



## SOUTHERN POWER DISTRIBUTION COMPANY OF TG LIMITED

**D.No :SP.O.O.Ms.No.40, Dt:06.01.2026**

2nd Alt. source to 33/11kV Ravindra Society SS from 132/33kV Khaitalapur EHT SS

Estimate for providing of second alternate source to 33/11kV Ravindra Society Indoor SS from 132/33kV Khaitalapur EHT SS which involves laying of 33KV 3X400sq.mm XLPE UG Cable (Double Run) for a distance of 5KM pertaining to Madhapur Lines Section & Sub Division of Banjarahills Lines Division of SCADA circle and work executed by the Master plan SD-IV Section & Sub-Division of MP-1 Division of Hyderabad Masterplan Circle under T&D Improvements to original works (Summer Action Plan 2026).

### Report to Accompany:

General: The Estimate proposal is for providing of second alternate source to 33/11kV Ravindra Society Indoor SS from 132/33kV Khaitalapur EHT SS which involves laying of 33KV 3X400sq.mm XLPE UG Cable (Double Run) for a distance of 5KM pertaining to Madhapur Lines Section & Sub Division of Banjarahills Lines Division of SCADA circle and work executed by the Master plan SD-IV Section & Sub-Division of MP-1 Division of Hyderabad Masterplan Circle under T&D Improvements to original works (Summer Action Plan 2026).

### Justification:

1.The existing 33/11kV Ravindra Society Indoor SS has total 2No's PTRs (2X16MVA) and the existing 33kV Source details are as shown below:

- i) Regular source of supply: 33kV Jubilee hills Ravindra Society feeder emanating from 132/33kV Jubilee hills EHT SS with maximum load of 180A, recorded on 15.06.2025 @ 13:00Hrs
- ii) 1st alternate source of supply: 33kV Ravindra Society (Madhapur) feeder emanating from 132/33kV Madhapur EHT SS with maximum load of 264A recorded on 18.06.2025 @ 22:00Hrs.

Though 2No's 33kV sources are available to this SS, as the 33/11kV Ravindra Society Indoor SS having 2no#s 16MVA PTRs with each PTR feeding to one source and in case of failure of supply from any one of the source the existing feeder not sufficient to cater the load total substation load, Hence for maintaining N-1 redundancy a dedicated 33kV Feeder from 132/33kV Khaitalapur EHT is proposed to provide uninterrupted power supply.

Therefore, in order to provide uninterrupted power supply as well as to meet the future load demand, it is necessitated to provide 2nd alternate source to 33/11kV Ravindra Society Indoor SS from 132/33kV Khaitalapur EHT SS.

In view of the above, as per the request of the Superintending Engineer/SCADA and higher authorities instructions vide

1. Memo.No. CE (O&M)/SE(O&M)/DE(O&M)/-II/D.No.1705/25-26, Dt: 14.08.2025 &
- 2.Endt.No:CE/MP/DE(T)/ADE(T)/F.No.1025/D.No.23/08/25, a Joint Inspection was conducted along with Lines wing under control of the ADE/Lines/Madhapur, SCADA Circle on 02.09.2025 and accordingly, this estimate proposal is prepared & submitted for sanction.

### Additional Justification:

- i) Due to existence of railway crossing in the route of now proposed 33kV UG Cable, the railway crossing permission charges, lump sum amount of Rs.10,00,000/- is proposed for a length of 150m Double run cable i.e., 300 m and as per the demand notice received from the railway department, payment will be done.
- ii) Supply of 1200m of 6" B class GI Pipe, 400m of 6# DWC pipe & 800m 9# HUME Pipe are proposed in the estimate as a provision to utilize where ever necessitated as per the field conditions.

Note: The rates adopted in the estimate are as per SSY FY2025-26.

Hence estimate is here with prepared and submitted under T&D Improvement works as per request by Superintending Engineer, SCADA Circle.

### Main Features:

The proposal envisages the following:

In 33kV Line work:

- a) Laying & Raising of 33kV 3X400Sq.mm XLPE UG Cable Double Run for a distance of 5KM & 60Mtrs which includes:
  1. Laying of Double Run 33kV UG in CC/BT (CC/BT Compressor) # 4100 m.
  2. Laying of Double Run 33kV UG across CC/BT (Road crossing) # 200m
  3. Laying of Double Run 33kV UG in Hard Gravel # 100m
  4. Laying of Double Run 33kV UG in Hard Rock # 100m



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5. Laying of 33KV UG cable by HDD method # 1000m
6. Laying of Second cable - 4400m
7. Supply of 6# B class GI Pipe-1200m
8. Supply of 6# DWC Pipe-400m
9. Supply of 9# HUME Pipe-800m
- b) Erection of DP Structure:
  1. Erection of 3 No's DP Structure with 2No's RS joist 175X85mm Box poles and 1no. RS Joist 175x85mm Box pole for cable raise ((i) Railway Crossing incoming side of UG Cable at Khaitalapur (ii) Railway Crossing outgoing side of UG Cable at Khaitalapur (iii) 33/11kV Ravindra Society SS).
  2. Erection of RS joist 175X85mm pole for cable raising at 132/33kV Khaitalapur SS - 1No.
  3. Erection of 33kV 800A D/B AB Switch on now proposed DP Structure - 3No's
- c) Road cutting charges - BT road in GHMC/R&B and Centage Charges @ 16.5% for a distance of 5,000m totaling to an amount of Rs.1,32,51,900.00/- (excl. 18% GST) is proposed in the estimate.
- d) Railway Crossing permission charges - for a lump sum amount of Rs.10,00,000/- (excl. 18% GST) is proposed in the estimate.
- e) HDD proposed at Railway Crossing for 150m and 350m at Parwath Nagar X-road. Total HDD length proposed 500m Double Run.
- f) Mass Concreting is proposed for providing concrete at two locations (i). at road crossing and (ii). at 132/33kV Khaitalapur premises. (200m\*0.6\*0.3+200mr\*0.6\*0.3).

Note:

CI Pipes:

--> 2 Nos. for DP structure & 1 No. for end kit at Railway Crossing DP Structure incoming, outgoing UG Cable and at 33/11kV Ravindra Society SS.

--> 2 Nos. at 132/33kV Khaitalapur EHT SS

<b>Division</b>	<b>: CGM/MP &amp; LINES</b>	<b>Section</b>	<b>: AE/MASTER PLAN 4</b>
<b>Project Type</b>	<b>: T&amp;D Improvements to original works</b>	<b>Cost Center</b>	<b>: 112110101</b>
<b>Estimate No.</b>	<b>: T-2527-12-01-01-01-001</b>	<b>Estimate Description</b>	<b>: 2nd Alt. source to 33/11kV Ravindra Soci</b>
<b>Network No.</b>	<b>: 510000329895</b>	<b>Estimate Created Date</b>	<b>: 18.11.2025</b>
<b>Reservation No.</b>	<b>: 8002877408</b>	<b>Plant</b>	<b>: 1080</b>
<b>User Status</b>	<b>: APRD NBGD</b>	<b>System Status</b>	<b>: CRTD AVAC</b>
<b>Estimate Approved date</b>	<b>: 06.01.2026</b>	<b>Estimate Sanctioned By</b>	<b>: CGM_OPN</b>

<b>Total Estimate Cost (Gross):</b>		81276049.67
<b>Less Credits :</b>		0.00
<b>Estimate Cost (Net) :</b>		81276049.67
<b>SL.No.</b>	<b>Proposals involves</b>	<b>Total in Rs.</b>
1	10 - 33kV Line Material	43686234.97
2	20 - 33kV Line Labour	20772572.7006
3	30 - Road CUTting charges	15637242
4	40 - Railway Crossing Permission	1180000



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Estimate Number : T-2527-12-01-01-01-001

Activity No : 10

Activity Description : 33kV Line Material

S.No	Materials Code	Materials Text	Item Catagory	Quantity	Unit	Rate in Rs.	Amount in Rs.
1	CBX30006	33KV Tree Retardant XLPE UG Cb 3x400Sqmm	Stock item	10,120.000	M	3,547.53	35,901,003.60
2	SCB10114	33KV 3X400 Heat Shble out/d end ter kit	Stock item	12	EA	5,342.09	64,105.08
3	SCB10115	33KV 3X400 Heat Shble in/d end ter kit	Stock item	2	EA	3,995.46	7,990.92
4	SCB10113	33KV 3X400 Heat Shble Str thr joint kit	Stock item	36	EA	29,462.33	1,060,643.88
5	ABS30004	33KV 800A D/B AB SWITCH WITH INSULATORS	Stock item	3	EA	61,108.57	183,325.71
6	LAS00003	33KV Lightning Arrestors Line Type	Stock item	9	EA	2,498.30	22,484.70
7	MST00032	RS Joist 175x85mm	Stock item	4,750.000	KG	71.96	341,810.00
8	MST00012	MS Channel 100x50 mm	Stock item	825.000	KG	65.73	54,227.25
9	MST00015	MS Flat 75x8	Stock item	375.000	KG	66.55	24,956.25
<b>Material Cost</b>							37,660,547.39
<b>3 % S &amp; H Charges :</b>							1129816.42
<b>3 % Contingencies on materials:</b>							1129816.42
<b>10 % Estt. &amp; General Charges :</b>							3766054.74
<b>Total :</b>							43686234.97



# SOUTHERN POWER DISTRIBUTION COMPANY OF TG LIMITED

Estimate Number : T-2527-12-01-01-01-001

Activity No : 20

Activity Description : 33kV Line Labour

S.No	Services Code	Services Text	Item Catagory	Quantity	Unit	Rate in Rs.	Amount in Rs.
1	SWR22092	survey line&cabl inc peg mark&tree clear	—	5.000	KM	765.00	3,825.00
2	SWR11230	Load-11/33KV XLPE UG Cable for all sizes	—	34	DR	1,024.00	34,816.00
3	SWR11860	Transport of Cond Drum,VCBs upto 10Km	—	17	EA	2,720.34	46,245.78
4	SWR11231	Unload-11/33KV XLPE UG Cable all sizes	—	34	DR	1,024.00	34,816.00
5	SWR11980	Lay-DR 33KV 3x400sqmm UG Cb CC/BT Compsr	—	4,100.000	M	1,388.84	5,694,244.00
6	SWR11988	Lay-DR 33KV 3x400sqmm UG Cb CC/BT RdCrsg	—	200.000	M	1,587.07	317,414.00
7	SWR11972	Lay-DR 33KV 3x400sqmm UG Cb HG/BC/CC/BT	—	100.000	M	749.00	74,900.00
8	SWR11002	Laying of 33kV UG 2Run in Hard rock.	—	100	RMT	1,430.00	143,000.00
9	SWR11001	HDD cable with HDPE pipe in Hard rock	—	1,000.000	M	6,993.00	6,993,000.00
10	SWR12004	Raise-DR 33KV 3x400sqmm UG Cb on support	—	60.000	M	323.85	19,431.00
11	SWR10988	Lay-2nd Cable in Excavated Trench	—	4,400.000	M	204.10	898,040.00
12	SWR25089	S&E-Smart RFID marker	—	46	EA	2,745.00	126,270.00
13	SWR10382	Straight through joint 33kv 3x400 xlpe	—	36	EA	5,700.78	205,228.08
14	SMR40081	S-6" B Class GI pipe 5mm thck 20Kg/M	—	1,200.000	M	1,344.00	1,612,800.00
15	SMR11610	S-6" DWC pipe	—	400.000	M	1,012.00	404,800.00
16	SMR40001	Hume pipe 9" size	—	800.000	M	125.00	100,000.00
17	SWR10387	OD/ldoor end termination 33kv 3x400 xlpe	—	14	EA	2,764.76	38,706.64
18	SWR21903	Consult charg for providng traffic diver	—	5,000.000	M	30.00	150,000.00
19	SWR10206	LOADING of MS Channel,Angles,Flats&Rods	—	1.200	TO	221.00	265.20
20	SWR10524	UNLOADING of MS Channel,Angles,Flats&Rod	—	1.200	TO	185.00	222.00
21	SWR10204	LOADING of R.S. Joists 175 x 85 mm	—	19	EA	76.00	1,444.00
22	SWR10132	TRANSPORT OF STEEL 10 TO 20KM	—	5.950	TO	412.08	2,451.88
23	SWR10522	UNLOADING of R.S. Joists 175 x 85 mm	—	19	EA	50.00	950.00
24	SWR10642	Fabricate&Paint-	—	9	EA	512.55	4,612.95



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		175x85/150x75mm RS Joist					
25	SWR10640	Painting of RS Joist(1C RO, 2C Al.Paint)	—	10	EA	1,132.00	11,320.00
26	SWR11040	Ex of Hard pit w/o blast 0.75X0.9X1.95M	—	10	EA	990.68	9,906.80
27	SWR11266	Erection of 9/10/11Meter Box pole	—	9	EA	2,643.83	23,794.47
28	SWR10918	Earthing for raisers of SS Flat 75x8 mm.	—	78.130	RMT	50.00	3,906.50
29	SWR10356	Mass concreting of supports incl. cement	—	10.500	M3	6,579.00	69,079.50
30	SWR11890	Coping & Muffing-Iron Pole	—	0.310	M3	3,893.00	1,206.83
31	SWR10869	Fabrication of struc.with welding.	—	0.825	TO	3,426.00	2,826.45
32	SWR10396	Erect of 33kv LA stn type incl earthing	—	3	SET	880.00	2,640.00
33	SWR10239	LOADING of 33 KV AB SWCH Con 400/800 A	—	3	EA	126.00	378.00
34	SWR10557	UNLOADING of 33 KV AB SWCH Con 400/800 A	—	3	EA	79.00	237.00
35	SWR10392	Erection of 33kv ABSwitch incl earthing	—	3	EA	4,500.00	13,500.00
36	SMR11483	S-CI Pipe earthing 80mm dia 2.75m long	—	11	EA	2,789.00	30,679.00
37	SWR10357	ERECT. OF LINES-Providing of earthing	—	11	EA	1,234.20	13,576.20
38	SWR10359	ERECT. OF LINES-Providing of RCC collar	—	11	EA	386.00	4,246.00
39	SMR40085	S-RCC Cable Joint/Route Marker	—	42	EA	484.00	20,328.00
40	SWR12101	Paint-Feeder Name on Support incl. Paint	—	10	EA	53.00	530.00
41	SMR11488	S-GI Bolts & Nuts,Washers etc.,	—	100.000	KG	117.50	11,750.00
42	SWR10881	Painting AB switch OP rods with PO red	—	3	EA	142.00	426.00
43	SWR12331	AB Switch Coil Earthing GI No. 8 Wire	—	3	EA	146.63	439.89
44	SWR10356	Mass concreting of supports incl. cement	—	72.000	M3	6,579.00	473,688.00
45	SWR10346	Erection of RS Joist 175 x 85 mm	—	1	EA	1,934.00	1,934.00
<b>Service Cost</b>							17,603,875.17
<b>GST 18%</b>							3,168,697.53
<b>3 % S &amp; H Charges :</b>							0.00
<b>3 % Contingencies on materials:</b>							0.00
<b>10 % Estt. &amp; General Charges :</b>							0.00
<b>Total :</b>							20772572.70



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Estimate Number : T-2527-12-01-01-01-001

Activity No : 30

Activity Description : Road CUTting charges

S.No	Services Code	Services Text	Item Catagory	Quantity	Unit	Rate in Rs.	Amount in Rs.
1	SWR24700	Road Cutting - BT Road in GHMC/R&B	—	5,000.000	M	2,275.00	11,375,000.00
2	SWR25246	Centage Chrgs-16.5% on RMT-BT GHMC/R&B	—	5,000.000	M	375.38	1,876,900.00
Service Cost							13,251,900.00
GST 18%							2,385,342.00
3 % S & H Charges :							0.00
3 % Contingencies on materials:							0.00
10 % Estt. & General Charges :							0.00
Total :							15637242.00



# SOUTHERN POWER DISTRIBUTION COMPANY OF TG LIMITED

Estimate Number : T-2527-12-01-01-01-001

Activity No : 40

Activity Description : Railway Crossing Permission

S.No	Services Code	Services Text	Item Catagory	Quantity	Unit	Rate in Rs.	Amount in Rs.
1	SWR24771	Railway Crossing Permission Charges	—	1,000,000	LS	1.00	1,000,000.00
Service Cost							1,000,000.00
GST 18%							180,000.00
3 % S & H Charges :							0.00
3 % Contingencies on materials:							0.00
10 % Estt. & General Charges :							0.00
Total :							1180000.00

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