

Priority Sheet for PMDP -Srinagar

Scope of work for total Kashmir Region :- Srinagar Circle,				PMDP	IPDS	PMDP		IPDS	
Sl. No.	Items	Unit	Total Quantity	Total Quantity	Package-A Srinagar	Package-B Srinagar	Package-A Srinagar	Package-B Srinagar	
A	New 33/11 kV Sub-Stations								
1	1 x 6.3 MVA	No.							
2	1 x 10 MVA	No.	10	5	7	3	5	0	
3	2 x 10 MVA	No.	2		1	1			
B	33/11 kV S/S : Additional Transformer								
1	1 x 6.3 MVA	No.	2		2	0			
2	1 x 10 MVA	No.							
C	33/11 kV S/S : Transformer Capacity Augmentation								
1	6.3 MVA to 10 MVA	No.	12	10	10	2	2	8	
D	Renovation & Modernisation of 33/11 kV SS								
1	R&M of Existing 33/11kV Receiving Stations by way of replacement of panels, CTs,PTs,LAs,etc. at Srinagar town	Job							
E	New 33 kV Feeders/Bifurcation of Feeders:								
1	New 33 kV Feeders- on ACSR .1	Km.							
2	New 33 kV Feeders- on ACSR .15	Km.							
3	New 33 kV Feeders- on ACSR .2	Km.	80	15	60	20	15	0	
F	33 kV feeders Reconductoring/Augmentation								
1	Augmentation from .1 ACSR to .2 ACSR	Km.							
2	Augmentation from .15 ACSR to .2 ACSR	Km.		8			8	0	
G	Others								
1	400 sqmm 33kV Cable for Alternate supply to new receiving Station	Job							
2	33kV Cable for ring formation in Densely pululated area and Tourist detination of Chemashahi and Tulip Garden	Job							
1	Installation of 33 KV RMUs/Sectionaliser alongwith aux power supply to operate sw/breaker.	No.	24		12	12			
H	11 kV Line : New Feeder/ Feeder Bifurcation								
1	ACSR Weasel on 9mtr ST poles.	Kms							
2	ACSR Rabbit on 9mtr ST poles.	Kms	140.4	60	94	47	48	12	
3	ACSR Dog on 9mtr ST poles.	Kms	38.5		21	18			
4	ABC 50 mm sq. on 8mtr ST poles.	Kms	79.75	20	43	37	5	15	
5	ABC 120 mm sq. on 8mtr ST poles.	Kms	13.63	10	14	0	5	5	
I	11 kV Line : Augmentation/Reconductoring								
1	ACSR Weasel to Rabbit	Kms		14			10	4	
2	ACSR Rabbit to Dog	Kms		10			10	0	
J	Arial Bunched Cable (Replacement of ACSR by ABC)								
i)	HT Line (Replacement of ACSR by ABC)								
1	ACSR Weasel by ABC 50 mm sq	Kms							
ii)	LT Line (Replacement of ACSR by ABC)								
1	ACSR Weasel by ABC 50 mm sq	Kms	269.75	75	270	0	70	5	
2	ACSR Rabbit by ABC 120 mm sq	Kms	175	427	170	5	365	62	
K	Installation of Distribution Transformer								
1	100 KVA Sub Stn	Nos.	210	100	168	42	100	0	
2	200 KVA Sub Stn	Nos.	500	65	400	100	39	26	
L	Capacity enhancement of LT sub-station								
1	25 KVA to 63 KVA	Nos.							
2	63 KVA to 100 KVA	Nos.							
3	100 KVA to 250 KVA	Nos.		55			55	0	
4	250 KVA to 400 KVA	Nos.		30			12	18	
M	LT Line : New Feeder/ Feeder Bifurcation								
1	ACSR Rabbit on 8 mt ST poles	Kms							
2	ABC 50 mm sq on 8 mt ST poles	Kms	50	20	50	0	15	5	
3	ABC 120 mm sq on 8 mt ST poles	Kms	100	61.35	100	0	55	6	
N	LT Line : Augmentation/Reconductoring								
1	ACSR Squirrel to Rabbit on 8 mtr ST Poles.	Kms							
2	ACSR Weasel to Rabbit on 8 mtr ST Poles.	Kms							
O	HVDS								
1	25 KVA 3-Phase (on single RS Joist)	Nos.	405	205	5	400	5	200	
2	63 KVA 3-Phase	Nos.	328	170	263	65	150	20	
3	100KVA 3-Phase	Nos.							
t for PM	R&M of Existing DT Structure at different towns								
1	R&M of Existing DT Structure at Srinagar City	Job		1			0	1	
U	Metering								
	3 phase Meters	No							
	1 phase Meters	No							
	Shifting of 1 ph Metere	No							
1	AMR for feeders with Modem	Nos.							
2	Distribution Boxes For Transformers	Nos.	2016	990	727	1289	327	663	
3	AMR for Distribution transformer and high load consumers on LT	Nos.							
V	Provisioning of solar panel								
1	Solar panel with Net Meter (5 Kw)	Job	24	5	24	0	5	0	

Schedule of materials for construction of 33/11 KV 2x10 MVA Substation			
Sl. No.	Particulars	Unit	Qty.
A 33 kV Line Bay			
1 SUB-STATION MAIN EQUIPMENT			
i)	33 kV Vacuum Circuit Breaker	No.	1
ii)	33 kV C&R Panel for Single Feeder (Scada Compatible)	No.	1
iii)	33 kV Isolator with Earthing Blade	No.	1
iv)	33 kV Isolator without Earthing Blade	No.	1
v)	33 kV Current Transformer	Set	1
vi)	33 kV Voltage Transformer	Set	1
vii)	30 kV Lightning Arrestors	Set	1
viii)	33 kV Post Insulator	Set	1
2 Structure			
i)	Galvanised Steel Structures for 33 kV Line Bay	MT	3
ii)	Galvanised Nuts & Bolts	Kg	150
3 Control Cables			
i)	12 Core Control Cables	M	60
ii)	4 Core Control Cables	M	300
iii)	2 Core Control Cables	M	60
iv)	Lugs, Ferrules etc.	Item	
4 Conductor & Hardware			
i)	200 sqmm ACSR Conductor Panther (for 33/11 kV S/s)	M	100
ii)	T Clamps for Panther Conductor	Nos.	24
iii)	Single Tension Fittings	Nos.	9
iv)	Disc Insulators for 33 kV Line Bay -70kN	Nos.	18
v)	GI flat for earthing 50x6 mm	Kg	125
B 33 kV Transformer Bay			
1 Sub-Station main Equipment			
i)	33 kV Vacuum Circuit Breaker	No.	2
ii)	33 kV Isolator without Earthing Blade	Nos.	4
iii)	33 kV Current Transformer	Set	2
iv)	30 kV Lightning Arrestors	Set	2
v)	33 kV C&R Panel for control of Single Transformer with Differential Protection (Scada Compatible)	No.	2
vi)	33 kV Post Insulator	Set	2
vii)	9kV LA	Set	1
2 Structures			
i)	Steel Structures for 33 KV Transformer Bay	MT	10
ii)	Galvanised Nuts & Bolts	Kg	600
3 Control Cables			
i)	12 Core Control Cables	M	120
ii)	6 Core Control Cables	M	600
iii)	2 Core Control Cables	M	120
iv)	Lugs, Ferrules etc.	Item	
4 Conductor & Hardware			
i)	200 sqmm ACSR Conductor Panther (for 33/11 kV S/s)	M	200
ii)	T Clamps for Panther Conductor	Nos.	6
C 33/11 kV Power Transformer			
1	33/11 kV, 10 MVA, 3 Phase Power Transformer	No.	2
2 Control Cables			
i)	12 Core Control Cables	M	240
ii)	4 Core Control Cables	M	240
iii)	2 Core Control Cables	M	480
D 11 KV Switchgear and Auxiliaries			
1	11 kV VCB Switchgear Panel Board (2 Incomer Panel + 7 Outgoing Panel)	Set	1
2	11kV Buscoupler with Adopter Panel	Set	1
3	11 kV LA Station Type	Set	7
4	11 KV XLPE Power Cables-		
i)	11 kV XPLE Power Cables- Single Core 630 mm ²	Mtr	320
ii)	11 kV XPLE Power Cables- 3C 300 mm ²	Mtr	420
iii)	11 kV XPLE Power Cables- 3C 185 mm ²	Mtr	
iv)	11 kV XPLE Power Cables- 3C 120 mm ²	Mtr	
5	11 kV Cable Kits for Single Core 630 mm ² XLPE Cable		
i)	Indoor Type Cable Termination Kit for 11 kV Single Core 630 mm ² XLPE Cable	Set	2
ii)	Outdoor Type Cable Termination Kit for 11 kV Single Core 630 mm ² XLPE Cable	Set	2
6	11 kV Cable Kits for 300 mm ² XLPE Cable		
i)	Indoor Type Cable Termination Kit for 11 kV 3C 300 mm ² XLPE Cable	Set	7
ii)	Outdoor Type Cable Termination Kit for 11 kV 3C 300 mm ² XLPE Cable	Set	7
7	11 kV G.O Switch	Set	1
8	11kV Isolator Double Break 3P, 600 A, with Horizontal type Earth Switch	Set	7
9	9 Mtr. Long Steel Tubular Pole	Nos	16
10	Galvanised Steel of sorts	MT.	0.48
11	100 KVA, 11/0.4 KV Stn. Transformer	No	1
12	120 mm ² 3.5 Core LT XLPE Cable	Mtr	15
13	11 kV Lightning Arrestors	Set	1
14	Earthing of Stn Transformer - Pipe Earthing (Complete)	No	1
15	GI strip for Earthing Stn Transformer	Kg	20
16	11 kV Do Fuse set	set	1
17	Cement Bottoming of Poles	No.	16
18	Red Oxide	Ltr	16
19	Aluminium Paint	Ltr	16
E Common Miscellenious Works			
1	Compound walling of identified land by way of Mass Concrete in Foundations and 228 mm Brick Wall of 2 M height (for new 33/11 KV Substation)	RM	128
2	Chainlink Fencing of 33 kV Yard of Substation by way of Mass Concrete in Foundations and chainlink fencing of 6 ft height (for new 33/11 KV Substation)	RM	50
3	Cable Trench for laying of 11 kV XLPE Cable from Power Transformer to Control Room (for new 33/11 KV Substation)	RM	30
4	33/11 kV Power Transformer Foundation	Job	2
5	33 kV Equipment Foundation & Gantry foundation (for new 33/11 KV Substation)	Job	1
6	Earthing Mat with GI Flat 50x8 (for new 33/11 KV Substation)	Job	1
7	Earthing Electrode (3m long 40mm dia GI pipe)	No.	38
8	33 kV Yard Concreting/Metalling (for new 33/11 KV Substation)	Job	1
9	Borewell with submersible pump	No.	1
10	Control Room Building (for new 33/11 KV Substation)	sqm	111
11	Shift Quarters for JE and SBA (at new 33/11 KV Substation)	sqm	130
12	Development of land by removing weeds, wild grass and endulation if any, ornamental land scaping and growing of ornamental trees in unbuilt areas and road sides and development of roads along with surface drains (for new 33/11 KV Substation)	Job	1
13	Yard Lighting (for new 33/11 KV Substation)	Job	1
14	Earthing Strip (25x3mm GI) (for DTR earthing)	Kg	320
F Common Miscellenious Equipments			
1	30 V Battery Bank	No.	1
2	30 V Battery charger - float cum boost- automatic	No.	1
3	D.C Distribution Board (for new 33/11 KV Substation)	No.	1
4	A.C Distribution Board (for new 33/11 KV Substation)	No.	1
5	Fire Fighting Equipment (for new 33/11 KV Substation)	Job	1

Schedule of materials for construction of 33/11 KV 10 MVA Substation			
Sl. No.	Particulars	Unit	Qty.
A 33 kV Line Bay			
1 SUB-STATION MAIN EQUIPMENT			
i)	33 kV Vacuum Circuit Breaker	No.	1
ii)	33 kV C&R Panel for Single Feeder (Scada Compatible)	No.	1
iii)	33 kV Isolator with Earthing Blade	No.	1
iv)	33 kV Isolator without Earthing Blade	No.	1
v)	33 kV Current Transformer	Set	1
vi)	33 kV Voltage Transformer	Set	1
vii)	30 kV Lightning Arrestors	Set	1
viii)	33 kV Post Insulator	Set	1
2 Structure			
i)	Galvanised Steel Structures for 33 KV Line Bay	MT	3
ii)	Galvanised Nuts & Bolts	Kg	150
3 Control Cables			
i)	12 Core Control Cables	M	60
ii)	4 Core Control Cables	M	300
iii)	2 Core Control Cables	M	60
iv)	Lugs, Ferrules etc.	Item	
4 Conductor & Hardware			
i)	200 sqmm ACSR Conductor Panther (for 33/11 kv S/s)	M	100
ii)	T Clamps for Panther Conductor	Nos.	24
iii)	Single Tension Fittings	Nos.	9
iv)	Disc Insulators for 33 KV Line Bay -70kN	Nos.	18
v)	GI flat for earthing 50x6 mm	Kg	125
B 33 kV Transformer Bay			
1 Sub-Station main Equipment			
i)	33 kV Vacuum Circuit Breaker	No.	1
ii)	33 kV Isolator without Earthing Blade	Nos.	2
iii)	33 kV Current Transformer	Set	1
iv)	30 kV Lightning Arrestors	Set	1
v)	33 kV C&R Panel for control of Single Transformer with Differential Protection (Scada Compatible)	No.	1
vi)	33 kV Post Insulator	Set	1
vii)	9kV LA	Set	1
2 Structures			
i)	Steel Structures for 33 KV Transformer Bay	MT	6
ii)	Galvanised Nuts & Bolts	Kg	300
3 Control Cables			
i)	12 Core Control Cables	M	60
ii)	6 Core Control Cables	M	300
iii)	2 Core Control Cables	M	60
iv)	Lugs, Ferrules etc.	Item	
4 Conductor & Hardware			
i)	200 sqmm ACSR Conductor Panther (for 33/11 kv S/s)	M	100
ii)	T Clamps for Panther Conductor	Nos.	3
C 33/11 kV Power Transformer			
1	33/11 kV, 10 MVA, 3 Phase Power Transformer	No.	1
2 Control Cables			
i)	12 Core Control Cables	M	120
ii)	4 Core Control Cables	M	120
iii)	2 Core Control Cables	M	240
D 11 KV Switchgear and Auxiliaries			
1	11 kV VCB Switchgear Panel Board (1 Incomer Panel + 5 Outgoing Panel)	Set	1
2	11 kV LA Station Type	Set	4
3	11 KV XPLE Power Cables-		
i)	11 kV XPLE Power Cables- Single Core 630 mm ²	Mtr	160
ii)	11 kV XPLE Power Cables- 3C 300 mm ²	Mtr	200
iii)	11 kV XPLE Power Cables- 3C 185 mm ²	Mtr	
iv)	11 kV XPLE Power Cables- 3C 120 mm ²	Mtr	
4	11 kV Cable Kits for Single Core 630 mm ² XLPE Cable		
i)	Indoor Type Cable Termination Kit for 11 kV Single Core 630 mm ² XLPE Cable	Set	1
ii)	Outdoor Type Cable Termination Kit for 11 kV Single Core 630 mm ² XLPE Cable	Set	1
5	11 kV Cable Kits for 300 mm ² XLPE Cable		
i)	Indoor Type Cable Termination Kit for 11 kV 3C 300 mm ² XLPE Cable	Set	5
ii)	Outdoor Type Cable Termination Kit for 11 kV 3C 300 mm ² XLPE Cable	Set	5
6	11 kV G.O Switch	Set	1
7	11kV Isolator Double Break 3P, 600 A, with Horizontal type Earth Switch	Set	4
8	9 Mtr. Long Steel Tubular Pole	Nos	10
9	Galvanised Steel of sorts	MT.	0.3
10	100 KVA, 11/0.4 KV Stn. Transformer	No	1
11	120 mm ² 3.5 Core LT XLPE Cable	Mtr	15
12	Galvanised Steel Structures for Station Transformer	MT.	0.2
13	11 kV Lightning Arrestors	Set	1
14	Earthing of Stn Transformer - Pipe Earthing (Complete)	No.	3
15	GI strip for Earthing Stn Transformer	Kg	20
16	11 kV Do Fuse set	set	1
18	Cement Bottoming of Poles	No.	10
	Red Oxide	Ltr	10
	Aluminium Paint	Ltr	10
E Common Miscelleneous Works			
1	Compound walling of identified land by way of Mass Concrete in Foundations and 228 mm Brick Wall of 2 M height (for new 33/11 KV Substation)	RM	128
2	Chainlink Fencing of 33 kV Yard of Substation by way of Mass Concrete in Foundations and chainlink fencing of 6 ft height (for new 33/11 KV Substation)	RM	50
3	Cable Trench for laying of 11 kV XLPE Cable from Power Transformer to Control Room (for new 33/11 KV Substation)	RM	30
4	33/11 kV Power Transformer Foundation	Job	1
5	33 kV Equipment Foundation & Gantry foundation (for new 33/11 KV Substation)	Job	1
6	Earthing Mat with GI Flat 50x8 (for new 33/11 KV Substation)	Job	1
7	Earthing Electrode (3m long 40mm dia GI pipe)	No.	38
8	33 kV Yard Concreting/Metalling (for new 33/11 KV Substation)	Job	1
9	Borewell with submersible pump	No.	1
10	Control Room Building (for new 33/11 KV Substation)	sqm	111
11	Shift Quarters for JE and SBA (at new 33/11 KV Substation)	sqm	130
12	Development of land by removing weeds, wild grass and endulation if any, ornamental land scaping and growing of ornamental trees in unbuilt areas and road sides and development of roads along with surface drains (for new 33/11 KV Substation)	Job	1
13	Yard Lighting (for new 33/11 KV Substation)	Job	1
14	Earthing Strip (25x3mm GI) (for DTR earthing)	Kg	160
F Common Miscelleneous Equipments			
1	30 V Battery Bank	No.	1
2	30 V Battery charger - float cum boost- automatic	No.	1
3	D.C Distribution Board (for new 33/11 KV Substation)	No.	1
4	A.C Distribution Board (for new 33/11 KV Substation)	No.	1
5	Fire Fighting Equipment (for new 33/11 KV Substation)	Job	1

Schedule of materials for Installation of 33/11 KV 6.3 MVA Additional Power Transformer			
Sl. No.	Particulars	Unit	Qty.
A	33 kV Transformer Bay		
1	Sub-Station main Equipment		
i)	33 kV Vacuum Circuit Breaker	No.	1
ii)	33 kV Isolator without Earthing Blade	Nos.	2
iii)	33 kV Current Transformer	Nos.	1
iv)	30 kV Lightning Arrestors	Set	1
v)	33 kV Post Insulator	Set	1
vi)	9kV LA	Set	1
vii)	33 kV C&R Panel for control of Single Transformer (Scada Compatible)	No.	1
2	Structures		
i)	Steel Structures for 33 KV Transformer Bay	MT	6
ii)	Galvanized Nuts & Bolts	kg	300
3	Control Cables		
i)	12 Core Control Cables	M	60
ii)	6 Core Control Cables	M	300
iii)	2 Core Control Cables	M	60
iv)	Lugs, Ferrules etc.	Item	
4	Conductor & Hardware		
i)	200 sqmm ACSR Conductor Panther (for 33/11 kV S/s)	M	100
ii)	T Clamps for Panther Conductor	Nos.	3
B	33/11 kV Power Transformer		
1	33/11 kV, 6.3 MVA, 3 Phase Power Transformer	No.	1
2	Control Cables		
i)	12 Core Control Cables	M	120
ii)	4 Core Control Cables	M	120
iii)	2 Core Control Cables	M	240
C	11 KV Switchgear and Auxularies		
1	11 kV VCB Switchgear Panel Board (1 Incomer Panel + 4 Outgoing Panel)	Set	1
2	11 kV L.A Station Type	Set	4
3	11 KV XPLE Power Cables-		
i)	11 KV XPLE Power Cables- 3C 400 mm ²	Mtr	40
ii)	11 KV XPLE Power Cables- 3C 300 mm ²	Mtr	
iii)	11 KV XPLE Power Cables- 3C 185 mm ²	Mtr	
iv)	11 KV XPLE Power Cables- 3C 300 mm ²	Mtr	60
4	11 kV Cable Kits for 3C 400 mm ² XLPE Cable		
i)	Indoor Type Cable Termination Kit for 11 kV 3C 400 mm ² XLPE Cable	Set	1
ii)	Outdoor Type Cable Termination Kit for 11 kV 3C 400 mm ² XLPE Cable	Set	1
5	11 kV Cable Kits for 3C 300 mm ² XLPE Cable		
i)	Indoor Type Cable Termination Kit for 11 kV 3C 300 mm ² XLPE Cable	Set	1
ii)	Outdoor Type Cable Termination Kit for 11 kV 3C 300 mm ² XLPE Cable	Set	1
6	11kV Isolator Double Break 3P , 600 A , with Horizontal type Earth Switch	Set	1
7	9 Mtr. Long Steel Tubular Pole	Nos	2
8	Cement Bottoming of Poles	No.	2
9	Red Oxide	Ltr	2
10	Aluminium Paint	Ltr	2
11	GI.Steel of sorts	MT	0.06
D	Common Miscellenious Works		
1	33/11 kV Power Transformer Foundation	Job	1
2	33 kV Equipment Foundation & Gantry foundation (for additional equipments and Gantry)	Job	1
3	Earthing Mat (GI Flat 50x8) for additional PTR	KG	20.00
4	Earthing Electrode (3m long 40mm dia GI pipe) for additional PTR	No.	10.00
5	Earthing Strip (25x3mm GI) (for DTR earthing)	Kg	160

Schedule of materials for Installation of 33/11 KV 10 MVA Additional Power Transformer			
Sl. No.	Particulars	Unit	Qty.
A	33 kV Transformer Bay		
1	Sub-Station main Equipment		
i)	33 kV Vacuum Circuit Breaker	No.	1
ii)	33 kV Isolator without Earthing Blade	Nos.	2
iii)	33 kV Current Transformer	Set	1
iv)	30 kV Lightning Arrestors	Set	1
v)	33 kV C&R Panel for control of Single Transformer with Differential Protection (Scada Compatible)	No.	1
vi)	33 kV Post Insulator	Set	1
vii)	9kV LA	Set	1
2	Structures		
i)	Steel Structures for 33 KV Transformer Bay	MT	6
ii)	Galvanized Nuts & Bolts	KG	300
3	Control Cables		
i)	12 Core	M	60
ii)	6 Core	M	300
iii)	2 Core	M	60
iv)	Lugs, Ferrules etc.	Item	
4	Conductor & Hardware		
i)	200 sqmm ACSR Conductor Panther (for 33/11 kV S/s)	M	100
ii)	T Clamps for Panther Conductor	Nos.	3
B	33/11 kV Power Transformer		
1	33/11 kV, 10 MVA, 3 Phase Power Transformer	No.	1
2	Control Cables		
i)	12 Core	M	120
ii)	4 Core	M	120
iii)	2 Core	M	240
C	11 KV Switchgear and Auxularies		
1	11 kV VCB Switchgear Panel Board (1 Incomer Panel + 5 Outgoing Panel)	Set	1
2	11 kV L.A Station Type	Set	5
3	11 KV XPLE Power Cables-		
i)	11 KV XPLE Power Cables- Single Core 630 mm ²	Mtr	160
ii)	11 KV XPLE Power Cables- 3C 300 mm ²	Mtr	120
iii)	11 KV XPLE Power Cables- 3C 185 mm ²	Mtr	
iv)	11 KV XPLE Power Cables- 3C 120 mm ²	Mtr	
4	11 kV Cable Kits for Single Core 630 mm ² XLPE Cable		
i)	Indoor Type Cable Termination Kit for 11 kV Single Core 630 mm ² XLPE Cable	Set	1
ii)	Outdoor Type Cable Termination Kit for 11 kV Single Core 630 mm ² XLPE Cable	Set	1
5	11 kV Cable Kits for 3C 300 mm ² XLPE Cable		
i)	Indoor Type Cable Termination Kit for 11 kV 3C 300 mm ² XLPE Cable	Set	2
ii)	Outdoor Type Cable Termination Kit for 11 kV 3C 300 mm ² XLPE Cable	Set	2
	11kV Isolator Double Break 3P , 600 A , with Horizontal type Earth Switch	Set	2
7	9 Mtr. Long Steel Tubular Pole	Nos	4
8	M. Steel of sorts for Feeder Gantry	MT	0.12
9	Cement Bottoming of Poles	No.	4
	Red Oxide	Ltr	4
	Aluminium Paint	Ltr	4
D	Common Miscellenious Works		
1	33/11 kV Power Transformer Foundation	Job	1
2	33 kV Equipment Foundation & Gantry foundation (for additional equipments and	Job	1
3	Earthing Mat (GI Flat 50x8) for additional PTR	KG	20.00
4	Earthing Electrode (3m long 40mm dia GI pipe) for additional PTR	No.	10.00
5	Earthing Strip (25x3mm GI) (for DTR earthing)	Kg	160

Schedule of materials for Augmentation of 33/11 KV Power Transformer from 6.3 MVA to 10 MVA

Sl. No.	Particulars	Unit	Qty.
1	33/11 kV, 10 MVA, 3 Phase Power Transformer	No.	1
2	11 kV VCB Switchgear Panel Board (1 Incomer Panel + 5 Outgoing Panel)	No.	1
3	11 KV 630 mm ² Single Core Cable (with one spare length) for 10 MVA Power Transformer	Mtr	160
4	11 KV XPLE Power Cables- 3C 300 mm ²	Mtr	
5	11 kV Cable Kits for Single Core 630 mm ² XLPE Cable	Mtr	
i	Indoor Type Cable Termination Kit for 11 kV Single Core 630 mm ² XLPE Cable	Set	1
ii	Outdoor Type Cable Termination Kit for 11 kV Single Core 630 mm ² XLPE Cable	Set	1
6	11 kV Cable Kits for 3C 120 mm ² XLPE Cable		
i	Indoor Type Cable Termination Kit for 11 kV 3C 300 mm ² XLPE Cable	Set	1
ii	Outdoor Type Cable Termination Kit for 11 kV 3C 300 mm ² XLPE Cable	Set	1
7	9 Mtr. Long Steel Tubular Pole	No.	2
8	Earthing of Power Transformer	Job	1
9	11kV Isolator Double Break 3P , 600 A , with Horizontal type Earth Switch	Set	1
10	Cement Bottoming of Poles	No.	2
11	Red Oxide	Ltr	2
12	Aluminium Paint	Ltr	2

Schedule of materials Renovation & Modernisation of 33/11 kV SS

Sl. No.	Particulars	Unit	Qty.
1	New/Replacement of 33kV VCB	No	1
2	New/Replacement of 33kV C&R Panel (For R&M of 33/11 KV Substation)	No	1
3	New/Replacement of 11 kV, 1250 Amp, 25 kA for 3 sec, VCB Switchgear Panel Board (2 Incomer Panel + 7 Outgoing Panel) (For R&M/Aug. of 33/11 KV Substation)		
4	New/Replacement of 11 kV, 1250 Amp, 25 kA for 3 sec, VCB Switchgear Panel Board (3 Incomer Panel + 7 Outgoing Panel) (For R&M, Aug. of 33/11 KV Substation)		
5	New/Replacement of 11 kV VCB (1+5) (For R&M of 33/11 KV Substation)	Set	1
6	New/Replacement of 30 kV LAs (For R&M of 33/11 KV Substation)	Set	1
7	New/Replacement of 33 kV CTs (For R&M of 33/11 KV Substation)	Set	1
8	New/Replacement of 33 kV PTs (For R&M of 33/11 KV Substation)	Set	1
9	New/Replacement of 33 kV isolator with earthing blade (For R&M of 33/11 KV Substation)	No	1
10	New/Replacement of 33 kV isolator with out earthing blade (For R&M of 33/11 KV Substation)	No	1
11	11 KV XPLE Power Cables- 3C 400 mm ²	Mtr.	60
12	Indoor Type Cable Termination Kit for 11 kV 3C 400 mm ² XLPE Cable	Set	1
13	Outdoor Type Cable Termination Kit for 11 kV 3C 400 mm ² XLPE Cable	Set	1
14	11kV Isolator Double Break 3P , 600 A , with Horizontal type Earth Switch	Set	4
15	11kV LA sets (For R&M of 33/11 KV Substation)	Set	4
16	Battery Bank (For R&M of 33/11 KV Substation)	No	1
17	Battery Charger (For R&M of 33/11 KV Substation)	No	1
18	Fire Extinguisher system (For R&M of 33/11 KV Substation)	No	1
19	ACDB (For R&M of 33/11 KV Substation)	No	1
20	DCDB (For R&M of 33/11 KV Substation)	No	1
21	Galavanised Steel structure with nut bolts for 33kv Outdoor equipments.		
22	Foundation for 33kV CTs for Augmentation/ Additional PTR locations		
23	Foundation for 33kV VCB for Augmentation/ Additional PTR locations		
24	Foundation for 33kV LA for Augmentation/ Additional PTR locations		
25	Foundation for 33kV Towers/ Gantry for Augmentation/ Additional PTR locations		

Schedule of materials for erection of 1 km of 33 KV Line with ACSR Panther Conductor on 11 meter ST Poles			
Sl. No.	Particulars	Unit	Qty.
1	11 Mtr. Long Steel Tubular Pole	Nos	19
2	13 Mtr. Long Steel Tubular Pole with welded steel base plate of Designation 410 SP -69(IS 2713, Pt I, II, III 1980.) for Long spans and Line Crossings only.	Nos	2
3	GI V cross-arm with top Bracket including clamp	Kg	425
4	GI Channel X-arm including clamps and braces	Kg	160
5	200 mm ² ACSR Conductor	km	3.09
6	PG Clamps for 200 mm ² ACSR Conductor	Nos	12
7	33 kV Pin Insulators with Pins	Nos	57
8	33 kV Disc Insulators Complete with fitting	Nos	12
9	Galvanized Nuts and Bolts.	kg	19
10	33 kV Danger Plates with Clamps	Nos	19
11	Anti-Climbing Device with Clamps	Nos	19
12	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	19
13	Red Oxide	Ltr.	19
14	Aluminium Paint	Ltr.	19
15	Cement bottoming	Nos	19
16	33 KV Stay Set	Nos	5
17	Aluminium Jointing Sleeves	Nos	3
18	Guard Netting	Span	4

**Schedule of materials for erection of 1 km of 33 KV Line
with ACSR Wolf Conductor on 11 meter ST Poles**

Sl. No.	Particulars	Unit	Qty.
1	11 Mtr. Long Steel Tubular Pole	Nos	19
2	13 Mtr. Long Steel Tubular Pole with welded steel base plate of Designation 410 SP -69(IS 2713, Pt I, II, III 1980.) for Long spans and Line Crossings only.	Nos	2
3	GI V cross-arm with top Bracket including clamp	Kg	425
4	GI Channel X-arm including clamps and braces	Kg	160
5	150 mm ² ACSR Conductor	km	3.09
6	PG Clamps for 150 mm ² ACSR Conductor	Nos	12
7	33 kV Pin Insulators with Pins	Nos	57
8	33 kV Disc Insulators Complete with fitting	Nos	12
9	Galvanized Nuts and Bolts.	kg	19
10	33 kV Danger Plates with Clamps	Nos	19
11	Anti-Climbing Device with Clamps	Nos	19
12	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	19
13	Red Oxide	Ltr.	19
14	Aluminium Paint	Ltr.	19
15	Cement bottoming	Nos	19
16	33 KV Stay Set	Nos	5
17	Aluminium Jointing Sleeves	Nos	3
18	Guard Netting	Span	4

**Schedule of materials for augmentation of 1 CKM 33 kV Line
from ACSR Conductor to ACSR Wolf Conductor**

Sl. No.	Particulars	Unit	Qty.
1	150 mm ² ACSR Conductor	km	3.09
2	11 Mtr. Long Steel Tubular Pole	Nos	4
3	GI V cross-arm with top Bracket including clamp	Kg	88
4	PG Clamps for 150 mm ² ACSR Conductor	Nos	12
5	33 kV Pin Insulators with Pins	Nos	12
6	33 kV Disc Insulators Complete with fitting	Nos	6
7	Galvanized Nuts and Bolts.	kg	4
8	33 kV Danger Plates with Clamps	Nos	4
9	Anti-Climbing Device with Clamps	Nos	4
10	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	4
11	Red Oxide	Ltr.	4
12	Aluminium Paint	Ltr.	4
13	Cement bottoming	Nos	4
14	33 KV Stay Set	Nos	5
15	Aluminium Jointing Sleeves	Nos	3
16	Guard Netting	Span	4

Schedule of materials for augmentation of 1 CKM 33 kV Line from ACSR Conductor to ACSR Panther Conductor			
Sl. No.	Particulars	Unit	Qty.
1	200 mm ² ACSR Conductor	km	3.09
2	11 Mtr. Long Steel Tubular Pole	Nos	4
3	GI V cross-arm with top Bracket including clamp	Kg	88
4	PG Clamps for 200 mm ² ACSR Conductor	Nos	12
5	33 kV Pin Insulators with Pins	Nos	12
6	33 kV Disc Insulators Complete with fitting	Nos	6
7	Galvanized Nuts and Bolts.	kg	4
8	33 kV Danger Plates with Clamps	Nos	4
9	Anti-Climbing Device with Clamps	Nos	4
10	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	4
11	Red Oxide	Ltr.	4
12	Aluminium Paint	Ltr.	4
13	Cement bottoming	Nos	4
14	33 KV Stay Set	Nos	5
15	Aluminium Jointing Sleeves	Nos	3
16	Guard Netting	Span	4

Schedule of materials for Installation of 33 KV RMUs/Sectionalizer alongwith aux power supply to operate sw/breaker.			
Sl. No.	Particulars	Unit	Qty.
1	33 kV, 25 KA, 630 Amp Ring Main Unit-4-way type having motorised isolator with FPI on incoming circuit and SF6 circuit breaker with SCADA compatible Numerical Relays in outgoing circuit with electrical reset contacts.	No.	1
2	Foundation & Plinth for 33 kv RMU (4-way type) 2 Mtr. height (0.5 Mtr below ground level and 1.5 Mtr above ground level) including grouting of foundation bolts as per technical specification. Length and breadth of foundation as per manufacturer design standard.	Job	1
3	33 kV, 25 KA, 630 Amp Ring Main Unit-3-way type (2 Isolators & 1 Breaker) having motorised isolator with FPI on incoming circuit and SF6 circuit breaker with SCADA compatible Numerical Relays in outgoing circuit with electrical reset contacts & with Aux. PT	No.	1
4	Foundation & Plinth for 33 kv RMU (3-way type) 2 Mtr. height (0.5 Mtr below ground level and 1.5 Mtr above ground level) including grouting of foundation bolts as per technical specification. Length and breadth of foundation as per manufacturer design standard.	Job	1
5	33 kV, 25 KA, 630 Amp Ring Main Unit-5-way type (2 Isolators & 3 Breaker) having motorised isolator with FPI on incoming circuit and SF6 circuit breaker with SCADA compatible Numerical Relays in outgoing circuit with electrical reset contacts & with Aux. PT	No.	1
6	Foundation & Plinth for 33 kv RMU (5-way type) 2 Mtr. height (0.5 Mtr below ground level and 1.5 Mtr above ground level) including grouting of foundation bolts as per technical specification. Length and breadth of foundation as per manufacturer design standard.	Job	1
7	33 kV, 25 KA, 630 Amp Ring Main Unit-4-way type (3 Isolators & 1 Breaker) having motorised isolator with FPI on incoming circuit and SF6 circuit breaker with SCADA compatible Numerical Relays in outgoing circuit with electrical reset contacts & with Aux. PT	No.	1
8	Foundation & Plinth for 33 kv RMU (4-way type) 2 Mtr. height (0.5 Mtr below ground level and 1.5 Mtr above ground level) including grouting of foundation bolts as per technical specification. Length and breadth of foundation as per manufacturer design standard.	Job	1
9	33 kV, 25 KA, 630 Amp Ring Main Unit-3-way type (1 Isolators & 2 Breaker) having motorised isolator with FPI on incoming circuit and SF6 circuit breaker with SCADA compatible Numerical Relays in outgoing circuit with electrical reset contacts & with Aux. PT	No.	1
10	Foundation & Plinth for 33 kv RMU (3-way type) 2 Mtr. height (0.5 Mtr below ground level and 1.5 Mtr above ground level) including grouting of foundation bolts as per technical specification. Length and breadth of foundation as per manufacturer design standard.	Job	1
11	Fencing of RMU with wire mesh along with gate as per specifications	Job	1
12	33 kV, 3 Core XLPE Cable, 400 mm ²	Mtr.	40
13	Touch Proof Cable termination Kit for 33 kV 3C 400 mm ² XLPE Cable	Set	2
14	Outdoor Type Cable Termination Kit for 33 kV 3C 400 mm ² XLPE Cable	Set	2
15	33 kV, 3 Core XLPE Cable, 300 mm ²	Mtr.	40
16	Touch Proof Cable termination Kit for 33 kV 3C 300 mm ² XLPE Cable	Set	2
17	Outdoor Type Cable Termination Kit for 33 kV 3C 300 mm ² XLPE Cable	Set	2
18	Digging of trench by excavation of earth, filling of sand 100 mm below Cable and 100 mm above cable, covering sand bed with tiles, backfilling, ramming and compaction of exavated earth as per specifications and standard practice for laying 33 kV 3C XLPE cables of sizes 400 mm ² and 300 mm ² including cost of sand, tiles, etc.	RM	40
19	Earthing of 33 KV RMU (Chemical Pipe Earthing 80 mm dia, 3 Mtr long, 25 KA for 3s)	Nos.	2
20	GI Strip 50x6 mm for earthing of RMU	Kg	10

Schedule of materials for erection of 1 km of 11 KV Line with ACSR Rabbit on 9 mtr ST Poles.			
Sl. No.	Particulars	Unit	Qty.
1	9 Mtr. Long Steel Tubular Pole	Nos	19
2	11 Mtr. Long Steel Tubular Pole	Nos	2
3	GI V cross-arm with top Bracket including clamp	Kg	289
4	GI Channel X-arm including clamps and braces	Kg	160
5	50 mm ² ACSR Rabbit Conductor	km	3.09
6	PG Clamps for 50 mm ² ACSR Conductor	Nos	12
7	11 kV Pin Insulators with Pins	Nos	57
8	11 kV Disc Insulators Complete with fitting	Nos	12
9	Galvanized Nuts and Bolts	kg	21
10	Danger Plates with Clamps	Nos	21
11	Anti-Climbing Device with Clamps	Nos	21
12	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	21
13	Red Oxide	Ltr.	21
14	Aluminium Paint	Ltr.	21
15	Cement bottoming	Nos	21
16	Aluminium Jointing Sleeves	Nos	3
17	Stay Set	Nos	4

Schedule of materials for erection of 1 km of 11 KV Line with ACSR Dog on 9 mtr ST Poles.			
Sl. No.	Particulars	Unit	Qty.
1	9 Mtr. Long ST Pole	Nos	19
2	11 Mtr. Long ST Pole	Nos	2
3	GI V cross-arm with top Bracket including clamp	Kg	289
4	GI Channel X-arm including clamps and braces	Kg	160
5	100 mm ² ACSR Dog Conductor	km	3.09
6	PG Clamps for 100 mm ² ACSR Conductor	Nos	12
7	11 kV Pin Insulators with Pins	Nos	57
8	11 kV Disc Insulators Complete with fitting	Nos	12
9	Galvanized Nuts and Bolts	kg	21
10	Danger Plates with Clamps	Nos	21
11	Anti-Climbing Device with Clamps	Nos	21
12	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	21
13	Red Oxide	Ltr.	21
14	Aluminium Paint	Ltr.	21
15	Cement bottoming	Nos	21
16	Aluminium Jointing Sleeves	Nos	3
17	Stay Set	Nos	4

Schedule of materials for erection of 1 km of 11 KV Line with HT ABC 50 mm ² on 8 mtr ST poles.			
Sl. No.	Particulars	Unit	Qty.
1	8 Mtr. Long Steel Tubular Pole	Nos	18
2	9 Mtr. Long Steel Tubular Pole	Nos	2
3	50 mm ² AB Cable (3X50+1X70)	km	1.05
4	Heat Shrinkable Outdoor Cable Termination Kit	Set	1
5	Suspension/Tension Clamp with eye hook	Nos	20
6	Galvanized Nuts and Bolts.	kg	20
7	Danger Plates	Nos	20
8	Anti-Climbing Device with Clamps	Nos	20
9	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	20
10	Red Oxide	Ltr.	20
11	Aluminium Paint	Ltr.	20
12	Cement bottoming	Nos	20
13	Mid Span Straight Throgh Jointing Kit for 11 KV ABC	Set	1
14	Stay set	Nos	4

Schedule of materials for erection of 1 km of 11 KV Line with HT ABC 120 mm² on 8 mtr ST poles.			
Sl. No.	Particulars	Unit	Qty.
1	8 Mtr. Long Steel Tubular Pole	Nos	18
2	9 Mtr. Long Steel Tubular Pole	Nos	2
3	120 mm ² AB Cable (3X120+1X95)	km	1.05
4	Heat Shrinkable Outdoor Cable Termination Kit	Set	1
5	Suspension/Tension Clamp with eye hook	Nos	20
6	Galvanized Nuts and Bolts.	kg	20
7	Danger Plates	Nos	20
8	Anti-Climbing Device with Clamps	Nos	20
9	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	20
10	Red Oxide	Ltr.	20
11	Aluminium Paint	Ltr.	20
12	Cement bottoming	Nos	20
13	Mid Span Straight Throgh Jointing Kit for 11 KV ABC	Set	1
14	Stay set	Nos	4

Schedule of materials for augmentation of 1 CKM 11 kV Line from ACSR Weasel Conductor to ACSR Rabbit Conductor			
Sl. No.	Particulars	Unit	Qty.
1	50 mm ² ACSR Conductor - Rabbit	KM	3.09
2	9 Mtr. Long Steel Tubular Pole	Nos	4
3	GI V cross-arm with top Bracket including clamp	Kg	58
4	PG Clamps for 50 mm ² ACSR Conductor	Nos	12
5	11 kV Pin Insulators with Pins	Nos	12
6	11 kV Disc Insulators Complete with fitting	Nos	6
7	Galvanized Nuts and Bolts with washer	kg	4
8	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	4
9	Danger Plates	Nos	4
10	Anti-Climbing Device with Clamps	Nos	4
11	Aluminium Jointing Sleeves	Nos	3
14	Cement Bottoming of Poles	No.	4
15	Red Oxide	Ltr	4
16	Aluminium Paint	Ltr	4
17	Stay set	Nos	4

Schedule of materials for Replacement of 1 km of LT Line on ACSR Weasel Conductor by LT ABC 50 mm²			
Sl. No.	Particulars	Unit	Qty.
1	50 mm ² LT AB Cable (3X50+1x16+1X35)	KM	1.05
2	Straight Through Cable Jointing Kit	Set	1
3	Suspension/Tension Clamp with eye hook	Nos	30
4	8 Mtr. Long ST Pole	Nos	4
5	Cement bottoming	Nos	4
6	LT 3-Ph Distribution Box with Busbar LT service connections	Nos	30
7	Galvanized Nuts and Bolts with washer	kg	10
8	Danger Plates	Nos	4
9	Anti-Climbing Device with Clamps	Nos	4
10	LT coil Earthing(Complete)	Nos	4
11	Red Oxide	Ltr.	4
12	Aluminium Paint	Ltr.	4
13	Insulating Piercing Connetors	No	64
14	Stay Set	No	5
15	35 sq mm 4C PVC Cable	Mtr.	60
16	Dead End Clamp	No	4
17	Insulating Piercing Connetors for street light 16sqmm Cable	No	30

Schedule of materials for Replacement of 1 km of LT Line on ACSR Rabbit Conductor by LT ABC 120 mm²			
Sl. No.	Particulars	Unit	Qty.
1	120 mm ² LT AB Cable (3X120+1x16+1X95)	KM	1.05
2	Straight Through Cable Jointing Kit	Set	1
3	Suspension/Tension Clamp with eye hook	Nos	20
4	8 Mtr. Long ST Pole	Nos	4
5	Cement bottoming	Nos	4
6	LT 3-Ph Distribution Box with Busbar LT service connections	Nos	30
7	Galvanized Nuts and Bolts with washer	kg	10
8	Danger Plates	Nos	4
9	Anti-Climbing Device with Clamps	Nos	4
10	LT coil Earthing(Complete)	Nos	4
11	Red Oxide	Ltr.	4
12	Aluminium Paint	Ltr.	4
13	Insulating Piercing Connetors	No	64
14	Stay Set	No	5
15	Insulating Piercing Connetors for street light 16sqmm Cable	No	30
16	35 Sq mm 4C PVC Cable	Mtr	60
17	Dead End Clamp	No.	6

Schedule of materials for Installation of 100 KVA Distribution Substation			
Sl. No.	Particulars	Unit	Qty.
1	11/0.433 kV, 100 KVA, 3-Ph Distribution Transformers with Bimetallic Terminal Connectors	No	1
2	11 kV Lightning Arrestors	Set	1
3	11 kV G.O Switch	Set	1
4	11 kV D O Fuse/HG Fuse (as per requirement)	Set	1
5	120 mm ² Single Core XLPE Cable	Mtr	88
6	9 Mtr. Long ST Pole	Nos	2
7	11 kV Disc Insulators Complete with fitting	Nos	3
8	GI Channel/Angle/Flat of sizes including clamps	Kgs	200
9	Galvanized Nuts and Bolts with washer	Kgs	8
10	Earthing of substation - Pipe earthing	Nos	3
11	GI Strip for Earthing	Kgs	20
12	11 KV Pin Insulators with Pins	No.	3
13	LT Distribution Box with mounting clamps for 100 KVA DTR with MCCBs on outgoing ckt.	No.	1
15	Wedge Connectors / PG Clamps	Nos	6
16	Danger Plates with Clamps	Nos	2
17	GI Barbed Wire for Anti Climbing	Kgs	15
18	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	2
19	Meter Box with Resin Cast Ring type CTs for DT Metering	No	1
20	DLMS type Meter for DT Metering with Modem	No	1
21	Cement Bottoming of Poles	Nos	2
22	Red Oxide	ltr	2
23	Aluminium Paint	ltr	2
24	Sundry items like aluminium lugs, Jumpers, binding Tape,	Per DTR	1
25	Stay Set	No	2

Schedule of materials for Installation of 250 KVA Distribution Substation			
Sl. No.	Particulars	Unit	Qty.
1	11/0.433 kV, 250 KVA, 3-Ph Distribution Transformers with Bimetallic Terminal Connectors	No	1
2	11 kV Lightning Arrestors	Set	1
3	11 kV G.O Switch	Set	1
4	11 kV D O Fuse/HG Fuse (as per requirement)	Set	1
5	240 mm ² Single Core XLPE Cable	Mtr	88
6	9 Mtr. Long ST Pole	Nos	2
7	11 kV Disc Insulators Complete with fitting	Nos	3
8	GI Channel/Angle/Flat of sizes including clamps	Kgs	200
9	Galvanized Nuts and Bolts with washer	Kgs	8
10	Earthing of substation - Pipe earthing	Nos	3
11	GI Strip for Earthing	Kgs	20
12	11 KV Pin Insulators with Pins	No.	3
13	LT Distribution Box with mounting clamps for 250 KVA DTR with MCCBs on outgoing Ckts	No.	1
15	Wedge Connectors / PG Clamps	Nos	6
16	Danger Plates with Clamps	Nos	2
17	GI Barbed Wire for Anti Climbing	Kgs	15
18	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	2
19	Meter Box with Resin Cast Ring type CTs for DT Metering	No	1
20	DLMS type Meter for DT Metering with Modem	No	1
21	Cement Bottoming of Poles	Nos	2
22	Red Oxide	ltr	2
23	Aluminium Paint	ltr	2
24	Sundry items like aluminium lugs, Jumpers, binding Tape,	Per DTR	1
25	Stay Set	No	2

Schedule of materials for Installation of 200 KVA Distribution Substation			
Sl. No.	Particulars	Unit	Qty.
1	11/0.433 kV, 200 KVA, 3-Ph Distribution Transformers with Bimetallic Terminal Connectors	No	1
2	11 kV Lightning Arrestors	Set	1
3	11 kV G.O Switch	Set	1
4	11 kV D O Fuse/HG Fuse (as per requirement)	Set	1
5	240 mm ² Single Core XLPE Cable	Mtr	88
6	9 Mtr. Long ST Pole	Nos	2
7	11 kV Disc Insulators Complete with fitting	Nos	3
8	GI Channel/Angle/Flat of sizes including clamps	Kgs	200
9	Galvanized Nuts and Bolts with washer	Kgs	8
10	Earthing of substation - Pipe earthing	Nos	3
11	GI Strip for Earthing	Kgs	20
12	11 KV Pin Insulators with Pins	No.	3
13	LT Distribution Box with mounting clamps for 200 KVA DTR with MCCBs on outgoing Ckts	No.	1
15	Wedge Connectors / PG Clamps	Nos	6
16	Danger Plates with Clamps	Nos	2
17	GI Barbed Wire for Anti Climbing	Kgs	15
18	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	2
19	Meter Box with Resin Cast Ring type CTs for DT Metering	No	1
20	DLMS type Meter for DT Metering with Modem	No	1
21	Cement Bottoming of Poles	Nos	2
22	Red Oxide	ltr	2
23	Aluminium Paint	ltr	2
24	Sundry items like aluminium lugs, Jumpers, binding Tape,	Per DTR	1
25	Stay Set	No	2

**Schedule of materials for Augmentation of Distribution Transformer
from 100 KVA to 250 KVA**

Sl. No.	Particulars	Unit	Qty.
1	11/0.433 kV, 250 KVA, 3-Ph Distribution Transformers with Bimetallic Terminal Connectors	No	1
2	240 mm ² Single Core XLPE Cable	Mtr	88
3	LT Distribution Box with mounting clamps for 250 KVA DTR with MCCBs on two outgoing Ckts	No.	1
4	GI Channel/Angle/Flat of sizes including clamps	Kg	60
5	Earthing of substation - Pipe earthing	No	3
6	GI Strip for Earthing	Kg	10

Schedule of materials for Augmentation of Distribution Transformer from 100 KVA to 200 KVA			
Sl. No.	Particulars	Unit	Qty.
1	11/0.433 kV, 200 KVA, 3-Ph Distribution Transformers with Bimetallic Terminal Connectors	No	1
2	240 mm ² Single Core XLPE Cable	Mtr	88
3	LT Distribution Box with mounting clamps for 200 KVA DTR with MCCBs on two outgoing Ckts	No.	1
4	GI Channel/Angle/Flat of sizes including clamps	Kg	60
5	Earthing of substation - Pipe earthing	No	3
6	GI Strip for Earthing	Kg	10

Schedule of materials for Augmentation of Distribution Transformer from 250 KVA to 400 KVA			
Sl. No.	Particulars	Unit	Qty.
1	11/0.433 kV, 400 KVA, 3-Ph Distribution Transformers with Bimetallic Terminal Connectors	No	1
2	300 mm ² Single Core XLPE Cable	Mtr	88
3	LT Distribution Box with mounting clamps for 400 KVA DTR with MCCBs on two outgoing Ckts	No.	1
4	Transformer Pad	No.	1
5	Earthing of substation - Pipe earthing	No	3
6	GI Strip for Earthing	Kg	10

Schedule of materials for Installation of 25 KVA Distribution Substation for HVDS (on Single RS Joist Pole)			
Sl. No.	Particulars	Unit	Qty.
1	11/0.433 kV, 25 KVA, 3-Ph Distribution Transformers with Bimetallic Terminal Connectors	No	1
2	11 kV Lightning Arrestors	Set	1
3	GO switch	set	1
4	11 kV D O Fuse/HG Fuse (as per requirement)	Set	1
5	35 mm ² Single Core XLPE Cable	Mtr	22
6	9 Mtr. Long RS Joist (SC 152x152)	Nos	1
7	11 kV Disc Insulators Complete with fitting	Nos	3
8	GI Channel/Angle/Flat of sizes including clamps	Kgs	100
9	Galvanized Nuts and Bolts with washer	Kgs	5
10	Earthing of substation - Pipe earthing	Nos	3
11	GI Strip for Earthing	Kgs	20
12	11 KV Pin Insulators with Pins	No.	3
13	LT 3-Ph Distribution Box with suitable MCCB and Busbar LT service connections	No.	1
14	Wedge Connectors / PG Clamps	Nos	3
15	Danger Plates with Clamps	Nos	1
16	GI Barbed Wire for Anti Climbing	Kgs	2
17	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	1
18	Meter Box with Resin Cast Ring type CTs for DT Metering	No	1
19	DLMS type Meter for DT Metering with Modem	No	1
20	Cement Bottoming of Poles	Nos	1
21	Red Oxide	Ltr.	1
22	Aluminium Paint	Ltr.	1
23	Sundry items like aluminium lugs, Jumpers, binding Tape,	Per DTR	1
24	Stay set	No.	1

Schedule of materials for Installation of 63 KVA Distribution Substation for HVDS			
Sl. No.	Particulars	Unit	Qty.
1	11/0.433 kV, 63 KVA, 3-Ph Distribution Transformers with Bimetallic Terminal Connectors	No	1
2	11 kV Lightening Arrestors	Set	1
3	11 kV G.O Switch	Set	1
4	11 kV D O Fuse/HG Fuse (as per requirement)	Set	1
5	70 mm ² Single Core XLPE Cable	Mtr	44
6	9 Mtr. Long ST Pole	Nos	2
7	11 kV Disc Insulators Complete with fitting	Nos	3
8	GI Channel/Angle/Flat of sizes including clamps	Kgs	200
9	Galvanized Nuts and Bolts with washer	Kgs	8
11	Earthing of substation - Pipe earthing	Nos	3
12	GI Strip for Earthing	Kgs	20
13	11 KV Pin Insulators with Pins	No.	3
14	LT Distribution Box with mounting clamps for 63 KVA DTR with MCCBs on two outgoing Ckts	No.	1
16	Wedge Connectors / PG Clamps	Nos	6
17	Danger Plates with Clamps	Nos	2
18	GI Barbed Wire for Anti Climbing	Kgs	15
19	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	2
20	Meter Box with Resin Cast Ring type CTs for DT Metering	No	1
21	DLMS type Meter for DT Metering with Modem	No	1
22	Cement Bottoming of Poles	Nos	2
23	Red Oxide	ltr	2
24	Aluminium Paint	ltr	2
25	Sundry items like aluminium lugs, Jumpers, binding Tape,	LS	1
26	Stay Set	No	2

Schedule of materials for Installation of 100 KVA Distribution Substation for HVDS

Sl. No.	Particulars	Unit	Qty.
1	11/0.433 kV, 100 KVA, 3-Ph Distribution Transformers with Bimetallic Terminal Connectors	No	1
2	11 kV Lightening Arrestors	Set	1
3	11 kV G.O Switch	Set	1
4	11 kV D O Fuse/HG Fuse (as per requirement)	Set	1
5	120 mm ² Single Core XLPE Cable	Mtr	44
6	9 Mtr. Long ST Pole	Nos	2
7	11 kV Disc Insulators Complete with fitting	Nos	3
8	GI Channel/Angle/Flat of sizes including clamps	Kgs	200
9	Galvanized Nuts and Bolts with washer	Kgs	8
11	Earthing of substation - Pipe earthing	Nos	3
12	GI Strip for Earthing	Kgs	20
13	11 KV Pin Insulators with Pins	No.	3
14	LT Distribution Box with mounting clamps for 100 KVA DTR with MCCBs on two outgoing Ckts	No.	1
16	Wedge Connectors / PG Clamps	Nos	6
17	Danger Plates with Clamps	Nos	2
18	GI Barbed Wire for Anti Climbing	Kgs	15
19	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	2
20	Meter Box with Resin Cast Ring type CTs for DT Metering	No	1
21	DLMS type Meter for DT Metering with Modem	No	1
22	Cement Bottoming of Poles	Nos	2
23	Red Oxide	ltr	2
24	Aluminium Paint	ltr	2
25	Sundry items like aluminium lugs, Jumpers, binding Tape,	LS	1
26	Stay Set	No	2

**Schedule of materials for erection of 1 km of LT Line
with 120 mm² LT AB Cable on 8 mtr ST Poles.**

Sl. No.	Particulars	Unit	Qty.
1	8 Mtr. Long ST Pole	Nos	28
2	9 Mtr. Long ST Pole	Nos	2
3	120 mm ² AB Cable (3X120+1x16+1X95)	km	1.05
4	Suspension/Tension Clamp with eye hook	Nos	30
5	Straight Through Cable Jointing Kit	Set	1
6	LT 3-Ph Distribution Box with Busbar LT service connections	Nos	30
7	Galvanized Nuts and Bolts with washer	kg	30
8	Danger Plates	Nos	30
9	Anti-Climbing Device with Clamps	Nos	30
10	LT coil Earthing(Complete)	Nos	30
11	Cement Bottoming of Poles	No	30
12	Insulating Piercing Connetors	No	64
13	Stay Set	No	5
14	35 Sq mm 4C PVC Cable	Mtr	60
15	Dead End Clamp	No.	6
16	Insulating Piercing Connetors for street light 16sqmm Cable	No	30
17	Red Oxide	Ltr.	30
18	Aluminium Paint	Ltr.	30

**Schedule of materials for erection of 1 km of LT Line
with 50 mm² LT AB Cable on 8 mtr ST Poles.**

Sl. No.	Particulars	Unit	Qty.
1	8 Mtr. Long ST Pole	Nos	28
2	9 Mtr. Long ST Pole	Nos	2
3	50 mm ² AB Cable (3X50+1x16+1X35)	km	1.05
4	Suspension/Tension Clamp with eye hook	Nos	30
5	Straight Through Cable Jointing Kit	Set	1
6	LT 3-Ph Distribution Box with Busbar LT service connections	Nos	30
7	Galvanized Nuts and Bolts with washer	kg	30
8	Danger Plates	Nos	30
9	Anti-Climbing Device with Clamps	Nos	30
10	LT coil Earthing(Complete)	Nos	30
11	Cement Bottoming of Poles	No	30
12	Insulating Piercing Connetors	No	64
13	Stay Set	No	5
14	35 Sq mm 4C PVC Cable	Mtr	60
15	Dead End Clamp	No.	6
16	Insulating Piercing Connetors for street light 16sqmm Cable	No	30
17	Red Oxide	Ltr.	30
18	Aluminium Paint	Ltr.	30

Schedule of materials for Installation 5 KWp Crystalline high power/efficiency Solar panel alongwith Net Meter (conforming to IEC 61215 and IS 14286)			
Sl. No.	Particulars	Unit	Qty.
1	SPV modules for a total capacity of 5 KWp as per specifications	No.	20
2	PCU, 5 KVA Hybrid as per specifications	No.	1
3	SPV module mounting structure suitable for accommodating 5 KWp capacity SPV modules including foundation as per specifications on ground/roof of building along with access facilities from ground through mettalic stairs	Set	1
4	Bidirectional Meter for Net Metering with Reverse Power relay and Accessories	No.	1
5	Data Logging system with remote monitoring as per specification	Set	1
6	Fuses, Transfer Switches, Printed Circuit Boards required for Power Plant	Set	1
7	Array Junction Boxes	No.	1
8	Main Junction Boxes	No.	1
9	DCDB of 5 kW	No.	1
10	ACDB of 5 kW	No.	1
11	4 sqmm, DC solar Cu Cable	Mtr.	160
12	4C, 10sqmm- AC Cu Cable	Mtr.	50
13	1C, 6 sqmm -Cu PVC Earthing Green Cable	Mtr.	20
14	CAT-6 Ar Cable	Mtr.	50
15	Lugs, Cable glands, MC4 Connectors, PVC Conduit pipe & bends, etc as per requirement	Job	1
16	Cable Tray-150X50 with cover	Mtr.	25
17	Chemical Pipe Earthing 80 mm dia, 3 Mtr long, 25 KA for 3s)	No.	3
18	Earthing Strip (25x3mm GI)	Kg	50
19	Lightning Arrester Conventional Type (as per BIS-1991)	No.	2
20	Spares, tools and tackles for operation and maintenance (as per the Technical Specifications of Solar Plant)	Set	1

Schedule of materials for Guard Netting of 1 Span of 66 kV or 33 kV lines			
Sl. No.	Particulars	Unit	Qty.
1	GI Channel X-arm including clamps and braces	Kgs	40
2	Galvanized Nuts and Bolts	Kgs	3
3	GI Wire 6 SWG, 8 SWG & 16 SWG as per requirement	Kgs	27
4	Eye Bolts	Nos.	4

Schedule of materials for Installation of 3 Phase Meter with Other Equipment

Sl. No.	Particulars	Unit	Qty.
1	4cx25 sq mm XLPE service Cable armoured	Mtr.	20
2	Meter Box(1:1) along with mounting clamps, nuts & bolts for 3-Ph Meter (Supply & Installation)	No.	1
3	Meter Box (2:1) along with mounting clamps, nuts & bolts for 3-Ph Meter (Supply & Installation)	No.	1
4	Meter Box (4:1) along with mounting clamps, nuts & bolts for 3-Ph Meter (Supply & Installation)	No.	1
5	Three Phase Energy Meter 20-80 A, DLMS compliant of accuracy class 1.0	No.	1
6	Misc item Biding wire ,Insulating tape ,Screw etc	Per Meter Board	1

Schedule of materials for Installation of 1Phase Meter with Other Equipment

Sl. No.	Particulars	Unit	Qty.
1	2cx16 sq mm XLPE service Cable armoured	Mtr.	20
2	Meter Metal Box (1:1) along with mounting clamps, nuts & bolts for 1-Ph Meter	No.	1
3	Meter (Meta)Box (2:1) along with mounting clamps, nuts & bolts for 1-Ph Meter (Supply & Installation)	No.	1
4	Meter Box (4:1) along with mounting clamps, nuts & bolts for 1-Ph Meter (Supply & Installation)	No.	1
5	20:1 Metering Panel Board	No.	1
6	Single Phase Energy Meter 10-60 Amp, DLMS compliant of accuracy class 1.0	No.	1
7	Misc item Biding wire ,Insulating tape ,Screw etc	Per Meter Board	1

Schedule of materials for Shifting of 1 Phase Meter

Sl. No.	Particulars	Unit	Qty.
1	2cx16 sq mm XLPE service Cable armoured	Mtr.	20
2	Meter Metal Box (1:1) along with mounting clamps, nuts & bolts for 1-Ph Meter	No.	1
3	Meter (Meta)Box (2:1) along with mounting clamps, nuts & bolts for 1-Ph Meter (Supply & Installation)	No.	1
4	Misc item Biding wire ,Insulating tape ,Screw etc	Per Meter Board	1

Schedule of material for installation of AMR for DTRs and high load consumer with modem

Sl. No.	Particulars	Unit	Qty.
1	Meter Box with Resin Cast Ring type CTs for DT Metering	No	1
2	DLMS type Meter for DT Metering with Modem	No	1

**Schedule of materials for augmentation of 1 CKM 11 kV Line
from ACSR Rabbit Conductor to ACSR Dog Conductor**

Sl. No.	Particulars	Unit	Qty.
1	100 mm ² ACSR Dog Conductor	KM	3.09
2	9 Mtr. ST Pole	Nos	4
3	GI V cross-arm with top Bracket including clamp	Kg	58
4	PG Clamps for 100 mm ² ACSR Conductor	Nos	12
5	11 kV Pin Insulators with Pins	Nos	12
6	11 kV Disc Insulators Complete with fitting	Nos	6
7	Galvanized Nuts and Bolts with washer	kg	4
8	Earthing of Poles by GI earthing Rod 20x2500 mm & 6 SWG GI wire	Nos	4
9	Danger Plates	Nos	4
10	Anti-Climbing Device with Clamps	Nos	4
11	Aluminium Jointing Sleeves	Nos	3
12	Cement Bottoming of Poles	Nos	4
13	Stay set	Nos	4
14	Red Oxide	Ltr	4
15	Aluminium Paint	Ltr	4

Schedule of materials for U/G Line with 33kV Cable for ring formation in densely pulplated area and Tourist detination of			
Sl. No.	Particulars	Unit	Qty.
A	33kV Cable for ring formation in densely pulplated area and Tourist detination of Chemashahi and Tulip Garden (10 Km)	10	
1	33 kV, 25 KA, 630 Amp Ring Main Unit-4-way type having motorised isolator with FPI on incoming circuit and SF6 circuit breaker with SCADA compatible Numerical Relays in outgoing circuit with electrical reset contacts.	No.	2
2	Foundation & Plinth for 33 kv RMU (4-way type) 2 Mtr. height (0.5 Mtr below ground level and 1.5 Mtr above ground level) including grouting of foundation bolts as per technical specification. Length and breadth of foundation as per manufacturer design standard.	Job	2
3	Fencing of RMU with wire mesh along with gate as per specifications	Job	2
4	33 kV, 3 Core XLPE Cable, 400 mm ²	Mtr.	22000
5	Touch Proof Cable termination Kit for 33 kV 3C 400 mm ² XLPE Cable	Set	4
6	Outdoor Type Cable Termination Kit for 33 kV 3C 400 mm ² XLPE Cable	Set	2
7	Straight Through Cable Jointing Kit for 33 kV 3C 185 mm ² XLPE Cable	Set	84
8	Digging of trench by excavation of earth, filling of sand 100 mm below Cable and 100 mm above cable, covering sand bed with tiles, backfilling, ramming and compaction of exavated earth as per specifications and standard practice for laying double circuit 33 kV 3C XLPE cables of sizes 400 mm ² including cost of sand, tiles, etc.	RM	8000
9	Digging of trench by excavation of earth, Supply & Laying of 200 mm dia RCC Pipe, backfilling, ramming and compaction of exavated earth for laying 33 kV 3C XLPE cables of sizes 400 mm ² .	M	1000
10	Supply and Laying of 200 mm dia HDPE Pipe for laying 33 kV 3C XLPE cables of sizes 400 mm ² inside the pipe. (Pipe to be laid by HDD method)	M	2800
11	Cutting of trench in puckka area, Supply and Laying of 200 mm dia HDPE Pipe for laying double circuit 33 kV 3C XLPE cables of sizes 400 mm ² inside the pipe & restoration of the site as original.	M	100
12	Cable route markers fixing concreating as per specification	Nos.	50
13	Earthing of 33 KV RMU (Chemical Pipe Earthing 80 mm dia, 3 Mtr long, 25 KA for 3s)	Nos.	4
14	GI Strip 50x6 mm for earthing of RMU	Kg	20
B	33kV Cable for ring formation at various locations (10 Km)	10	
15	33 kV, 3 Core XLPE Cable, 400 mm ²	Mtr.	22000
16	Touch Proof Cable termination Kit for 33 kV 3C 400 mm ² XLPE Cable	Set	4
17	Outdoor Type Cable Termination Kit for 33 kV 3C 400 mm ² XLPE Cable	Set	40
18	Straight Through Cable Jointing Kit for 33 kV 3C 185 mm ² XLPE Cable	Set	60
19	Digging of trench by excavation of earth, filling of sand 100 mm below Cable and 100 mm above cable, covering sand bed with tiles, backfilling, ramming and compaction of exavated earth as per specifications and standard practice for laying double circuit 33 kV 3C XLPE cables of sizes 400 mm ² including cost of sand, tiles, etc.	RM	8000
20	Digging of trench by excavation of earth, Supply & Laying of 200 mm dia RCC Pipe, backfilling, ramming and compaction of exavated earth for laying 33 kV 3C XLPE cables of sizes 400 mm ² .	M	1000
21	Supply and Laying of 200 mm dia HDPE Pipe for laying 33 kV 3C XLPE cables of sizes 400 mm ² inside the pipe. (Pipe to be laid by HDD method)	M	2800
22	Cutting of trench in puckka area, Supply and Laying of 200 mm dia HDPE Pipe for laying double circuit 33 kV 3C XLPE cables of sizes 400 mm ² inside the pipe & restoration of the site as original.	M	100
23	Cable route markers fixing concreating as per specification	Nos.	50
C	Van mounted micro processor based cable fault locator suitable for locating fault upto 33 kV voltage level as per technical specifications	No.	1

Schedule of material for installation of AMR for DTRs and high load consumer with modem

Sl. No.	Particulars	Unit	Qty.
1	11 kV feeder meter Trivector type DLMS Compliant with RS-485 port Category-A.	No	1
2	11 kV C.T of suitable ratio as per site requirement	No	
3	11 kV P.T of ratio 11000/110 V	No	

Schedule of materials Renovation & Modernisation of DT Structures at Srinagar City

Sl. No.	Particulars	Unit	Qty.
1	Earthing of Distribution Transformers	Nos.	100
2	L. Arresters for Distribution Transformers	Set	100
3	11 kV G.O. Switches for Distribution Transformers	Set	80
4	11 kV D.O. Sets for Distribution Transformers	Set	100
5	Replacement of LT Cable 120 sqmm	Mtr	500
6	Replacement of LT Cable 240sqmm	Mtr	300
7	Replacement of LT Cable 300sqmm	Mtr	200
8	New/Replacement of LT Distribution Box with mounting clamps for existing 250 KVA DTR with MCCBs With suitable incoming & outgoing ckt.	Nos.	
9	New/Replacement of LT Distribution Box with mounting clamps for existing 630 KVA DTR with MCCBs With suitable incoming & outgoing ckt.	Nos.	
10	New/Replacement of LT Distribution Box with mounting clamps for existing 1000 KVA DTR with incomer ACB and outgoing MCCBs With suitable outgoing ckt.	Nos.	
11	Cutting of earth/soil and disposal to suitable dumping area	Cum	
12	Repair of plinth/foundation of existing DTs by cement/Plastering	Job	
13	Temporary Dismantling of Existing DTs	Job	
14	Realignment of existing tilted STPs	Nos.	
15	Dismantling of old foundation and preparing new foundation for 400kVA	Nos.	
16	Dismantling of old foundation and preparing new foundation for 630kVA	Nos.	
17	Dismantling of old foundation and preparing new foundation for 1000kVA	Nos.	
18	Plain concrete dismentling	Cum	
19	Dismantling of RCC work	Cum	
20	Dismantling of Brick work	Cum	
21	Dismantling of door and window	each	
22	Dismantling of steel and weld section angle	kg	
23	Slab dismantling	sqm	
24	Re-plastering 1:6 , 18mm outer and 12mm inner	sqm	
25	Plaster removal	sqm	
26	Disposal of Malwa to nearest location from site(within 10kms)	Cum	
27	PCC (1:4:8)	Cum	
28	Excavation of soil for Foundation & Trenches	Cum	
29	RCC Raft (1:1.5:3) for Foundations	Cum	
30	RCC Pedestal- for all Foundations (1:1.5:3)	Cum	
31	RCC Wall for Trench	Cum	
32	RCC Cover Slab for Trench	Cum	
33	Sand Filling in S/s	Cum	
34	Demolishing of Existing Foundation	Cum	
35	Structural Steel MS	MT	
36	Chequered Plate MS	MT	
37	Shuttering/Formwork	Sqm	
38	Backfilling of Foundation by Soil	Cum	
39	Reinforcement Steel	MT	
40	Dismantling of Support Structure	MT	
41	Foundation Bolt (20 Dia Foundation Bolt)	Kg	
42	Dismantling of Poles for 33kV, 11kV & LT Line	Nos.	
43	Dismantling of Lines for 33kV, 11kV & LT Line	Kms	
44	Dismanteling of existing 11kV LA sets on Power transformer secondary side where augmentation is proposed	No.	