pipe 3000 mm long, as per IS 1161, making earth grid using 50x6mm GI Flat and riser as per scope of work of Distribution Transformer Substations, approved drawings and technical specifications,	Set								
12.00	8 SWG GI wire for earthing as per technical specifications, approved drawings and scope of works.	MT								
13.00	1.1 KV XLPE Aluminium Conductor, Stranded, unarmoured cable for connection of transformer LV bushing to Distribution Box and Distribution box to overhead line as per Scope of work, technical specification and approved drawings:									
13.01	1Cx16 sqmm aluminium conductor cable	km								
13.02	1CX35 sqmm aluminium conductor cable	km								
13.03	1CX50 sqmm aluminium conductor cable	km								
13.04	1Cx70 sqmm aluminium conductor cable	km								
13.05	1Cx150 sqmm aluminium conductor cable	km								
13.06	1Cx300 sqmm aluminium conductor cable	km								
14.00	ACSR Rabbit Conductor for jumpering including PG Clamps, bi-metallic connectors, hardware etc as per technical specifications, approved drawings and scope of works	Km								
Total Ex-works										

% DISCOUNT, IF ANY: _____

Note:

18.00	Internal Electrification works of control room comprising of Main Distribution Board, Sub-distribution Boards, copper flexible multi conductor 2.5 sqmm wiring (for light & fan)/4 sqmm wiring(for power points), power and light points, conduits, fan/LED lamps/tube fittings, exhaust fans, switches, sockets, 2mm thick, PVC 25mm dia conduits pipes in recess, plugs, miniature circuit breakers, separate independent earthing (2 Nos of 40mm GI Pipe/3-m long)etc as required including DC emergency lighting and auto-change-over switch as per technical specifications, approved drawings and scope of work.	Set								
19.00	External Electrification in switch yard area including power receptacles, station yard lighting with 4 Nos lightning mast (fitted with 2x250 watts SON fittings) made of 12 meters high Steel Tubular Poles (IS 2713 part I, II III) of designation 410 – SP - 60, complete as per technical specifications, approved drawings and scope of the work.	Set								
20.00	11kV, 200 A, 3-ph Drop Out fuse assembly including insulators and mounting arrangements, jumpering from bus bar, hardware, etc as required as per technical specifications, approved drawings and scope of the works.	Set								
21.00	LT Power Cables including their termination materials like glands, lugs, tagging etc. as per technical specifications, approved drawings and scope of the work.									
21.01	3.5 Core 150 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	km								
21.02	3.5 Core 70 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	km								
21.03	2 Core 16 Sq. mm armoured, stranded aluminium conductor, PVC insulated and PVC sheathed cable	km								
22.00	LT Control cables including their termination materials like glands, lugs etc. as per technical specifications, approved drawings and scope of the work.									
22.01	2 Core 2.5 sqmm armoured, stranded copper conductor, PVC insulated and PVC sheathed cable	km								
22.02	6 Core 2.5 sqmm armoured, stranded copper conductor, PVC insulated and PVC sheathed cable	km								
22.03	10 Core 2.5 sqmm armoured, stranded copper conductor, PVC insulated and PVC sheathed cable	km								
23.00	Outdoor type Distribution Box for station transformer comprising 200 A switch fuse unit, 6 Nos SP MCCB– 90 A, 2 Nos 32 A SP MCCB, 3-ph, 63A, contactor controlled yard lighting timer unit, tri-vector electronic energy meter with suitable CT, control/power cabling and terminals, 1 No 20 A Industrial socket and switch for local power supply requirements, mounting channel, clamps and hardware as per scope of work, technical specifications and approved drawings,	Set								
24.00	12 kV, 800A, 25kA for 3 seconds, 3-ph double break centre rotating type (DBCR), Gang Operated Isolator along with Support Insulators, Operating Mechanism, Base Channel, down Pipe and all required accessories complete as per technical specifications, scope of works and approved drawings	Set								

25.00	12kV, 600A, 25kA for 3 sec, 3-Phase, 3 Pin type, Horizontal/Vertical Mounting type (as desired by DISCOM), Gang Operated, AB Switch, along with support insulators, Base Channel, down pipe, Arching Horns etc. and all complete accessories as per technical specifications, scope of works and approved drawings	Set								
26.00	36 kV, 3-pole, 1-Phase, 33kV/110 volt, Single core outdoor type Potential Transformer along with junction box (1 no junction box for 3 no of 1-phase PTs), bi-metallic clamp and required accessories etc., complete as per technical specifications, approved drawings and scope of the works.	Set								
27.00	12 kV, 3-pole, 1-Phase, 11kV/110 volt, Single core outdoor type Potential Transformer along with junction box (1 no junction box for 3 no of 1-phase PTs), bi-metallic clamp and required accessories etc., complete as per technical specifications, approved drawings and scope of the works.	set								
B (I)	11 KV CAPACITOR BANK INCLUDING MOUNTING STEEL GALVANISED STRUCTURE AND ACCESSORIES AS REQUIRED AS PER DETAILED TECHNICAL SPECIFICATIONS, DRAWING AND SCOPE OF WORKS IN FOLLOWING ARRANGEMENTS:									
1.00	CAPACITOR BANK 600 KVAR - FIXED TYPE SUBSTATION MOUNTED WITH CAPACITOR SWITCH AND ASSOCIATED ACCESSORIES	Set								
2.00	CAPACITOR BANK 1200 KVAR - AUTO TYPE SUBSTATION MOUNTED WITH ALL ASSOCIATED EQUIPMENT LIKE 11 KV VCB, C&R PANEL, CTs, 11 KV 200A ISOLATORS WITH EARTH SWITCH, RVT, 11 KV STATION CLASS LA, RED OXIDE / ALUMINIUM PAINTING, 2.5 SQ.MM. PVC ARMoured STRANDED COPPER CONTROL CABLES, PROTECTION CIRCUIT AND EQUIPMENT, EARTHING, 16 MM DIA MS NUTS & BOLTS ETC AS REQUIRED AS PER APPROVED TECHNICAL SPECIFICATIONS, DRAWING AND SCOPE OF WORKS	Set								
3.00	CAPACITOR BANK 1500 KVAR - AUTO TYPE SUBSTATION MOUNTED WITH ALL ASSOCIATED EQUIPMENT LIKE 11 KV VCB, C&R PANEL, CTs, 11 KV 200A ISOLATORS WITH EARTH SWITCH, RVT, 11 KV STATION CLASS LA, RED OXIDE / ALUMINIUM PAINTING, 2.5 SQ.MM. PVC ARMoured STRANDED COPPER CONTROL CABLES, PROTECTION CIRCUIT AND EQUIPMENT, EARTHING, 16 MM DIA MS NUTS & BOLTS ETC AS REQUIRED AS PER APPROVED TECHNICAL SPECIFICATIONS, DRAWING AND SCOPE OF WORKS	Set								
B (IV)	Description of items needed for fully outdoor type 33/11 kV substation									
1.00	12 kV, 1250 A, 25kA for 3 seconds, 3-ph, Outdoor type Vacuum Circuit breaker along with 12 kV, 1-Phase, 600-300/5-5 or 300-150/5-5 or 200-100/5-5 3 Nos outdoor type Current Transformer along with junction box (1 no junction box for 3 no of 1-phase CTs), Jumpers, earthing, supporting structures, bi-metallic clamps, permanent maintenance platform, marshalling box, control cabling between VCB and indoor control panel and required accessories complete as per technical specifications, approved drawings and scope of the works.	No								

4.01	3Cx 300 sqmm	km								
4.02	3Cx 185sqmm	km								
4.03	3Cx35 Sqmm	km								
5.00	Cable termination kit suitable for termination in transformer cable box/ breaker panel/ outdoor 11 KV terminals complete with all accessories etc. as per technical specifications, approved drawings and scope of the works.									
5.01	3Cx 300 sqmm	set								
5.02	3Cx 185sqmm	set								
5.03	3Cx35 Sqmm	set								
6.00	12 kV, 3-pole, 1-Phase, 11kV/110 volt, Single core Indoor type Potential Transformer along with required accessories etc., complete as per technical specifications, approved drawings and scope of the works.	Set								
Total Ex-works										

% DISCOUNT, IF ANY: _____

Note:

DEVELOPMENT OF DISTRIBUTION INFRASTRUCTURE AT XXXX [Name of the District] District of XXXX [Name of State] UNDER REVAMPED REFORMS-BASED AND (Schedule of rates and prices)

Ex-works supply of materials

Bidder's Name & Address:

All prices in Indian Rupees

E New LT Line										
Line Item No.	Description of Goods	Unit	Quantity	Unit Ex-works price	Total Ex-works price	Unit Price for inland transportation and other services required in India to convey the Goods to their final destination	Total Price for inland transportation and other services required in India to convey the Goods to their final destination	GST payable on the price quoted if Contract is awarded (%)	GST payable on the price quoted if Contract is awarded (Amount)	Total Price per line item
1.00	Support for LT overhead Line as per technical specification, approved drawings and scope of work.									
1.01	8 m/140 kgs PCC Poles (PCC Pole as per state practice)	No								
1.02	11 m long H-Beam 152x152 mm, 37.1kg/mtr	No								
1.03	11 M long Steel Tubular poles with welded steel base plate of Designation 540 SP 52 (IS 2713, Pt I, II, III 1980)	No								
1.04	9 M long Steel Tubular poles with welded steel base plate of Designation 540 SP 28 (IS 2713, Pt I, II, III 1980)	No								
2.00	Galvanised Stay Set with anchor plate (200x200x6mm), 50x8mm stay clamp, Stay guy insulator, nut bolts, 2 Nos turn buckles, 1.8 m long, 16 mm diameter solid GS Stay rod & 7/3.15 mm Dia GI stranded wire etc as required as per technical specification, approved drawings and scope of work.	Set								
3.00	Earthing as per approved drawings, technical specifications and scope of work									
3.01	40 mm dia., 3000 mm long GI pipe earth electrode with test link, RCC pit, RCC cover plates on GI frame, bentonite powder and other accessories complete	Set								
3.02	Spike Earthing 20mm solid Rod	Set								
3.03	Chemical rod earthing including electrode, chemical, with 2000mm long, 50 mm diameter GI pipe, GI Strip of 24x3mm minimum in hard rock locations only.	Set								
3.04	8 SWG GI wire for earthing & GI nuts, bolts & washers	MT								
4.00	LT line with following arrangements using areal bunched XLPE cable including tension clamps for dead end, suspension clamps, clamps for neutral, piercing connectors type-I & type-II, 16 mm dia MS nuts & bolts, pole clamps, spring loaded bus bar suitable for single phase and three phase systems etc. as required as per technical specification, approved drawings and scope of work:									
4.01	AERIAL BUNCHED XLPE CABLE 3 X 50 SQ.MM.+1x35 SQ. MM.+1x16 SQ. MM.	Km								
4.02	AERIAL BUNCHED XLPE CABLE 3 X 35 SQ.MM.+1x35 SQ. MM.+1x16 SQ. MM.	Km								
4.03	AERIAL BUNCHED XLPE CABLE 3 X 25 SQ.MM.+1x35 SQ. MM.+ 1x16 SQ. MM.	Km								
4.04	AERIAL BUNCHED XLPE CABLE 3 X 16 SQ.MM. + 1x16 SQ. MM. +1x25 SQ. MM.	Km								
4.05	AERIAL BUNCHED XLPE CABLE 2 X 35 SQ.MM. + 1x16 SQ. MM.	Km								
4.06	AERIAL BUNCHED XLPE CABLE 2 X 25 SQ.MM. + 1x16 SQ. MM.	Km								
	Total Ex-works									

% DISCOUNT, IF ANY: _____

Note:

3.03	3 Ph 16 KVA transformer 25 A TPN MCCB (incomer) and 6 Nos. 16 A SP MCCB (outgoing)	No							
3.04	3 Ph 25 KVA transformer 40 A TPN MCCB (incomer) and 6 Nos. 25 A SP MCCB (outgoing)	No							
3.05	3 Ph 63 KVA Transformer having 200 A TPN isolator, 100 A HRC fuse (incomer) and 6 Nos. 60 A SP MCCB (outgoing)	No							
3.06	3 Ph 100 KVA Transformer having 200 A TPN isolator, 160A HRC fuse (incomer) and 6 Nos. 90 A SP MCCB (outgoing)	No							
3.07	3 Ph 200 KVA Transformer having 600 A TPN isolator, 315 A HRC fuse (incomer) and 9 Nos. 120 A SP MCCB (outgoing)	No							
3.08	3 Ph 315 KVA Transformer having 600 A TPN isolator, 500 A HRC fuse (incomer) and 12 Nos. 120 A SP MCCB (outgoing)	No							
4.00	Renovation of DTR substation Earthing as per technical specification, approved drawings and scope of work:								
4.01	Revamping of Distribution Transformer substation earthing by using 40 mm dia 3 meter long GI pipe earthing, using 50x6 mm GS flat for earth mat and riser and 25x3mm GS flat for connecting equipment, using 200 kg bentonite powder of substation in normal soil	No							
4.02	Revamping of Distribution Transformer substation earthing by using 3 Nos. chemical rod earthing including electrode & chemical, 50x6 mm GS flat for earth mat and riser and 25x3mm GS flat for connecting equipment in hard rock soil	No							
5.00	Augmentation of DTR substation by new Pre-fabricated steel items like DC cross arm (100x50x6 mm), back clamps (65x8 mm), pole clamp (65x8 mm), DO mounting channel (100x50x6 mm), transformer mounting channel (100x50x6 mm), transformer clamping set (50x50x6 mm), transformer belting set (50x50x6 mm) as per technical specification, approved drawings and scope of work.	MT							
6.00	Augmentation of DTR substation by new MS Nuts, Bolts with Washers as per technical specification, approved drawings and scope of work.	MT							
7.00	Augmentation of DTR substation by new Polymer/ Porcelain Insulators with hardware fittings, hardware etc as required as per technical specification, approved drawings and scope of work.								
7.01	11 KV, Disc Insulator with suitable hardware fittings	Set							
7.02	11 KV, Post Insulators / Pin Insulators with hardware fittings	Set							
8.00	Augmentation of DTR substation by new 9KV, 11 KA Distribution Class Lightning Arrester for DT as per technical specification, approved drawings and scope of work.	Set							
9.00	Augmentation of DTR substation by new 11 kv, 3-ph, 200 A, 3 Pin type, Vertical Mounting type, Gang Operated, AB Switch along with Support Insulators, Base Channel, down Pipe, Arcing Horns etc. complete as per technical specifications, scope of works and approved drawings	Sets							
10.00	11kV, 200 A, 3-ph Drop Out fuse assembly including insulators and mounting arrangements, jumpering from bus bar, hardware, etc as required as per technical specifications, approved drawings and scope of the works.	Set							
F(II)	Augmentation of 33 KV lines								
1.00	Augmentation of 3 phase 33 kV line using additional supports matching with length and type of existing support as per technical specifications, scope of works and approved drawings								
1.01	9.1 meter long /280 KG PCC Poles (PCC Pole as per state practice)	No							
1.02	13 m long H-Beam 152x152 mm 37.1 kg/m	No							

1.03	11 M long steel Tubular poles with welded steel base plate of Designation 540 SP 52 (IS 2713, Pt I, II, III 1980)	No							
1.04	13 M long steel Tubular poles with welded steel base plate of Designation 540 SP 72 (IS 2713, Pt I, II, III 1980)	No							
2.00	Augmentation of 3 phase 33 kV line using new Pre-fabricated steel items like V cross arm, top clamp, DC cross arm, bracket, clamps, cross bracings, bracings, strain plate, guarding channels, back clamp, transformer mounting structure etc made of MS Channels (100x50x6mm), MS angle (65x65x6mm), MS flats (65x8mm) of given sizes for over head structures as per technical specification, approved drawings and scope of work.	MT							
3.00	Augmentation of 3 phase 33 kV line replacing existing conductor with following type of new ACSR conductor including jointing sleeves, binding material and helical formed fittings etc as required as per technical specification, approved drawings and scope of work.								
3.01	6/4.72 mm+7/1.57 mm (100 mm ² Al. Area) - Dog replacing existing racoon conductor	km							
3.02	6/4.09 + 1/4.09 mm (80 mm ² Al. Area) - Racoon replacing existing rabbit/weasel conductor	km							
3.03	30/3.00 + 7/3.00 mm (200 mm ² Al. Area) - Panther replacing existing dog/racoon conductor	km							
4.00	Augmentation of 3 phase 33 kV line using new Insulator and hardware as per technical specification, approved drawings and scope of work								
4.01	33 KV polymer/porcelain Disc insulator 45 KN along with suitable hardware fittings	Set							
4.02	33 KV Polymer /porcelain Pin Insulators 10 KN with GI PIN	Set							
5.00	Augmentation of 3 phase 33 kV line using new Earthing arrangement as per technical specifications, approved drawings and scope of work.								
5.01	40 mm dia., 3000 mm long GI pipe earth electrode with test link, RCC pit, RCC cover plate on GI frame, bentonite powder and other accessories complete	Set							
5.02	GI Earthing spike made of 20mm solid Rod	Set							
5.03	Chemical rod earthing including electrode, chemical, with 2000mm long, 50 mm diameter GI pipe, GI Strip of 24x3mm minimum in hard rock locations only.	Set							
5.04	8 SWG GI Coil 115 tonnes (1.85 kg)	No							
6.00	Augmentation of 3 phase 33 kV line using new Stay Set (Galvanised) with 50x8 mm stay clamp, guy insulator, anchor plate (300x300x8mm) , nut bolts, 2 Nos turn-buckles, 1.8 m long, 20 mm diameter solid GS stay rod & 7/4.00 mm dia GI stranded wire complete as per technical specification, approved drawings and scope of work.	Set							
7.00	Augmentation of 3 phase 33 kV line using new 33kV, 600A, 25kA, 3-ph, 3 Pin type, Horizontal/Vertical Mounting type (as desired by DISCOM), Gang Operated, AB Switch along with Support Insulators, Base Channel down Pipe, Arcing Horns etc. complete as per technical specifications, scope of works and approved drawings	Set							
8.00	Augmentation of 3 phase 33 kV line using new GI wire for earthing and guarding as per technical specification, approved drawings and scope of work.								
8.01	6 SWG	MT							
8.02	8 SWG	MT							
F(III)	Augmentation of 11 KV lines								

1.00	Augmentation of 3 phase 11 kV line using additional supports matching with length and type of existing support as per technical specifications, scope of works and approved drawings								
1.01	8 meter long /140 KG PCC Poles (PCC Pole as per state practice)	No							
1.02	13 m long H-Beam 152x152 mm 37.1 kg/m	No							
1.03	11 M long steel Tubular poles with welded steel base plate of Designation 540 SP 52 (IS 2713, Pt I, II, III 1980)	No							
1.04	13 M long steel Tubular poles with welded steel base plate of Designation 540 SP 72 (IS 2713, Pt I, II, III 1980)	No							
2.00	Augmentation of 3 phase 11 kV line using new Pre-fabricated steel items like V cross arm, top clamp, DC cross arm, bracket, clamps, cross bracings, bracings, strain plate, guarding channels, back clamp, transformer mounting structure etc made of MS Channels, MS angle, MS flats of given sizes for over head structures as per technical specification, approved drawings and scope of work.	MT							
3.00	Augmentation of 3 phase 11 kV line replacing existing conductor with following type of new ACSR conductor including jointing sleeves, binding material and helicon formed fittings etc as required as per technical specification, approved drawings and scope of work.								
3.01	6/3.35 + 1/3.35 mm (50 mm ² Al. Area) - Rabbit by replacing existing weasel/squirrel conductor	km							
3.02	6/4.09 + 1/4.09 mm (80 mm ² Al. Area) - Raccoon by replacing existing rabbit/weasel/squirrel conductor	km							
3.03	6/4.72 mm+7/1.57 mm (100 mm ² Al. Area) - Dog by replacing existing racoon/rabbit conductor	km							
4.00	Augmentation of 3 phase 11 kV line using new Insulator and hardware as per technical specification, approved drawings and scope of work								
4.01	11 KV polymer/porcelain Disc insulator 45 KN along with suitable hardware fittings	Set							
4.02	11 KV Polymer /porcelain Pin Insulators 10 KN with GI PIN	Set							
5.00	Augmentation of 3 phase 11 kV line using new Earthing arrangement as per technical specifications, approved drawings and scope of work.								
5.01	40 mm dia., 3000 mm long GI pipe earth electrode with test link, RCC pit, RCC cover plate on GI frame, bentonite powder and other accessories complete	Set							
5.02	GI Earthing spike made of 20mm solid Rod	Set							
5.03	Chemical rod earthing including electrode, chemical, with 2000mm long, 50 mm diameter GI pipe, GI Strip of 24x3mm minimum in hard rock locations only.	Set							
5.04	8 SWG GI Coil 115 tonnes (1.85 kg)	No							
6.00	Augmentation of 3 phase 11 kV line using new Stay Set (Galvanised) with 50x8 mm stay clamp, guy insulator, anchor plate (200x200x6mm) , nut bolts, 2 Nos turn-buckles, 1.8 m long, 16 mm diameter solid GI stay rod & 7/3.15 mm dia GI stranded wire complete as per technical specification, approved drawings and scope of work.	Set							
7.00	Augmentation of 3 phase 11 kV line using new 11kV, 600A, 25kA, 3-ph, 3 Pin type, Horizontal/Vertical Mounting type (as desired by DISCOM), Gang Operated, AB Switch along with Support Insulators, Base Channel down Pipe, Arcing Horns etc. complete as per technical specifications, scope of works and approved drawings	Set							

1.00	33/11 kV, 3 ph, 50 Hz, ONAN, Cu Wound, Outdoor Conventional type Power Transformer along with transformer oil, Buchholtz relay, breather, OTI & WTI, Marshalling Box, Conservator tank, oil level indicator, valves, 2 sets of 50x8 mm GS Neutral Earthing strips {(with braided conductor on bushing end), isolating link, isolation with insulators}, Vent explosion plug, control wiring between sensing equipment and marshalling box, cable supporting tray on the body of transformer, transformer wheels, LV/HV bushing etc as required as per technical specifications, approved drawings and scope of the work.								
1.01	1.60 MVA without tap changer	No							
1.02	3.15 MVA without tap changer	No							
1.03	5.00 MVA with off load tap changer	No							
1.04	8.00 MVA with off load tap changer	No							
1.05	10.0 MVA with off load tap changer	No							
2.00	Gantry structures made of H-Beam 152x152 mm 37.1 kg 8 meter long, double MS Channel 100x50mm for bus bar supports (Beam), 65x65x6mm angle for cross arms/supporting structures and 50x8mm flats for clamps along with hardware items duly painted etc. as per technical specifications, approved drawings and scope of works.	MT							
	OR								
2.00	Gantry structures made of Lattice structures of equal angles sections, flat as per approved drawings. State practices are to be adopted in the design. All structural steel members and bolts shall be galvanized after fabrication as per IS:4759 and zinc coating shall not be less than 610gm/sq. meter for all structural steel members. All L45x45x5 will have 23 mm back mark. All L50x50x6 will have 28mm back mark. 3.5mm spring washers are to be used under each nut, structural steel shall conform to IS 2026. All weld shall be 6mm filled weld unless specified otherwise. All nuts and bolts shall be of property class 5.6 of IS 1367. Plain washers shall be as per IS 2016 & spring washers shall be IS: 3063 as per technical specifications, approved drawings and scope of works. .	MT							
3.00	36kV, 1250A, 25kA for 3 seconds, 3-ph, Outdoor type Vacuum Circuit breaker along with 36kV, 1-Phase, 25kA/3 seconds, 200-100/5-5 Amps or 300-150/5-5 Amps 3 Nos outdoor type Current Transformers along with junction box (1 no junction box for 3 no of 1-phase CTs), Jumpers, earthing, supporting structures, bi-metallic clamps, permanent maintenance platform, marshalling box etc required as per technical specifications, scope of works and approved drawings	No							
4.00	33kV, Indoor, Control & Relay panel along with E/F & O/C relays, Mimic Diagram, Voltmeter, Ammeter, Annunciation Windows with annunciation relays and other components etc as per approved drawings, specifications and scope of works controlling:								
4.01	33 kV feeder VCB with Static Tri-Vector Energy Meter	No							
4.02	Power transformer 33 kV VCB with Static Tri-Vector Energy Meter	No							
5.00	36kV, 630A, 25kA for 3 seconds, 3-ph double break center rotating type (DBCR), Gang Operated, isolator along with Support Insulators, Operating Mechanism, Base Channel down Pipe and all required accessories complete as per technical specifications, scope of works and approved drawings	Set							
6.00	30 kV, 10kA, 1-ph Station Class Lightning Arrester with mounting platform, jumpering from bus bar, earthing connection using 50x6mm GS flat, hardware etc as required as per technical specifications, approved drawings and scope of the works.	No.							
7.00	9kV, 10kA, 1-ph Station Class Lightning Arrester with mounting platform, jumpering from bus bar, earthing connection using 50x6mm GS flat, hardware, etc as required as per technical specifications, approved drawings and scope of the works.	No.							

16.00	40 mm dia., 3000 mm long GI pipe earth electrode with test link, RCC pit, RCC cover, placed on GI frame, bantonide powder and other accessories complete as per technical specification. (for Power Transformer Neutral, Station Transformer Neutral and Lightning Arresters direct earthing) as per technical specifications, approved drawings and scope of works.	Set							
17.00	33 and 11 KV Insulator - Pin, Post and Disc insulators along with suitable hardware & accessories suitable for Panther/Dog conductors as per approved drawings & specifications.	Set							
18.00	LT Control cables including their termination materials like glands, lugs etc. as per technical specifications, approved drawings and scope of the work.								
18.01	2 Core 2.5 sqmm armoured, stranded copper conductor, PVC insulated and PVC sheathed cable	km							
18.02	6 Core 2.5 sqmm armoured, stranded copper conductor, PVC insulated and PVC sheathed cable	km							
18.03	10 Core 2.5 sqmm armoured, stranded copper conductor, PVC insulated and PVC sheathed cable	km							
19.00	12 kV, 800A, 25kA for 3 seconds, 3-ph double break centre rotating type (DBCR), Gang Operated Isolator along with Support Insulators, Operating Mechanism, Base Channel, down Pipe and all required accessories complete as per technical specifications, scope of works and approved drawings	Set							
20.00	12kV, 600A, 25kA for 3 sec, 3-Phase, 3 Pin type, Vertical Mounting type, Gang Operated, AB Switch, along with support insulators, Base Channel, down pipe, Arching Horns etc. and all complete accessories as per technical specifications, scope of works and approved drawings	Set							
21.00	36 kV, 3-pole, 1-Phase, 33kV/110 volt, Single core outdoor type Potential Transformer along with junction box (1 no junction box for 3 no of 1-phase PTs) including earthing connection using 50x6mm GS flat, bi-metallic clamp and required accessories etc., complete as per technical specifications, approved drawings and scope of the works.	Set							
22.00	12 kV, 3-pole, 1-Phase, 11kV/110 volt, Single core outdoor type Potential Transformer along with junction box (1 no junction box for 3 no of 1-phase PTs) including earthing connection using 50x6mm GS flat, bi-metallic clamp and required accessories etc., complete as per technical specifications, approved drawings and scope of the works.	set							
F (VI)	Augmentation of 33/11 KV Partly outdoor type substation								
1.00	33/11 kV, 3 ph, 50 Hz, ONAN, Cu Wound, Outdoor Conventional type Power Transformer along with transformer oil, Buchholtz relay, breather, OTI & WTI, Marshalling Box, Conservator tank, oil level indicator, valves, 2 sets of 50x8 mm GS Neutral Earthing strips {(with braided conductor on bushing end), isolating link, isolation with insulators}, Vent explosion plug, control wiring between sensing equipment and marshalling box, cable supporting tray on the body of transformer, transformer wheels, LV/HV bushing etc as required as per technical specifications, approved drawings and scope of the work.								
1.01	1.60 MVA without tap changer	No							
1.02	3.15 MVA without tap changer	No							
1.03	5.00 MVA with off load tap changer	No							

1.04	8.00 MVA with off load tap changer	No							
1.05	10.0 MVA with off load tap changer	No							
2.00	<p>Gantry structures made of H-Beam 152x152 mm 37.1 kg 8 meter long, double MS Channel 100x50mm for bus bar supports (Beam), 65x65x6mm angle for cross arms/supporting structures and 50x8mm flats for clamps along with hardware items duly painted etc. as per technical specifications, approved drawings and scope of works.</p>	MT							
	<p style="text-align: center;">Or</p>								
2.00	<p>Gantry structures made of Lattice structures of equal angles sections, flat as per approved drawings. State practices are to be adopted in the design. All structural steel members and bolts shall be galvanized after fabrication as per IS:4759 and zinc coating shall not be less than 610gm/sq. meter for all structural steel members. All L45x45x5 will have 23 mm back mark. All L50x50x6 will have 28mm back mark. 3.5mm spring washers are to be used under each nut, structural steel shall conform to IS 2026. All weld shall be 6mm filled weld unless specified otherwise. All nuts and bolts shall be of property class 5.6 of IS 1367. Plain washers shall be as per IS 2016 & spring washers shall be IS: 3063 as per technical specifications, approved drawings and scope of works. .</p>	MT							
3.00	<p>36kV, 1250A, 25kA for 3 seconds, 3-ph, Outdoor type Vacuum Circuit breaker along with 36kV, 1-Phase, 25kA/3 seconds, 200-100/5-5 Amps or 300-150/5-5 Amps 3 Nos outdoor type Current Transformers along with junction box (1 no junction box for 3 no of 1-phase CTs), Jumpers, earthing, supporting structures, bi-metallic clamps, permanent maintenance platform, marshalling box etc required as per technical specifications, scope of works and approved drawings</p>	No							
4.00	<p>33kV, indoor, Control & Relay panel along with E/F & O/C relays, Mimic Diagram, Voltmeter, Ammeter, Annunciation Windows with annunciation relays and other components etc as per approved drawings, specifications and scope of works controlling:</p>								
4.01	33 kV feeder VCB with Static Tri-Vector Energy Meter	No							
4.02	Power transformer 33 kV VCB with Static Tri-Vector Energy Meter	No							
5.00	<p>36kV, 630A, 25kA for 3 seconds, 3-ph double break centre rotating type (DBCR), Gang Operated, isolator along with Support Insulators, Operating Mechanism, Base Channel down Pipe and all required accessories complete as per technical specifications, scope of works and approved drawings</p>	Set							
6.00	<p>30 kV, 10kA, 1-ph Station Class Lightning Arrester with mounting platform, jumpering from bus bar, earthing connection using 50x6mm GS flat, hardware etc as required as per technical specifications, approved drawings and scope of the works.</p>	No.							
7.00	<p>9kV, 10kA, 1-ph Station Class Lightning Arrester with mounting platform, jumpering from bus bar, earthing connection using 50x6mm GS flat, hardware, etc as required as per technical specifications, approved drawings and scope of the works.</p>	No.							

8.00	12 kV, 1250 A, 25kA for 3 seconds, 3-ph, indoor type Vacuum Circuit breaker along with 12 kV, 1-Phase, 600-300/5-5 or 300-150/5-5 or 200-100/5-5 3 Nos indoor type Current Transformer, indoor mounting type control panel for Transformer breaker, control cabling between VCB and indoor control panel and required accessories, bi-metallic clamps, A-meter, volt-meter, Relays & accessories complete as per specifications for transformer breaker protection	No								
9.00	12 kV, 1250 A, 25kA for 3 seconds, 3-ph, indoor type Vacuum Circuit breaker along with 12 kV, 1-Phase, 300-150/5-5 or 200-100/5-5 3 Nos indoor type Current Transformer, indoor mounting type control panel for feeder protection, control cabling between VCB and indoor control panel and required accessories, bi-metallic clamps, A-meter, volt-meter, 3-phase electronic energy meter, Relay & accessories complete as per specifications for feeder breaker protection	Set								
10.00	12 kV, 1250 A, 25kA for 3 seconds, 3-ph, indoor type Vacuum Circuit breaker along with 12 kV, 1-Phase, 600-300/5-5 or 300-150/5-5 3 Nos indoor type Current Transformer, indoor mounting type control panel for bus coupler, control cabling between VCB and indoor control panel and required accessories, bi-metallic clamps, A-meter, volt-meter, 3-phase electronic energy meter, Relay & accessories complete as per specifications for bus coupler protection	Set								
11.00	24V, 80 AH (or as per state practices) Ni-Cd or Lead Acid battery, battery stand made of teak wood duly painted with anti rusting paint, battery insulators, inter-battery wiring using 30 sqmm, 1.1 kv, copper single core multi strand cable, terminal connectors, & all other accessories and connectors as per technical specifications, approved drawings and scope of works.	Set								
12.00	24V, 40 Amp. (or as per state practice) Float-cum-Boost Battery Charger with full wave rectification for 230 V, 1 phase, 50 Hz AC Input Supply with built in DCDB as per technical specifications, approved drawings and scope of works.	set								
13.00	415V, ACDB along with three phase-neutral voltmeter, three phase ammeter and Selector switches, 200 Amps TPN switch fuse unit as incomer, 32 Amps TPN switches as outgoing feeders suited for number of VCB-cum-control panels, nos of VCB kiosk panel, having 20% spare outgoing feeders, mounting arrangements etc as per technical specifications, approved drawings and scope of works.	No								
14.00	24 Volts (or voltage as per state practices) Direct Current Distribution Board (DCDB) Indoor floor mounted comprising of 2P/100A DC Switch Fuse Unit as incomer and 2P/40A switch fuse units for each individual outgoing circuit of indoor VCB-cum-control panels, indoor/outdoor VCB panels, control room emergency DC lighting including 20% as spare as per technical specifications, approved drawings and scope of works. .	Set								
15.00	ACSR Conductor for Bus-Bars & Jumpers/Droppers/Terminations including hardware fittings, hardware, T-clamp etc as per technical specifications, approved drawings and scope of works.									
15.01	6/4.72 mm+7/1.57 mm (100 mm ² Al. Area) - Dog	km								
15.02	30/3.00 + 7/3.00 mm (200 mm ² Al. Area) - Panther	km								
16.00	Earthing & Grounding conductor as per Approved Electrical Layout for each sub-station with									
16.01	75 x 8 mm GI flat for ground mat	MT								

F(VII))	11 KV CAPACITOR BANK INCLUDING MOUNTING STEEL GALVANISED STRUCTURE AND ACCESSORIES AS REQUIRED AS PER DETAILED TECHNICAL SPECIFICATIONS, DRAWING AND SCOPE OF WORKS IN FOLLOWING ARRANGEMENTS:																	
1.00	CAPACITOR BANK 600 KVAR - FIXED TYPE SUBSTATION MOUNTED WITH CAPACITOR SWITCH AND ASSOCIATED ACCESSORIES	Set																
2.00	CAPACITOR BANK 1200 KVAR - AUTO TYPE SUBSTATION MOUNTED WITH ALL ASSOCIATED EQUIPMENT LIKE 11 KV VCB, C&R PANEL, CTs, 11 KV 200A ISOLATORS WITH EARTH SWITCH, RVT, 11 KV STATION CLASS LA, RED OXIDE / ALUMINIUM PAINTING, 2.5 SQ.MM. PVC ARMoured STRANDED COPPER CONTROL CABLES, PROTECTION CIRCUIT AND EQUIPMENT, EARTHING, 16 MM DIA MS NUTS & BOLTS ETC AS REQUIRED AS PER APPROVED TECHNICAL SPECIFICATIONS, DRAWING AND SCOPE OF WORKS	Set																
3.00	CAPACITOR BANK 1500 KVAR - AUTO TYPE SUBSTATION MOUNTED WITH ALL ASSOCIATED EQUIPMENT LIKE 11 KV VCB, C&R PANEL, CTs, 11 KV 200A ISOLATORS WITH EARTH SWITCH, RVT, 11 KV STATION CLASS LA, RED OXIDE / ALUMINIUM PAINTING, 2.5 SQ.MM. PVC ARMoured STRANDED COPPER CONTROL CABLES, PROTECTION CIRCUIT AND EQUIPMENT, EARTHING, 16 MM DIA MS NUTS & BOLTS ETC AS REQUIRED AS PER APPROVED TECHNICAL SPECIFICATIONS, DRAWING AND SCOPE OF WORKS	Set																
	Total Ex-works																	

% DISCOUNT, IF ANY: _____

Note:

