

**DEVELOPMENT OF DISTRIBUTION INFRASTRUCTURE AT ARVALLI District of GUJARAT UNDER REVAMPED REFORMS-BASED AND RESULTS-  
(Bill of Quantity)**

Bidder's Name & Address:

Installation / Erection Quantity :

<b>A (I)</b>	<b>Augmentation, Renovation and Modernisation of existing Distribution Transformer</b>		
<b>Service No.</b>	<b>Description of Related Services (excludes inland transportation and other services required in India to convey the goods to their final destination)</b>	<b>Unit</b>	<b>Quantity</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>A (I)</b>	<b>Augmentation &amp; Renovation of 11/0.4 kV Distribution Transformer Substation</b>		
<b>1.00</b>	<b>Erection, testing &amp; commissioning of augmented/new Distribution Transformer by reconnecting 11 kV, LT, earthing circuit providing suitable lugs, bi-metallic clamps including supporting structure etc as required as per technical specifications, approved drawings and scope of the work. Replaced material and DTR to be deposited in Employer's store:</b>		
1.01	New 100 KVA (11/0.4 kV) Aluminium wound DTR (Replacing 63 KVA old DTR),	No	149
1.02	New 200 KVA (11/0.4 kV) Aluminium wound DTR (Replacing 100 KVA old DTR),	No	3

**DEVELOPMENT OF DISTRIBUTION INFRASTRUCTURE AT ARVALLI District of GUJARAT UNDER REVAMPED REFORMS-BASED AND RESULTS-LINKED,  
(Bill of Quantity)**

Bidder's Name &amp; Address:

Installation / Erection Quantity :

<b>A (II)</b>	<b>Crossing Removal (Safety)</b>		
<b>Service No.</b>	<b>Description of Related Services (excludes inland transportation and other services required in India to convey the goods to their final destination)</b>	<b>Unit</b>	<b>Quantity</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1.00</b>	<b>Cables:</b>		
1.01	Installation, Testing & commissioning of 11 kV,(E),XLPE insulated Aluminium Conductor, Armoured cable as per enclosed specification 3 core 185 sq. mm. as per enclosed specification including rates for approval of local Authorities for laying of cable.(Make as approved by UGVCL) Laying of 11 KV (E) XLPE insulated aluminium armoured cable in ground up to 1200 mm deep, 500 mm wide cable trench providing sand cushioning before and after laying cable and covering with half round Hume pipe and refilling the trench.( rate shall include cost of excavation of trench) as per technical specification, approved drawings and scope of work.	Mtr	15948.00
1.02	Laying of HDPE (DWC) ducts conforming to IS:4984 having dia OD/ID 120/90.mm, 6kg/cm2, 11.63 kg/6 RMT at a minimum depth of 1200mm below the road surface by pushthrough method by drilling the road with HDD machine without breaking the road surface for laying of cable for internal road crossing for enclosing HT/LT XLPE insulated aluminium armoured cable up to 240/185 sqmm through the duct as per the instructions of EIC as per technical specification, approved drawings and scope of work.	Mtr	2754.00
<b>2.00</b>	<b>Indoor application: HT push on/heat shrink type end termination preferably for at switchgear end boxes, transformer( PAD/Pole mounted) for 11 kV XLPE Aluminium Conductor Armoured cable as specified with connection of leads including cutting,stripping of cable, insulations,providing compression type terminals,crimping of lugs with suitable crimping tool, as per technical specification, approved drawings and scope of work.</b>		
2.01	3Cx185 mm 2 11 KV XLPE	No	0.00
<b>3.00</b>	<b>Outdoor application: HT push on/heat shrink type end termination preferably for at switchgear end boxes, transformer( PAD/Pole mounted) for 11 kV XLPE Aluminium Conductor Armoured cable as specified with connection of leads including cutting,stripping of cable, insulations,providing compression type terminals,crimping of lugs with suitable crimping tool, as per technical specification, approved drawings and scope of work.</b>		
3.01	3Cx185 mm 2 11 KV XLPE	No	558.00
<b>4.00</b>	<b>Straight Joint: HT push on/heat shrink type straight joint preferably for 11 kV XLPE Aluminium Conductor Armoured cable as specified with connection of leads including cutting,stripping of cable, insulations,providing compression type terminals,crimping of lugs with suitable crimping tool.as per technical specification, approved drawings and scope of work.</b>		
4.01	3Cx185 mm 2 11 KV XLPE	No	0.00
<b>5.00</b>	<b>Earthing arrangement as per technical specifications, approved drawings and scope of work.</b>		
5.01	Erecting earth pit of minimum bore dia. 150 mm size approved make safe Earthing Electrode consisting Pipe in pipe Technology as per IS 3043-1987 made of corrosion free G.I. Pipes having Outer pipe dia of 50 mm having 80-200 Micron galvanising connections, terminal dia of 12 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation with civil works of earthing chamber. For Electrical installation covering Transformer neutrals,HT & LT switchgears for independent earthing in normal soil, Length of Pipe 3 mtrs.Backfilling compound 2 bags of 25 Kg each	No	558.00
5.02	Installation & commissioning of earthing conductor 38 x 3 G.I. strip for pole mounted transformer and upto FSP,RMU as well as connection to be made to the earth pit. Rates inclusive of hot dipped hardware.	Mtr	8928.00
<b>6.00</b>	<b>Providing 11kV Double Pole Structure with AB Switch 12kV, 600A, 25kA for 3sec, 3-ph, 3 Pin type, 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 on 8 Mtr PSC Poles as per approved drawings by Engineer in charge as per Technical Specification</b>	No	0.00
<b>7.00</b>	<b>Cable Laying above ground in air for termination of cable on pole with necessary accessories and wooden clamp as per Engineer Incharge</b>	Mtr	4464.00
<b>8.00</b>	<b>Fixing of 100 mm Dia heavy duty GI pipe with clamping for the protection for the cable above the ground</b>	Mtr	558.00
<b>9.00</b>	<b>Stay Set (Galvanised) with 50x8 mm stay clamp, stay insulator (2 Nos.), anchor plate (200x200x6), nut bolts, 2 Nos turn-buckles, 1.8 m long, 16 mm diameter solid GS stay rod &amp; 7/3.15 mm dia GI stranded wire complete as per technical specification, approved drawings and scope of work.</b>	Set	558.00
<b>10.00</b>	<b>Cable Route Marker: Erecting RCC cable Route marker as per drawing duly marked with "DANGER" Mark, "UGVCL POWER CABLE" and Arrow of route of cable.</b>	No	460.00
<b>11.00</b>	<b>RCC CABLE TRENCH: Construction of RCC cable trench ( Three tier / Four tier) as per approved design and drawing and as per directives of engineer-in-charge with required excavation as per site condition, Base concreting, providing and laying of reinforcement as per design, concreting of M-20 grade for Pardi and Raft, Precast RCC cover of 75 mm thick, fabrication of cable tray as per design with one coat of red oxide and two coats of oil painting to structural steel, two coats of waterproof cement paint to all inside, outside surfaces of cable trench with top cover. the work to be done as per drawing and PWD specification. Detail description of major civil work activities involved are as under.</b>		
	i. Excavation for foundation in dense or hard soil up to 1.5 M depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead. And filling excavated stuff in trenches and besides cable trench in layers not exceeding 20 cm in depth with consolidating/watering etc. complete.		
	ii. Providing and laying cement concrete 1:4:8 (1 cement :4 coarse sand :8 Machine crush metal aggregates 40 mm nominal size) and curing complete including cost of form work in foundation etc. complete.		
	iii. Providing and laying control cement concrete M200 and curing complete including cost of form work and reinforcement for reinforced cement concrete work in (A)Raft Foundations, vertical pardi etc.(Form work of steel sheet to be utilized.)		
	iv. Providing and placing 75mm thick Precast RCC cover of size 1500 x 300mm, made in M-200 cement concrete with necessary reinforcement of 3 Nos. of 10 mm TMT bars bars as main bar and 8 mm TMT distribution bars at 200mm c/c incl providing 8mm TMT bars hook for lifting arrangement & curing, finishing all the surfaces etc complete incl. placing in position at site.		
	v. Providing and fabrication of structural steel for cable tray including cutting,erecting, fixing in position and applying one coat of red oxide & two coats of oil painting in angles, flat and like section etc complete.		
	vi.Expansion Joint: Providing and placing 12 mm thick premoulded asphalt or bitumen cork board filler joint at every 50 Mtr length.		
	(VII) Painting the inside, outside of Cable trench wall including precast cover with two coats of water proofing cement paint.		
	<b>Three tier cable trench as per approved design and drawing</b>	RMT	
<b>12.00</b>	<b>RCC Stopper Wall at end of cable trench: Construction of 150 mm thick RCC stopper wall at end of cable trench as per approved drawing in cement concrete 1:2:4 including TMT bar reinforcement main/vertical bars and distribution bar of 8 mm dia @ 200 mm c/c both side including bending, binding and placing in position as per drawing and form work of steel sheets so as to give a fair finish including centering, shuttering, strutting and propping etc including providing &amp; fixing 110 mm dia. PVC pipe(6 kg/cm2) of 400mm length across the stopper wall with coupler &amp; plug for future cable laying etc complete as per drawing and as directed by EIC.</b>	JOB	
<b>13.00</b>	<b>DISMENTALLING</b>		
13.01	Dismantalling PSC Pole 8 Mtr with cross arm,insulators,hardwares etc.and return it to UGVCL store.While dismantalling utmost care shall be taken so that the material so that the same can be reused by UGVCL.	No	0
13.02	Dismantalling PSC 10 Mtr/Rail/RSJ pole with cross arm,insulators,hardwares etc.and return it to UGVCL store.While dismantalling utmost care shall be taken so that the material so that the same can be reused by UGVCL.	No	0
13.03	Dismantalling of ACSR/Earth wire conductor & line material & after making coil and stacking the same at UGVCL store.Conductor length	Per Cond./kM	43.05

**DEVELOPMENT OF DISTRIBUTION INFRASTRUCTURE AT ARVALLI District of GUJARAT UNDER REVAMPED REFORMS-BASED AND RESULTS-LINKED,  
(Bill of Quantity)**

Bidder's Name & Address:

Installation / Erection Quantity :

<b>A (III) New Feeder / Feeder Bifurcation</b>			
<b>Service No.</b>	<b>Description of Related Services (excludes inland transportation and other services required in India to convey the goods to their final destination)</b>	<b>Unit</b>	<b>Quantity</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1.00</b>	<b>Erection of following types of poles for 11 KV overhead line by providing and installing danger plate, anti-climbing devices (barbed wire), earthing material (coil and 8SWG GI wire), red oxide &amp; aluminium paint, pole numbering as per scope of work, approved drawings and specifications:</b>		
1.01	10 m / 275 kgs PSC Poles - (PSC Pole as per state practice)	No	0
1.02	8 m / 200 kgs PSC Poles - (PSC Pole as per state practice)	No	58
<b>2.00</b>	<b>Erection of following types of poles for 11 KV overhead line by providing and installing danger plate, anti-climbing devices (barbed wire), earthing material (coil and 8SWG GI wire), red oxide &amp; aluminium paint, pole numbering including cement concrete foundation or refilling by bolders using cement concreting foundation 1 part cement, 3 part sand, 6 part 40 mm size stone aggregate chips (1:3:6) or/and 200 mm average size bolders mixed with excavated earth etc as per scope of work, approved drawings and specifications:</b>		
2.01	10 m / 275 Kgs PSC Poles with Cement concreting 0.5 cmt	No	37
2.02	8 m / 200 Kgs PSC Poles with Cement concreting 0.5 cmt	No	121
<b>3.00</b>	<b>Erection, testing &amp; commissioning of pre-fabricated steel items like V cross arm, top clamp, DC cross arm, bracket, clamps, cross bracings, bracings, strain plate, guarding channels, back clamp, etc made of MS Channels, MS angle, MS flats of given sizes for over head structures and MS nuts, bolts &amp; washers including painting by red oxide &amp; aluminium paint as per technical specification. approved drawings and scope of work.</b>	MT	4.188
<b>4.00</b>	<b>Earthing arrangement as per technical specifications, approved drawings and scope of work.</b>		
4.01	Erecting earth pit of minimum bore dia. 150 mm size approved make safe Earthing Electrode consisting Pipe in pipe Technology as per IS 3043-1987 made of corrosion free G.I. Pipes having Outer pipe dia of 50 mm having 80-200 Micron galvanising connections, terminal dia of 12 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation with civil works of earthing chamber. For Electrical installation covering Transformer neutrals, HT & LT switchgears for independent earthing in normal soil, Length of Pipe 3 mtrs. Backfilling compound 2 bags of 25 Kg each	No	226.00
4.02	Installation & commissioning of earthing conductor 38 x 3 G.I. strip for pole mounted transformer and upto FSP, RMU as well as connection to be made to the earth pit. Rates inclusive of hot dipped hardware.	Mtr	1912.00
<b>5.00</b>	<b>Excavation of stay pit in following type of soils, as per scope of work, approved drawings and specifications:</b>		
5.01	Normal soil	No	70
<b>6.00</b>	<b>Erection of complete stay set with GI stay wire (7x3.15 mm dia), binding of stay wire, by providing Guy stay insulator (2 Nos.) and 0.2 cmt concreting 1 part cement, 3 part sand, 6 part 40 mm size stone aggregate chips (1:3:6) as per technical specifications. approved drawings and scope of works.</b>	Set	70
<b>7.00</b>	<b>Erection, testing and commissioning of 11 kV insulator including their hardware fittings as per technical specification, approved drawings and scope of work.</b>		
7.01	11 KV Polymer (Composite) Disc insulator 45 KN along with suitable hardware fittings	Set	197
7.02	11 KV Polymer (Composite) Pin Insulators having GI PIN	Set	589
<b>8.00</b>	<b>Paying out, tensioning, binding of conductor and tightening of stays and stringing, testing and commissioning of ACSR Conductor of following sizes including jointing sleeves, helical formed fittings, jumpering and by providing &amp; erecting PG Clamps etc as required as per approved drawings, scope of work and technical specifications</b>		
8.01	6/4.72 mm+7/1.57 mm (100 mm <sup>2</sup> Al. Area) - Dog	kM	2.28
8.02	AL Alloy Conductor 55mm <sup>2</sup> Size	kM	26.11
<b>9.00</b>	<b>Erection, Testing and Commissioning of 11 kV AB Switch along with Support Insulators, Base Channel, down Pipe, Arcing Horns etc. complete as per technical specifications, scope of works and approved drawings</b>	Set	10
<b>10.00</b>	<b>Cables:</b>		
10.01	Installation, Testing & commissioning of 11 kV, (E), XLPE insulated Aluminium Conductor, Armoured cable as per enclosed specification 3 core 185 sq. mm. as per enclosed specification including rates for approval of local Authorities for laying of cable. (Make as approved by UGVCL) Laying of 11 KV (E) XLPE insulated aluminium armoured cable in ground up to 1200 mm deep, 500 mm wide cable trench providing sand cushioning before and after laying cable and covering with half round Hume pipe and refilling the trench. (rate shall include cost of excavation of trench) as per technical specification. approved drawings and scope of work.	Mtr	595.00
10.02	Laying of HDPE (DWC) ducts conforming to IS:4984 having dia OD/ID 120/90 mm, 6kg/cm <sup>2</sup> , 11.63 kg/6 RMT at a minimum depth of 1200mm below the road surface by pushthrough method by drilling the road with HDD machine without breaking the road surface for laying of cable for internal road crossing for enclosing HT/LT XLPE insulated aluminium armoured cable up to 240/185 sqmm through the duct as per the instructions of EIC as per technical specification. approved drawings and scope of work.	Mtr	80.00
<b>11.00</b>	<b>Indoor application: HT push on/heat shrink type end termination preferably for at switchgear end boxes, transformer (PAD/Pole mounted) for 11 kV XLPE Aluminium Conductor Armoured cable as specified with connection of leads including cutting, stripping of cable, insulations, providing compression type terminals, crimping of lugs with suitable crimping tool, as per technical specification. approved drawings and scope of work.</b>		
11.01	3Cx185 mm 2 11 KV XLPE	No	7.00
<b>12.00</b>	<b>Outdoor application: HT push on/heat shrink type end termination preferably for at switchgear end boxes, transformer (PAD/Pole mounted) for 11 kV XLPE Aluminium Conductor Armoured cable as specified with connection of leads including cutting, stripping of cable, insulations, providing compression type terminals, crimping of lugs with suitable crimping tool, as per technical specification. approved drawings and scope of work.</b>		
12.01	3Cx185 mm 2 11 KV XLPE	No	11.00
<b>13.00</b>	<b>Straight Joint: HT push on/heat shrink type straight joint preferably for 11 kV XLPE Aluminium Conductor Armoured cable as specified with connection of leads including cutting, stripping of cable, insulations, providing compression type terminals, crimping of lugs with suitable crimping tool. as per technical specification, approved drawings and scope of work.</b>		
13.01	3Cx185 mm 2 11 KV XLPE	No	0.00
<b>14.00</b>	<b>Earthing arrangement as per technical specifications, approved drawings and scope of work.</b>		

14.01	Erection of maintaince free earthing sysytem comprising of 17.2 mm dia 3 mtr Long Earthing Electrode of low carbon steel electrode with 250 micrns copper coating + carbon based conductive concrete back fill safe compound(resisitivity of less than 0.10 ohm mtr) & GI clamp.Supply, Earcting and Install pre cast RCC Earth pit Chamber (300*300 MM),Making 100 mm Dia Bore, 3 Mtr Long, Making of Earth pit chamber in normal Soil.	No	
14.02	Installation & commissioning of earthing conductor 38 x 3 G.I. strip for pole mounted transformer and upto FSP,RMU as well as connection to be made to the earth pit. Rates inclusive of hot dipped hardware.	Mtr	
<b>15.00</b>	<b>Cable Laying above ground in air for termination of cable on pole with necessary accessories and wooden clamp as per Engineer Incharge</b>	Mtr	70.00
<b>16.00</b>	<b>Fixing of 100 mm Dia heavy duty GI pipe with clamping for the protection for the cable above the ground</b>	Mtr	15.00
<b>17.00</b>	<b>Cable Route Marker: Erecting RCC cable Route marker as per drawing duly marked with "DANGER" Mark, "UGVCL POWER CABLE" and Arrow of route of cable.</b>	No	3.00
<b>18.00</b>	<b>Stringing of HT AB Cable including fittings of All Accessories</b>		
18.01	Stringing of HT AB Cable including fittings of All Accessories	Km	0.525
18.02	Providing and fixing of Self tightening anchoring (Dead End) clamp with pole bracket using Statinless Steel Strap & Buckle	No	2
18.03	Providing and fixing of Self Locking Suspension Clamp with Pole bracket using Statinless Steel Strap & Buckle	No	11
18.04	Providing and fixing Heat Shrinkable type cable jointing kit suitable for 11kV 3CX70 Sq MM AB Cable for outdoor termination application	No	3
18.05	Stainless Steel of Size Strap 20mm * 0.7mm & Buckle width 20 mm	No	25
18.06	Crimping of Insulated Mid Span Joint for ABC	No	0

**DEVELOPMENT OF DISTRIBUTION INFRASTRUCTURE AT ARVALLI District of GUJARAT UNDER REVAMPED REFORMS-BASED AND RESULTS-LINKED,  
(Bill of Quantity)**

Bidder's Name & Address:

Installation / Erection Quantity :

<b>A (IV)</b>	<b>Erection, testing and Commissioning of Maintenance free, Ready capsule, Pipe-in-cage (PiC) type earthing and connections to the various parts of transformer center using GI Strip and GI Nut Bolts:</b>		
<b>Service No.</b>	<b>Description of Related Services (excludes inland transportation and other services required in India to convey the goods to their final destination)</b>	<b>Unit</b>	<b>Quantity</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1.00</b>	<b>Installation, testing and commissioning of Maintenance free, Ready capsule, Pipe-in-cage (PiC) type Earthing with 3 Mtr Electrode as per technical specification, approved drawings and scope of work.</b>	No	489.00
<b>2.00</b>	<b>Installation of 25 X 3 mm GI Strip having hot dip- galvanized-zinc coating of 80-100 microns without any joints or welding. Both the end of the GI strip should be connected with GI nut bolts and required fabrication work for giving separate earthing connections to (1) Neutral of the transformer (2) MS structures of the transformer center (3) Lightning Arrestor (Approximately 30 meter GI strip per transformer centre -as per requirement and instruction of Engineer in-charge) (3 earth Pits required for three separate earthings) as per technical specification, approved drawings and scope of work.</b>	Mtr	4890.00
<b>3.00</b>	<b>Installation of uPVC standard make Pipe of 1.25" diameter for covering GI strip with UV protected Cable Ties of 550 X 7.6 mm size to bind with pole face(Approximately 25 meter uPVC pipe for GI strip covering per transformer centre -as per requirement and instruction of Engineer in-charge) as per technical specification, approved drawings and scope of work.</b>	Mtr	4075.00

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(Bill of Quantity)**

Bidder's Name & Address:

Installation / Erection Quantity :

A (V)	Interlinking of 11kV Feeder (Reliability)		
Service No.	Description of Related Services (excludes inland transportation and other services required in India to convey the goods to their final destination)	Unit	Quantity
1	2	3	4
<b>1.00</b>	<b>Erection of following types of poles for 11 KV overhead line by providing and installing danger plate, anti-climbing devices (barbed wire), earthing material (coil and 8SWG GI wire), red oxide &amp; aluminium paint, pole numbering as per scope of work, approved drawings and specifications:</b>		
1.01	10 m / 275 kgs PSC Poles - (PSC Pole as per state practice)	No	0
<b>2.00</b>	<b>Erection of following types of poles for 11 KV overhead line by providing and installing danger plate, anti-climbing devices (barbed wire), earthing material (coil and 8SWG GI wire), red oxide &amp; aluminium paint, pole numbering including cement concrete foundation or refilling by bolders using cement concreting foundation 1 part cement, 3 part sand, 6 part 40 mm size stone aggregate chips (1:3:6) or/and 200 mm average size bolders mixed with excavated earth etc as per scope of work, approved drawings and specifications:</b>		
2.02	10 m / 275 Kgs PSC Poles with Cement concreting 0.6 cmt	No	0
<b>3.00</b>	<b>Erection, testing &amp; commissioning of pre-fabricated steel items like V cross arm, top clamp, DC cross arm, bracket, clamps, cross bracings, bracings, strain plate, guarding channels, back clamp, etc made of MS Channels, MS angle, MS flats of given sizes for over head structures and MS nuts, bolts &amp; washers including painting by red oxide &amp; aluminium paint as per technical specification. approved drawings and scope of work.</b>	MT	
<b>4.00</b>	<b>Earthing arrangement as per technical specifications, approved drawings and scope of work.</b>		
4.01	Erecting earth pit of minimum bore dia. 150 mm size approved make safe Earthing Electrode consisting Pipe in pipe Technology as per IS 3043-1987 made of corrosion free G.I. Pipes having Outer pipe dia of 50 mm having 80-200 Micron galvanising connections, terminal dia of 12 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation with civil works of earthing chamber. For Electrical installation covering Transformer neutrals, HT & LT switchgears for independent earthing in normal soil, Length of Pipe 3 mtrs. Backfilling compound 2 bags of 25 Kg each	No	84.00
4.02	Installation & commissioning of earthing conductor 38 x 3 G.I. strip for pole mounted transformer and upto FSP, RMU as well as connection to be made to the earth pit. Rates inclusive of hot dipped hardware.	Mtr	420.00
<b>5.00</b>	<b>Excavation of stay pit in following type of soils, as per scope of work, approved drawings and specifications:</b>		
5.01	Normal soil	No	42
<b>6.00</b>	<b>Erection of complete stay set with GI stay wire (7x3.15 mm dia), binding of stay wire, by providing Guy stay insulator (2 Nos.) and 0.2 cmt concreting 1 part cement, 3 part sand, 6 part 40 mm size stone aggregate chips (1:3:6) as per technical specifications. approved drawings and scope of work.</b>	Set	42
<b>7.00</b>	<b>Erection, testing and commissioning of 11 kV insulator including their hardware fittings as per technical specification, approved drawings and scope of work.</b>		
7.01	11 KV Polymer (Composite) Disc insulator 45 KN along with suitable hardware fittings	Set	0
7.02	11 KV Polymer (Composite) Pin Insulators having GI PIN	Set	0
<b>8.00</b>	<b>Paying out, tensioning, binding of conductor and tightening of stays and stringing, testing and commissioning of ACSR Conductor of following sizes including jointing sleeves, helical formed fittings, jumpering and by providing &amp; erecting PG Clamps etc as required as per approved drawings, scope of work and technical specifications</b>		
8.01	6/4.72 mm+7/1.57 mm (100 mm <sup>2</sup> Al. Area) - Dog		
<b>9.00</b>	<b>Erection, Testing and Commissioning of 11 kV AB Switch along with Support Insulators, Base Channel, down Pipe, Arcing Horns etc. complete as per technical specifications, scope of works and approved drawings</b>	Set	0
<b>10.00</b>	<b>Cables:</b>		
10.01	Installation, Testing & commissioning of 11 kV, (E), XLPE insulated Aluminium Conductor, Armoured cable as per enclosed specification 3 core 185 sq. mm. as per enclosed specification including rates for approval of local Authorities for laying of cable. (Make as approved by UGVCL) Laying of 11 KV (E) XLPE insulated aluminium armoured cable in ground up to 1200 mm deep, 500 mm wide cable trench providing sand cushioning before and after laying cable and covering with half round Hume pipe and refilling the trench. (rate shall include cost of excavation of trench) as per technical specification, approved drawings and scope of work.	Mtr	3400.00
<b>11.00</b>	<b>Indoor application: HT push on/heat shrink type end termination preferably for at switchgear end boxes, transformer (PAD/Pole mounted) for 11 kV XLPE Aluminium Conductor Armoured cable as specified with connection of leads including cutting, stripping of cable, insulations, providing compression type terminals, crimping of lugs with suitable crimping tool, as per technical specification. approved drawings and scope of work.</b>		
11.01	3Cx185 mm 2 11 KV XLPE	No	42.00
<b>12.00</b>	<b>Outdoor application: HT push on/heat shrink type end termination preferably for at switchgear end boxes, transformer (PAD/Pole mounted) for 11 kV XLPE Aluminium Conductor Armoured cable as specified with connection of leads including cutting, stripping of cable, insulations, providing compression type terminals, crimping of lugs with suitable crimping tool, as per technical specification, approved drawings and scope of work.</b>		
12.01	3Cx185 mm 2 11 KV XLPE	No	42.00
<b>13.00</b>	<b>Straight Joint: HT push on/heat shrink type straight joint preferably for 11 kV XLPE Aluminium Conductor Armoured cable as specified with connection of leads including cutting, stripping of cable, insulations, providing compression type terminals, crimping of lugs with suitable crimping tool. as per technical specification, approved drawings and scope of work.</b>		
13.01	3Cx185 mm 2 11 KV XLPE	No	3.00
<b>14.00</b>	<b>Earthing arrangement as per technical specifications, approved drawings and scope of work.</b>		
14.01	Erection of maintenance free earthing system comprising of 17.2 mm dia 3 mtr Long Earthing Electrode of low carbon steel electrode with 250 microns copper coating + carbon based conductive concrete back fill safe compound (resistivity of less than 0.10 ohm mtr) & GI clamp. Supply, Earthing and Install pre cast RCC Earth pit Chamber (300*300 MM), Making 100 mm Dia Bore, 3 Mtr Long, Making of Earth pit chamber in normal Soil.	No	0.00
14.02	Installation & commissioning of earthing conductor 38 x 3 G.I. strip for pole mounted transformer and upto FSP, RMU as well as connection to be made to the earth pit. Rates inclusive of hot dipped hardware.	Mtr	0.00
<b>15.00</b>	<b>Cable Laying above ground in air for termination of cable on pole with necessary accessories and wooden clamp as per Engineer Incharge</b>	Mtr	336.00
<b>16.00</b>	<b>Fixing of 100 mm Dia heavy duty GI pipe with clamping for the protection for the cable above the ground</b>	Mtr	126.00
<b>17.00</b>	<b>Cable Route Marker: Erecting RCC cable Route marker as per drawing duly marked with "DANGER" Mark, "UGVCL POWER CABLE" and Arrow of route of cable.</b>	No	120.00

<b>18.00</b>	<b>RMU : Installation, Testing &amp; Commissioning of SF6 gas insulated, 630Amp both sides extensible, SCADA compatible Ring Mains Units (RMU) including civil work i.e. plinth as per technical specification, approved drawings and scope of work.</b>		
18.01	2 Isolator (2-Way)	No	0
18.02	1 Circuit Breaker 1 Isolator (2-Way)	No	0
18.03	3 Isolator (3-Way)	No	0
18.04	1 Circuit Breaker 2 Isolator (3-Way)	No	18
18.05	2 Circuit Breaker 1 Isolator (3-Way)	No	0
18.06	1 Circuit Breaker 3 Isolator (4-Way)	No	3
18.07	4 Isolator (4-Way)	No	0
18.08	2 Circuit Breaker 2 Isolator (4-Way)	No	0
18.09	1 Circuit Breaker 4 Isolator (5-Way)	No	0
18.1	1 Circuit Breaker 5 Isolator (6-Way)	No	0
<b>19.00</b>	<b>DISMANTALLING</b>		
19.01	Dismantalling PSC Pole 8 Mtr with cross arm,insulators,hardwares etc.and return it to UGVCL store.While dismantalling utmost care shall be taken so that the material so that the same can be reused by UGVCL.	No	0
19.02	Dismantalling PSC 10 Mtr/Rail/RSJ pole with cross arm,insulators,hardwares etc.and return it to UGVCL store.While dismantalling utmost care shall be taken so that the material so that the same can be reused by UGVCL.	No	0
19.03	Dismantalling of ACSR/Earth wire conductor & line material & after making coil and stacking the same at UGVCL store.Conductor length	Per Cond./KM	10.20
<b>19.00</b>	<b>Fixing chain link fencing to RMU as per Specification and drawing(approx. total running length of each fencing 10.8 meters)</b>	RMT	0.00