

ANN - 160 AUTORECLOSER & SECTIONALISER

Sl.No.	Circle	District	Division	SUBDIVISION	SECTION	NAME OF 33KV FEEDER	Urban/ Rural	Location	Total AR/SR Qty required (In nos)	AR with DTU (in nos)	SR with DTU (in nos)
										Req	Req
1	Bolangir	Sonepur	Sonepur	Sonepur	Sonepur	Nandanmal	Rural		1	1	
2	Rourkela	Sundargarh	RED	BISRA/BASANTI	GBPALLI/BNDM	TOWN 2 BISRA	Urban	GBPALLI T-OFF	1	1	
3	Rourkela	Sundargarh	RSED	INDUSTRIAL ESTATE	INDUSTRIAL ESTATE	INDUSTRIAL ESTATE	Urban	Industrial Estate PSS	1	1	
4	Rourkela	Sundargarh	Rajgangpur	RGP-2	KUTRA	KUTRA	RURAL	RGP GSS TO BAI-BAI CHOWK	1	1	
5	Rourkela	Sundargarh	Rajgangpur	KALUNGA	KALUNGA-2	KALUNGA INDUSTRIAL	RURAL	KALUNGA GSS TO OTTO INDIA PSS	1	1	
6	Rourkela	Sundargarh	Rajgangpur	KALUNGA	KALUNGA-2	KALUNGA	RURAL	GSS TO AMTOLA	1	1	
7	Kalahandi	Kalahandi	KEED	KESINGA	UTKELA	BHAWANIPATNA-1	RURAL	UTKELA	0	0	0
8	Kalahandi	Kalahandi	KEED	KESINGA	NUNMATH	MEGALIFT-2	RURAL	AMATH	0	0	0
7	kalahandi	kalahandi	KEED	NARLA	MADANPUR	NARLA	RURAL	PAJIBAHALI	1	1	0
10	kalahandi	kalahandi	KEED	BHAWANIPATNA-II	BHAWANIPATNA-II	BHANGABARI	URBAN	Towards PHD SAGADA	0	0	0
11	Kalahandi	Kalahandi	KEED	KESINGA	BORDA	riar-2(BORDA T-OFF SINDHEIK	RURAL	SINDHEIKELA PSS TAP	0	0	0
12	Kalahandi	Nuapada	NED	Khariar Road	Khariar Road-ii	Bisora	Rural	T-off Saipala,Bisora and Nuapada	0	0	0
13	Kalahandi	Nuapada	NED	Khariar	Sinapali	Khariar-1(Sinapali)	Rural	Chalna T-off	0	0	0
8	Kalahandi	Nuapada	NED	Nuapada	Komna	Old Nuapada	Rural	Komna To Kurumpuri,Tarbod	1	1	0
15	Kalahandi	Nuapada	NED	Khariar	Khariar	Khariar2	Urban	Khariar	0	0	0
16	Kalahandi	Kalahandi	KWED	Charbahal	Jaypatna	33kv Badkutru	Urban/ Rural	Near baner 4-Pole towards Jaypatna Side.	0	0	0
17	Kalahandi	Kalahandi	KWED	Charbahal	Koksara	33kv Ladugaon Fdr.	Urban/ Rural	Near Ladugaon 4-pole towards Gadramal & Temra T-off	0	0	0
18	Kalahandi	Kalahandi	KWED	Charbahal	Charbahal	33kv Charbahal	Rural	Near Mahichala	0	0	0
9	Sambalpur	Jharsuguda	BNED	Belpahad	Bandhbahal	33KV OPGC	Rural	hill top	1	1	
20	Sambalpur	Jharsuguda	JED	SDO Kuchinda	ESO Jamankira	33kv Jamankira	Rural	Towards Lasa, towards bhojpur			
21	Sambalpur	Sambalpur	JED	Kuchinda	Kuchinda	33kv Kusumi Feeder	RURAL	NEAR LAD LOCATION(TOWRDS KUSUMI)			
22	Sambalpur	Sambalpur	JED	Kuchinda	Kuchinda	33kv Kusumi Feeder	RURAL	NEAR HADIPALI PSS (TOWARDS LAIDA)			
23	Sambalpur	Jharsuguda	JED	SDO-2 Jharsuguda	Kolabira	33kv Kolabira	urban	NEAR PATRAPALI 4POLE (TOWARDS MEGALIFT)			
10	Sambalpur	Jharsuguda	JED	SDO-1 Jharsuguda	Sahapada	33kv Industrial-1	urban	4 pole towards LN Metallics	2	2	
25	Sambalpur	Jharsuguda	JED	SDO-2 Jharsuguda	Kolabira	33kv Kolabira	urban	NEAR PATRAPALI 4POLE (TOWARDS HTC)			
11	Sambalpur	Sambalpur	SED	SDO-2 Sambalpur	Balibandha	33kv Cheruapada	Urban	Busstand	1	1	

Annexure 161 - Addition of New LT ABC

Sl.No.	Circle	11kV Feeder Name	Existing DTR Name	DTR capacity in Kva	Proposed Length In CKm	Proposed AB Cable Size(95/120/ 150 sqmm)	Reason for proposal (Overloading/ Undervoltage/ N-1/LOADGROWTH)
1	KALAHANDI	NO 2	NUABANDH	500	0.6	95	OVERLOADING
2	KALAHANDI	NO 2	POLICE STATION	315	0.3	95	OVERLOADING
3	KALAHANDI	NO 2	GIRLS HIGH SCHOOL	500	0.4	95	OVERLOADING
4	KALAHANDI	NO 2	GAYATRI MANDIR	500	0.4	95	OVERLOADING
5	KALAHANDI	BARABANDHA	PIPADI	63	1	95	OVERLOADING
6	KALAHANDI	KASTURA	WEEKLY MARKET	315	0.7	95	OVERLOADING
7	KALAHANDI	KASTURA	KANYASHRAM	100	0.7	95	OVERLOADING
8	KALAHANDI	KASTURA	HANDAKHAL PADA	100	0.7	95	OVERLOADING
9	KALAHANDI	KASTURA	HANUMAN TEMPLE	250	0.7	95	OVERLOADING
10	KALAHANDI	FARANG	FARANG	100	0.7	95	OVERLOADING
11	KALAHANDI	FARANG	FUNDA	100	0.7	95	OVERLOADING
12	KALAHANDI	FARANG	BORGUDA	100	0.7	95	OVERLOADING
13	KALAHANDI	FARANG	RENGSAPALI	100	0.7	95	OVERLOADING
14	KALAHANDI	CHICHIGUDA	BALICHHADA	100	0.7	95	OVERLOADING
15	KALAHANDI	CHICHIGUDA	ARKOTA	100	0.7	95	OVERLOADING
16	KALAHANDI	CHICHIGUDA	BHEJIPADAR	100	0.7	95	OVERLOADING
17	KALAHANDI	CHICHIGUDA	TRIKHUTIPADA	100	0.7	95	OVERLOADING
18	KALAHANDI	DUAJHAR	DUAJHAR BUS STOP	100	0.7	95	OVERLOADING
19	KALAHANDI	DUAJHAR	MEHER PADA DUJHAR	100	0.7	95	OVERLOADING
20	KALAHANDI	BABEBIR	SAGARBHOI	100	0.7	95	OVERLOADING
21	KALAHANDI	BABEBIR	SECTION OFFICE	100	0.7	95	OVERLOADING
22	KALAHANDI	BABEBIR	BABEBIR	100	0.7	95	OVERLOADING
23	KALAHANDI	SINGJHOR	SINGJHOR	100	0.7	95	OVERLOADING
24	KALAHANDI	TOWN	BODEN BUS STAND	100	0.7	95	OVERLOADING
25	KALAHANDI	TOWN	LITI SARGI	100	0.7	95	OVERLOADING
26	KALAHANDI	KHARI	KHARI	100	0.6	95	OVERLOADING
27	KALAHANDI	BORIGAON	BORIGAON	100	0.6	95	OVERLOADING
28	KALAHANDI	BANKA	CHALAMUNDA	100	0.6	95	OVERLOADING
29	KALAHANDI	BANKA	BAJRANG PADA	100	0.6	95	OVERLOADING
30	KALAHANDI	BANKA	KOLDA	100	0.6	95	OVERLOADING
31	ROURKELA	OSAP	SINGHASNI PALLI	500	1.5	95	OVERLOADING

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32	ROURKELA	OSAP	LEPROCY HOSPITAL	100	0.5	95	OVERLOADING
33	ROURKELA	OSAP	SINGHASNI PALLI	500	1.5	95	OVERLOADING
34	ROURKELA	PANPOSH BASTI FEEDER	FRIDAY MARKET	100	0.7	95	OVERLOADING
35	ROURKELA	PANPOSH BASTI FEEDER	TUNGURITOLA	100	0.7	95	OVERLOADING
36	ROURKELA	GOGUA	JAKEIKELA RANGMATIA SAHI	100	0.15	95	OVERLOADING
37	ROURKELA	BANEIKELA	KANTAPALI	63	0.5	95	OVERLOADING
38	ROURKELA	MAHULPADA	MAHULDIHA	100	0.2	95	OVERLOADING
39	ROURKELA	BADGAON	RUGUDA	100	0.15	95	OVERLOADING
40	ROURKELA	MAHULPADA	EKPADI	63	0.16	95	OVERLOADING
41	ROURKELA	MAHULPADA	RENGALI	63	0.3	95	OVERLOADING
42	ROURKELA	GOGUA	JAKEIKELA RANGMATIA SAHI	100	0.15	95	OVERLOADING
43	ROURKELA	OLD GURUNDIA	UPARPADA BRAHMASAHU	100	0.4	95	OVERLOADING
44	ROURKELA	BIJABAHAL	PATUA BAHAL	63	0.5	95	OVERLOADING
45	ROURKELA	TOWN-2	STATION NUATOTI	100	1.3	95	OVERLOADING
46	ROURKELA	GOPAPALI	NAIK PADA	100	0.5	95	LOAD GROWTH
47	ROURKELA	KALUNGA TOWN	MUSLIM BASTI	500	0.5	95	LOAD GROWTH
48	ROURKELA	VEDVYAS	STEEL CRAFT	250	0.3	95	LOAD GROWTH
49	ROURKELA	BARGAON	LAMP	100	0.5	95	OVERLOADING
50	ROURKELA	BARGAON	TAHASHIL CHOWCK	100	0.5	95	OVERLOADING
51	ROURKELA	BARGAON	POST OFFICE	100	0.5	95	OVERLOADING
52	ROURKELA	BARGAON	MAHABIR CHOWCK	100	0.3	95	OVERLOADING
53	ROURKELA	JARONGOLI	TIKILIPADA	63	0.5	95	OVERLOADING
54	ROURKELA	COLLEGE	COLLEGE ROAD	500	0.5	95	LOAD GROWTH
55	ROURKELA	COLLEGE	THANAPADA	250	0.3	95	LOAD GROWTH
56	ROURKELA	COLLEGE	GOVT COLLEGE	100	0.3	95	LOAD GROWTH
57	ROURKELA	COLLEGE	BS HIGH SCHOOL	250	0.3	95	LOAD GROWTH
58	ROURKELA	RRIT	LIG 2	100	0.3	95	LOAD GROWTH
59	ROURKELA	BALIJORI	BALIJORI DSS	100	0.4	95	LOAD GROWTH
60	ROURKELA	KARUABAHAL	SARESKHOL	25	0.5	95	LOAD GROWTH
61	ROURKELA	JHARIAPALI	BARHAKHAI	100	0.5	95	LOAD GROWTH
62	ROURKELA	GOPALPUR	KULAPADA	25	0.8	95	LOAD GROWTH

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63	ROURKELA	GOPALPUR	MEHERPADA	25	0.5	95	LOAD GROWTH
64	ROURKELA	TAPARIA	HARIHAT	63	0.8	95	LOAD GROWTH
65	ROURKELA	TAPARIA	SAMARPINDHA	25	0.5	95	LOAD GROWTH
66	SAMBALPUR	BRAJRAJNAGAR	OPM COLONY	100	0.7	95	OVERLOADING
67	SAMBALPUR	BRAJRAJNAGAR	OPM COLONY H-LINE	100	0.6	95	OVERLOADING
68	SAMBALPUR	BRAJRAJNAGAR	BUS STAND	315	1	95	OVERLOADING
69	SAMBALPUR	JAMGAON	RENKALI	100	0.1	95	OVERLOADING
70	SAMBALPUR	11KV KADOPADA	KELDA	63	0.5	95	OVERLOADING
71	SAMBALPUR	PALSAMA	KARLAGA MARKET	63	0.6	95	OVERLOADING
72	SAMBALPUR	JSG NO.3	DIPUPADA DURGAMANDAP	250	1	95	OVERLOADING
73	SAMBALPUR	JSG NO.3	KABARASTANPADA	500	0.5	95	OVERLOADING
74	SAMBALPUR	JSG NO.3	DIPUPADA GUALAPADA	100	1	95	OVERLOADING
75	SAMBALPUR	SUNARIMUNDA	PAUL HEIGHT	100	0.4	95	OVERLOADING
76	SAMBALPUR	JHADESWAR	KALATALAB-1	250	0.4	95	OVERLOADING
77	SAMBALPUR	BURLA FEEDER	KANIJHURI-I	100	0.3	95	OVERLOADING
78	SAMBALPUR	SBP2	RAJAPADA	100	0.2	95	N-1
79	SAMBALPUR	SBP2	LARPANK	100	0.2	95	N-1
80	SAMBALPUR	MAHALAXMI	MUNDAGHAT 1	100	0.45	95	OVERLOADING
81	SAMBALPUR	GODABHAGA	SANATIKRA NEW	63	0.45	95	OVERLOADING
82	SAMBALPUR	GODABHAGA	BHOITIKRA NEW	100	0.5	95	OVERLOADING
83	SAMBALPUR	GODABHAGA	KULERJOR NEW	63	0.6	95	OVERLOADING
84	SAMBALPUR	GODABHAGA	BABA DHABA CHHAWK	100	0.5	95	OVERLOADING
85	SAMBALPUR	GODABHAGA	LADUKHAI NEW	100	0.6	95	OVERLOADING
86	SAMBALPUR	NAVODAYA	KADAMPADA COLONY	100	0.5	95	OVERLOADING
87	SAMBALPUR	KALAMATI	KALAMATI KALYANMANDAP NEAR	63	0.45	95	OVERLOADING
88	SAMBALPUR	DIARY FARM	LITC NEAR	100	0.45	95	OVERLOADING
89	SAMBALPUR	MUNDAGHAT	KUTURPADA NEW	100	0.45	95	OVERLOADING
90	SAMBALPUR	MUNDAGHAT	ADITYA ETA BHATA NEAR	100	0.45	95	OVERLOADING
91	SAMBALPUR	SAKHIPADA	SURESH PUJARI GALI	500	0.1	95	UNDERVOLTAGE
92	SAMBALPUR	CS COLONY	PANTHA NIWAS	250	1.2	95	OVERLOADING
93	SAMBALPUR	KHINDA	MENDILIPALI	63	0.7	95	OVERLOADING

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94	SAMBALPUR	RENGALI TOWN	BHIM NAGAR	200	1.2	95	OVERLOADING
95	SAMBALPUR	RENGALI TOWN	RENGALI BASTI	315	1.5	95	OVERLOADING
96	SAMBALPUR	MURA	RENGALPALI	25	0.5	95	OVERLOADING
97	SAMBALPUR	MURA	PADHANPALI	16	0.5	95	OVERLOADING
98	BOLANGIR	BALANGIR-3	NEHERUNAGAR	500	0.5	95	OVERLOADING
99	BOLANGIR	BALANGIR-2	COLDSTORAGE	500	0.8	95	UNDERVOLTAGE
100	BOLANGIR	BALANGIR-2	COLDSTORAGE	500	0.3	95	UNDERVOLTAGE
101	BOLANGIR	KUSANG	KUSANG BASTI	100	0.6	95	OVERLOADING
102	BOLANGIR	JHARMUNDA	LUCHKIBAHAL	100	0.4	95	OVERLOADING
103	BOLANGIR	KUSANG	BUROMUNDA BASTI	100	0.5	95	OVERLOADING
104	BOLANGIR	SARGAD	DUMERJHARAN	100	0.8	95	OVERLOADING
105	BOLANGIR	SARGAD	KUMIAPALI	100	0.6	95	OVERLOADING
106	BOLANGIR	KANDAJURI	BUDELBAHALI	100	0.5	95	OVERLOADING
107	BOLANGIR	SUJIA	BHAINSA	100	0.7	95	OVERLOADING
108	BOLANGIR	DURGAPLI	PADIABAHAL	100	0.3	95	OVERLOADING
109	BOLANGIR	DURGAPLI	PIPRDA	100	0.5	95	OVERLOADING
110	BOLANGIR	CHHUIBANDHA	BAXIUDAR	100	0.3	95	OVERLOADING
111	BOLANGIR	LUPURSINGHA	TETELGOAN	100	1	95	OVERLOADING
112	BOLANGIR	MENDA	RANISARDA VILLAGE	100	0.5	95	OVERLOADING
113	BOLANGIR	LOISINGHA	LOISINGHA TRISUL BANDHA	250	0.06	95	OVERLOADING
114	BOLANGIR	LOISINGHA	LOISINGHA GIRLS HIGH SCHOOL	100	0.1	95	OVERLOADING
115	BOLANGIR	LOISINGHA	LOISINGHA STADIUM	100	0.1	95	OVERLOADING
116	BOLANGIR	LOISINGHA	LOISINGHA SISHU MANDIR	100	0.07	95	OVERLOADING
117	BOLANGIR	KHALIAPALI	JHARNIPALI	100	0.4	95	OVERLOADING
118	BALANGIR	TENTULIKHUNTI	BANDHKEDA100KVA	100	0.6	95	OVERLOADING
119	BALANGIR	SARGAJ	ANTARDA SISHU MANDIR100KVA	100	0.5	95	OVERLOADING
120	BALANGIR	TOWN-1	SAINAGAR100KVA	100	0.3	95	OVERLOADING
121	BALANGIR	SARGAJ	SARGAJ63KVA	63	0.5	95	OVERLOADING
122	BALANGIR	TARVA GENERAL	BHOISAPALI63KVA	63	0.6	95	OVERLOADING
123	BALANGIR	BANKIGHIRDI	KUKUDAJHOLI	25	0.5	95	OVERLOADING
124	BALANGIR	BANKIGHIRDI	KALATIKIRA	25	0.6	95	OVERLOADING

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125	BALANGIR	BANKIGHIRDI	PALSAPALI,VILL	100	0.4	95	OVERLOADING
126	BALANGIR	BADKARLEY	GIDMAL	63	0.3	95	OVERLOADING
127	BALANGIR	BADKARLEY	BALENPALI	100	0.3	95	OVERLOADING
128	BALANGIR	MAYABARHA	MAYABARHA	100	0.8	95	OVERLOADING
129	BALANGIR	MAYABARHA	SARASMAL	100	0.2	95	OVERLOADING
130	BALANGIR	RAMPUR	BHAWANIPALI	100	0.2	95	OVERLOADING
131	BALANGIR	RAMPUR	KANTAPALI	100	0.2	95	OVERLOADING
132	BALANGIR	GANDABAHAL	GANDABAHAL PANCHAYAT COLLEGE	100	0.5	95	OVERLOADING
133	BARGARH	TOWN-1	MEHERPADA 500 KVA	500	1	95	OVERLOADING
134	BARGARH	TOWN-1	SKT GALI 100 KVA	100	0.5	95	OVERLOADING
135	BARGARH	TOWN-1	MEHERPADA 500 KVA	500	1	95	OVERLOADING
136	BARGARH	TOWN-2	DORA PETROL PUMP 500 KVA	500	0.4	95	OVERLOADING
137	BARGARH	TOWN-2	JHANKARPADA 100 KVA	100	0.5	95	OVERLOADING
138	BARGARH	TOWN-2	100 KVA DAKBANGALA	100	0.9	95	OVERLOADING
139	BARGARH	TOWN-1	OFFICE 250 KVA	250	0.5	95	OVERLOADING
140	BARGARH	TOWN-1	OFFICE 500 KVA	500	0.6	95	OVERLOADING
141	BARGARH	TALPALI	63KVA JAMUTPALI	63	0.8	95	OVERLOADING
142	BARGARH	11KV MELCHHAMUNDA	250KVA BIJU CHOWK	250	0.15	95	OVERLOADING
143	BARGARH	11KV MELCHHAMUNDA	25KVA GYAN	25	0.3	95	LOAD GROWTH
144	BARGARH	11KV SARGIBAHAL	25KVA PANCHABHAYA	25	0.35	95	LOAD GROWTH
145	BARGARH	11KV MAHULPALI	63KVA PATHURI	63	0.6	95	LOAD GROWTH
146	BARGARH	CHURIAPALI	TANDOL 63 KVA	63	0.5	95	LOAD GROWTH
147	BARGARH	SOHELA TOWN	INSIDE THANA S/S	100	1	95	UNDERVOLTAGE
148	BARGARH	SOHELA TOWN	BUDHARAJA S/S	250	1	95	UNDERVOLTAGE
149	BARGARH	GRINJEL	KENDMUNDI CRICKET FIELD	100	1.5	95	OVERLOADING
150	BARGARH	LUHURACHATI	AINLAPALI	100	1.5	95	OVERLOADING
151	BARGARH	RAMPUR	DHIRPUR	63	0.5	95	OVERLOADING
152	BARGARH	RAMPUR	DHIRPUR	10	0.06	95	OVERLOADING
153	BARGARH	TULANDI	SAMPLESWARITIKIRA	25	0.3	95	OVERLOADING
154	BARGARH	TULANDI	BARANGPALI	100	0.8	95	OVERLOADING
155	BARGARH	RESHAM	RESHAM	100	1	95	OVERLOADING

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156	BARGARH	TULANDI	SIKIRDHI	63	0.5	95	OVERLOADING
157	BARGARH	LUHURACHATI	MEHERPADA 500 KVA	500	1.5	95	OVERLOADING
158	BARGARH	GRINJEL	BUDAMAL	100	1	95	OVERLOADING
159	BARGARH	LARAMBHA	LARAMBHA COLLEGE	63	1	95	OVERLOADING
160	BARGARH	SARANDA	JAMTIKIRA	100	0.3	95	OVERLOADING
161	BARGARH	SARANDA	JAMTIKIRA A.P	100	1	95	OVERLOADING
162	BARGARH	SARANDA	BAJRANG PADA	500	0.3	95	OVERLOADING
163	BARGARH	SARANDA	BHALUPALI	500	0.5	95	OVERLOADING
164	BARGARH	KURUAN	ADGAON,KHALIAKALA	25	0.35	95	LOAD GROWTH
165	BARGARH	HATPADA	SATSANG BIHAR	500	0.15	95	OVERLOADING
166	BARGARH	PVT BUS STAND	PUNJABI PADA	250	0.8	95	OVERLOADING
167	BARGARH	PVT BUS STAND	GORUMARKET	250	0.8	95	OVERLOADING
168	BARGARH	NAGENPALI	PILOT SAHA	100	1.3	95	OVERLOADING
169	BALANGIR	DAHIMAL	MUNDAPALA	63	0.1	95	OVERLOADING
170	BALANGIR	ARJUNPUR	AMDAHAN	100	0.6	95	OVERLOADING
171	BALANGIR	ARJUNPUR	BARHAKANA	100	0.7	95	OVERLOADING
172	BALANGIR	SAMARA	MAHIPUR	100	1.5	95	OVERLOADING
173	KALAHANDI	NO 1	POWER HOUSE	630	0.4	120	OVERLOADING
174	KALAHANDI	NO 1	POWER HOUSE	315	0.5	120	OVERLOADING
175	KALAHANDI	NO 1	BCC BANK	500	0.5	120	OVERLOADING
176	KALAHANDI	TOWN FEEDER	GRAPHITE	500	0.3	120	UNDERVOLTAGE
177	ROURKELA	BALBHADRA MARKET	UTTAM BASTI	500	1	120	OVERLOADING
178	ROURKELA	HANUMANVATIKA	GUDIATOLA 2	250	0.5	120	OVERLOADING
179	ROURKELA	COLLEGE	KHUNTIA	100	0.7	120	OVERLOADING
180	ROURKELA	RGH	RGH	500	1.2	120	OVERLOADING
181	ROURKELA	CHHEND PH-1	AHUTI BHAWAN	500	0.3	120	OVERLOADING
182	ROURKELA	CHHEND PH-1	FITNESS PARK	500	0.3	120	OVERLOADING
183	ROURKELA	CHHEND PH-1	L&T	500	0.6	120	OVERLOADING
184	ROURKELA	CHHEND PH-2	SHIVA MANDIR	315	0.4	120	OVERLOADING
185	ROURKELA	KV3RD PHASE	HIGB/205	500	1	120	N-1
186	ROURKELA	PRADHANPALLI	BLUEBELL SCHOOL TO JAGANNATHMANDIR	2*100+250	0.65	120	N-1

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Sl.No.	Circle	11kV Feeder Name	Existing DTR Name	DTR capacity in Kva	Proposed Length In CKm	Proposed AB Cable Size(95/120/150 sqmm)	Reason for proposal (Overloading/ Undervoltage/ N-1/LOADGROWTH)
187	ROURKELA	PRADHANPALLI	PANCHABATI TO BLUE BELL	2*100+250	0.65	120	N-1
188	ROURKELA	PRADHANPALLI	BIRSAMUNDA SCHOOL TO BLUE BELL SCHOOL	100+2*100	0.5	120	N-1
189	ROURKELA	JALDA INDUSTRIAL	DEOGAON CHUNGI GATE	500	1.5	120	OVERLOADING
190	ROURKELA	JALDA INDUSTRIAL	JAGANATH MANDIR A BLOCK-1	250	1.5	120	OVERLOADING
191	ROURKELA	JALDA TOWN FEEDER	MODERN INDIA	500	0.8	120	OVERLOADING
192	ROURKELA	JALDA TOWN FEEDER	RH COLONY	250	0.5	120	OVERLOADING
193	ROURKELA	JALDA C BLOCK FEEDER	RK TENT HOUSE	250	0.5	120	OVERLOADING
194	ROURKELA	JALDA INDUSTRIAL FEEDER	DEOGAON JENA KHADAN	63	1	120	OVERLOADING
195	ROURKELA	COLLEGE FEEDER	COLLEGE	100	1	120	OVERLOADING
196	ROURKELA	VEDVYAS	PANDEY COLONY	250	0.9	120	LOAD GROWTH
197	ROURKELA	GOPAPALI	PAHADI	250	0.8	120	LOAD GROWTH
198	ROURKELA	VEDVYAS	OLD OFFICE	500	0.3	120	LOAD GROWTH
199	ROURKELA	VEDVYAS	PANDEY COLONY	250	0.9	120	LOAD GROWTH
200	ROURKELA	GOPAPALI	PAHADI	250	0.8	120	LOAD GROWTH
201	ROURKELA	VEDVYAS	OLD OFFICE	500	0.3	120	LOAD GROWTH
202	ROURKELA	IDC	DURGA	200	1.5	120	LOAD GROWTH
203	ROURKELA	RAJGANGPUR TOWN-II	WEEKLY MARKET	500	1	120	LOAD GROWTH
204	ROURKELA	SUNDERGARH-I	KHAMARIPADA	500	0.7	120	LOAD GROWTH
205	ROURKELA	SUNDERGARH-I	DENGIBADI	500	0.5	120	LOAD GROWTH
206	ROURKELA	SUNDERGARH-I	PATRAPADA	500	0.4	120	LOAD GROWTH
207	SAMBALPUR	TOWN	MAUSIMA MANDIR	500	0.5	120	OVERLOADING
208	SAMBALPUR	TOWN	BAZARPADA	500	1	120	OVERLOADING
209	SAMBALPUR	TOWN	SIMPLEX	500	1	120	OVERLOADING
210	SAMBALPUR	TOWN	THANA	500	0.5	120	OVERLOADING
211	SAMBALPUR	TOWN-2	BHITIRIASAHI	315	1.5	120	OVERLOADING
212	SAMBALPUR	KALIMANDIR	PAHADI	250+100	1	120	OVERLOADING
213	SAMBALPUR	KALIMANDIR	KALIMANDIR	500	0.5	120	OVERLOADING
214	SAMBALPUR	RAWWATER	JMCOLONY,ATTACHAKI	500	1.1	120	OVERLOADING
215	SAMBALPUR	BUDHARAJA	SRITCOLONY	500	1.2	120	OVERLOADING
216	SAMBALPUR	FARMROAD	NALIAKHANDI	250	0.5	120	LOAD GROWTH
217	SAMBALPUR	FARMROAD	HOUSING BOARD	250	0.5	120	LOAD GROWTH

Annexure 161 - Addition of New LT ABC

Sl.No.	Circle	11kV Feeder Name	Existing DTR Name	DTR capacity in Kva	Proposed Length In CKm	Proposed AB Cable Size(95/120/ 150 sqmm)	Reason for proposal (Overloading/ Undervoltage/ N-1/LOADGROWTH)
218	SAMBALPUR	FARMROAD	HOUSING BOARD 2	250	0.5	120	LOAD GROWTH
219	SAMBALPUR	PHD	LAXMI TALKIES	500	1	120	OVERLOADING
220	SAMBALPUR	CS COLONY	TAPASWINI	250	1	120	OVERLOADING
221	SAMBALPUR	DHANUPALI	T/F COLLEGE CHOWK	2*100	1	120	OVERLOADING
222	SAMBALPUR	DHANUPALI	KHUMBHARPADA	315	0.5	120	OVERLOADING
223	SAMBALPUR	DHANUPALI	POLICE COLONY	500	0.5	120	OVERLOADING
224	BOLANGIR	BALANGIR-1	KOSHALNAGAR	500	1	120	OVERLOADING
225	BOLANGIR	BALANGIR-2	CHATIAPALI	500	0.7	120	OVERLOADING
226	BOLANGIR	GANDHINAGAR	RADHAKRISHNA	500	1.1	120	OVERLOADING
227	BOLANGIR	GANDHINAGAR	GANDHI STATUE	750	0.4	120	OVERLOADING
228	BOLANGIR	GANDHINAGAR	GANDHI STATUE	1000	0.5	120	OVERLOADING
229	BOLANGIR	GANDHINAGAR	DURGAMANDIR	500	0.5	120	OVERLOADING
230	BOLANGIR	GANDHINAGAR	RAMESWAR NAGAR	500	0.5	120	OVERLOADING
231	BOLANGIR	GANDHINAGAR	FISHERY OFFICE	500	1	120	OVERLOADING
232	BOLANGIR	KANSARIPADA	CITY POLICE	500	0.8	120	OVERLOADING
233	BOLANGIR	KANSARIPADA	SURUCHIMART	500	0.5	120	OVERLOADING
234	BOLANGIR	KANSARIPADA	KANSARIPADA	500	1.5	120	OVERLOADING
235	BOLANGIR	KANSARIPADA	SONEPUR ROAD	500	0.8	120	OVERLOADING
236	BOLANGIR	BEHERAPALI	BEHERAPALI	100	0.5	120	OVERLOADING
237	BOLANGIR	INDUSTRIAL ESTATE-01	SAGARPADA	500	1	120	OVERLOADING
238	BOLANGIR	INDUSTRIAL ESTATE-01	SASTRINAGAR	500	1	120	OVERLOADING
				TOTAL	150		

Annexure 162: Cost Analysis of 33 KV Bay with VCB (O/D), CT, PT, CRP (I/D) for Feeder protection							
Sl No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)	Remarks	Ref
A	Cost of PSC Poles				0.00		
B	Cost of Transformer/Breaker/ Joist Pole				968186.40		
1	11 Mtr RS Joist Pole	Nos.	4	42246.60	168986.40	CDB @ 48%	
2	33KV VCB 1600Amp with indoor CR Panel & outdoor CT (600-300-150/1-1A, 15VA) for feeder protection(without PT)	No	1	799200.00	799200.00	CDB @ 48%	
C	Cost of materials for line				912791.40		
1	GI channel 100x50x6mm.4.5mtr. Long,8Nos.(9.2kg./mtr.)	Kg.	344	111.00	38184.00	CDB @ 48%	
2	GI Channel 75x40x6mm.-8x4mtr. Long, (6.8Kg./mtr.)	Kg.	321	111.00	35631.00	CDB @ 48%	
3	GI angle 50x50x6mm.-8x4.5mtr. Long, (4.5Kg./mtr.)	Kg.	225	111.00	24975.00	CDB @ 48%	
4	Fish Plate	Kg.	8	137.64	1101.12	CDB @ 48%	
5	33KV Pin insulator polymer	No.	6	710.40	4262.40	CDB @ 48%	
6	33KV Disc Insulator (polymer)	No.	18	2130.95	38357.08	CDB @ 48%	
7	33KV H/W Fitting (B&S Type) 120KN (Single tension HW Fitting for 232mmsq Conductor)	No.	18	2486.40	44755.20	CDB @ 48%	
8	PG Clamp for 232mmsq AAA Conductor	No.	21	1702.00	35742.00	CDB @ 48%	
9	Aluminium Socket 240 mm	No.	18	66.60	1198.80	CDB @ 48%	
10	232sqmm AAA Conductor	Km.	0.10	231620.00	23162.00	CDB @ 48%	
11	33 KV 1250 Amp Isolator with earth switch	Set	1	149317.20	149317.20	CDB @ 48%	
12	33 KV 1250 Amp Isolator without earth switch	Set	2	135094.40	270188.80	CDB @ 48%	
13	Lightening Arrester(30KV, 10A)	Nos.	3	15318.00	45954.00	CDB @ 48%	
14	G.I. Pipe Earthing 3mtr. Long (OD/ID-50mm/40mm)	No.	7	1554.00	10878.00	CDB @ 48%	
15	GI Flat 50x6mm	Kg.	296	111.00	32856.00	CDB @ 48%	
16	G.I. Nuts, bolt & Washer	Kg.	30	115.44	3463.20	CDB @ 48%	
17	Danger Plate	No.	4	118.40	473.60	CDB @ 48%	
18	Fabrication & Galvanisation	Kg.	890	14.80	13172.00	CDB @ 48%	
19	2.5mmsq 10core Control Cable	Mtr	100	381.84	38184.00	CDB @ 48%	
20	2.5mmsq 4core Control Cable	Mtr	100	165.76	16576.00	CDB @ 48%	
21	33KV 1ph Oil Cooled PT	No	3	28120.00	84360.00	CDB @ 48%	
D	SUBTOTAL	D=A+B+C			1880977.80		
E	Landing Cost on Materials	E	18%		338576.00		
F	Stock, Storage & Insurance @ 3% of D=E	F	3%		56429.33		
G	Sub Total (F)	G=D+F			1937407.14		
H	T&P @ 2% of F	H	2%		38748.14		
I	Contingency @ 3% of F	I	3%		58122.21		
J	Transportation @ 7.5% of F	J	7.5%		145305.54		
K	Erection Charges for PSC Pole (20% OF (A+A*3%)) + GST	K	20%		0.00		
L	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))+ GST	L	5%		58836.69		
M	Erection Charges for other materials for line & substations (10% of (C+C*3%))+ GST	M	10%		110940.67		
N	Sub Total (M)	N=E+G+H+I+J +K+L+M			2687936.39		
O	Cost of Civil Works	O			243293.68		
1	Concreting ratio 1:1.5:3(M-20 Grade) (500mmX500mmX1800mm) = 0.45Cu.mtr(Per Pole)	M3	1.80	7845.64	14122.16	RC	6200006564
2	Couping ratio 1:1.5:3(M-20 Grade) with dimension (500X500X450)= 0.1125 Cu mtr(Per Pole)	M3	0.45	7845.64	3530.54	RC	6200006564
3	Earthing pit for pipe earthing	No.	7	4465.98	31261.87	RC	6200006564
4	Foundation for VCB	No.	1	53827.89	53827.89	RC	TPCODL RC
5	Foundation for CT & PT	No.	1	48479.59	48479.59	RC	TPCODL RC
6	Extension of Cable Trench	Rmt	10	9207.16	92071.62	RC	6200006564
P	Sub Total (O)	P=N+O			2931230.07		
Q	Other Overheads (including supervision charges)	Q	0%		0.00		
R	Sub Total	R=P+Q			2931230.07		
S	Labour Cess @ 1% of S=T	S	1%		29312.30		
T	Grand Total	T=R+S			2960542.37		
or say					2960542.00		
				In Cr	0.29605		

Annexure 163: Cost Analysis of 11 KV Bay with VCB (O/D), CT, PT, CRP (I/D) for feeder protection							
Sl No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)	Remarks	Ref
A	Cost of PSC Poles				0.00		
B	Cost of Transformer/Breaker/ Joist Pole				679586.40		
1	11 Mtr RS Joist Pole	Nos.	4	42246.60	168986.40	CDB @ 48%	
2	11KV VCB 800Amp with outdoor CT (600-300-150/1-1A) for feeder protection with CRP	No	1	510600.00	510600.00	CDB @ 48%	
C	Cost of materials for line				531469.48		
1	GI channel 100x50x6mm.4.5mtr. Long,8Nos.(9.2kg./mtr.)	Kg.	201	111.00	22311.00	CDB @ 48%	
2	GI Channel 75x40x6mm.-8x4mtr. Long, (6.8Kg./mtr.)	Kg.	200	111.00	22200.00	CDB @ 48%	
3	Glangle 50x50x6mm.-8x4.5mtr. Long, (4.5Kg./mtr.)	Kg.	90	111.00	9990.00	CDB @ 48%	
4	Fish Plate	Kg.	12	111.00	1332.00	CDB @ 48%	
5	11KV Pin insulator polymer	No.	6	296.00	1776.00	CDB @ 48%	
6	11 KV Disc Insulator (polymer)	No.	18	1702.00	30636.00	CDB @ 48%	
7	11 KV H/W Fitting (B&S Type) 90KN (Single tension HW Fitting	No.	18	518.00	9324.00	CDB @ 48%	
8	PG Clamp for 100mmsq AAA Conductor	No.	21	858.40	18026.40	CDB @ 48%	
9	Aluminium Socket 120 mm	No.	18	32.56	586.08	CDB @ 48%	
10	100 sqmm AAA Conductor	Km.	0.10	81400.00	8140.00	CDB @ 48%	
11	11 KV 800 Amp Isolator with earth switch	Set	1	78218.00	78218.00	CDB @ 48%	
12	11 KV 800 Amp Isolator without earth switch	Set	2	63995.20	127990.40	CDB @ 48%	
13	Lightening Arrester(12KV, 10A)	Nos.	3	5254.00	15762.00	CDB @ 48%	
14	G.I. Pipe Earthing 3mtr. Long (OD/ID-40mm)	No.	7	1554.00	10878.00	CDB @ 48%	
15	GI Flat 50x6mm	Kg.	296	111.00	32856.00	CDB @ 48%	
16	G.I. Nuts, bolt & Washer	Kg.	30	115.44	3463.20	CDB @ 48%	
17	Danger Plate	No.	4	118.40	473.60	CDB @ 48%	
18	Fabrication & others	Kg.	491	14.80	7266.80	CDB @ 48%	
19	11 KV 1ph Oil Cooled PT	No	3	25160.00	75480.00	CDB @ 48%	
20	2.5mmsq 10core Control Cable	Mtr	100	381.84	38184.00	CDB @ 48%	
21	2.5mmsq 4core Control Cable	Mtr	100	165.76	16576.00	CDB @ 48%	
D	SUBTOTAL	D=A+B+C			1211055.88		
E	Landing Cost on Materials	E	18%		217990.06		
F	Stock, Storage & Insurance @ 3% of D=E	F	3%		36331.68		
G	Sub Total (F)	G=D+F			1247387.56		
H	T&P @ 2% of F	H	2%		24947.75		
I	Contingency @ 3% of F	I	3%		37421.63		
J	Transportation @ 7.5% of F	J	7.5%		93554.07		
K	Erection Charges for PSC Pole (20% OF (A+A*3%))+ GST	K	20%		0.00		
L	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))+ GSt	L	5%		41298.47		
M	Erection Charges for other materials for line & substations (10% of (C+C*3%))+ GST	M	10%		64594.80		
N	Sub Total (M)	N=E+G+H+I+J+K+L+M			1727194.33		
O	Cost of Civil Works	O			243293.68		
1	Concreting ratio 1:1.5:3(M-20 Grade) (500mmX500mmX1800mm) = 0.45Cu.mtr(Per Pole)	M3	1.80	7845.64	14122.16	RC	6200006564
2	Couping ratio 1:1.5:3(M-20 Grade) with dimension (500X500X450)= 0.1125 Cu mtr(Per Pole)	M3	0.45	7845.64	3530.54	RC	6200006564
3	Earthing pit for pipe earthing	No.	7	4465.98	31261.87	RC	6200006564
4	Foundation for VCB	No.	1	53827.89	53827.89	RC	TPCODL RC
5	Foundation for CT & PT	No.	1	48479.59	48479.59	RC	TPCODL RC
6	Extension of Cable Trench	Rmt	10	9207.16	92071.62	RC	6200006564
P	Sub Total (O)	P=N+O			1970488.00		
Q	Other Overheads (including supervision charges)	Q	0%		0.00		
R	Sub Total	R=P+Q			1970488.00		
S	Labour Cess @ 1% of S=T	S	1%		19704.88		
T	Grand Total	T=R+S			1990192.88		
or say					1990193.00		
				In Cr	0.199019		

Annexure 164: Cost Analysis of 11 KV I/D Switchgear Panel							
Sl No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)	Remarks	Ref
A	Cost of PSC Poles				0.00		
B	Cost of Transformer/Breaker/ Joist Pole				995418.40		
1	11KV Indoor Air Insulated switchgear panel consisting of Breaker- 630 amp, Busbar 800 A, (copper), CT & CT(CTR-600-300- 150/1- I A. 15VA, STC 25KA/3sec, class: 0.5, 5P10) with multifunctional numeric Relay and multifunctional Meter for Transformer protection	No	1	995418.40	995418.40	CDB @ 48%	
C	Cost of materials for line				377540.91		
1	G.I. Pipe Earthing 3mtr. Long (OD/ID-50mm/40mm)	No.	2	1554.00	3108.00	CDB @ 48%	
2	GI Flat 50x6mm	Kg.	70.8	111.00	7858.80	CDB @ 48%	
3	G.I. Nuts, bolt & Washer	Kg.	10	115.44	1154.40	CDB @ 48%	
4	2.5mmsq 10core Control Cable	Mtr	20	381.84	7636.80	CDB @ 48%	
5	2.5mmsq 4core Control Cable	Mtr	20	165.76	3315.20	CDB @ 48%	
6	11 KV 3C 400 sqmm XLPE (Armoured,Steel Wire Wound) Cable	Mtr	120	2374.58	284949.15	RC	6200006717
7	I/D Termination Kit for 11 KV 3C 400 sqmm XLPE Cable	Nos	2	14181.36	28362.72	CDB @ 48%	
8	O/D Termination Kit for 11 KV 3C 400 sqmm XLPE Cable	Nos	2	20577.92	41155.84	CDB @ 48%	
D	SUBTOTAL	D=A+B+C			1372959.31		
E	Landing Cost on Materials	E	18%		247132.68		
F	Stock, Storage & Insurance @ 3% of D=E	F	3%		41188.78		
G	Sub Total (F)	G=D+F			1414148.09		
H	T&P @ 2% of F	H	2%		28282.96		
I	Contingency @ 3% of F	I	3%		42424.44		
J	Transportation @ 7.5% of F	J	7.5%		106061.11		
K	Erection Charges for PSC Pole (20% OF (A+A*3%)) + GST	K	20%		0.00		
L	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))+ GST	L	5%		60491.58		
M	Erection Charges for other materials for line & substations (10% of (C+C*3%))+ GST	M	10%		45886.32		
N	Sub Total (M)	N=E+G+H+I+J+K+L+M			1944427.18		
O	Cost of Civil Works	O			239111.02		
1	Earthing pit for pipe earthing	Nos.	2	4465.98	8931.96	RC	6200006564
2	Extension of Cable Trench	Rmt	25	9207.16	230179.06	RC	6200006564
P	Sub Total (O)	P=N+O			2183538.20		
Q	Other Overheads (including supervision charges)	Q	0%		0.00		
R	Sub Total	R=P+Q			2183538.20		
S	Labour Cess @ 1% of S=T	S	1%		21835.38		
T	Grand Total	T=R+S			2205373.58		
or say					2205374.00		
				In Cr	0.22054		



Annexure 165: Cost Analysis of PC +6 Tower for River Crossing							
Sl No	Description of materials	Unit	Qty	Rate (Rs)	Amount (Rs)	Remarks	Ref
A	Cost of PSC Poles	A					
B	Cost of RS Joist / Transformers	B			0.00		
C	Cost of materials for line	C			2564538.66		
1	PC Tower (5.346 X 1000 Kg per Tower)	Kg	10692.00	97.60	1043485.74	RC	TPCODL RC
2	+6 Mtr Extention (2.246 X 1000 Kg per Tower)	Kg	4492.00	97.60	438396.74	RC	TPCODL RC
3	Stub & Cleats (0.610 X 1000 Kg per Tower)	Kg	1220.00	97.60	119065.90	RC	TPCODL RC
4	Template (0.888X1000 Kg per Tower)	Kg	1776.00	94.67	168141.02	RC	TPCODL RC
5	PC Tower (0.336 X 1000 Kg per Tower)	Kg	672.00	115.44	77575.68	CDB @ 48%	
6	+6 TONr Extention (0.111 X 1000 Kg per Tower)	Kg	222.00	115.44	25627.68	CDB @ 48%	
7	232 Sq.mm. Conductor (AAAC)	M	1545.00	231.62	357852.90	CDB @ 48%	
8	Earth wire 7/1.5, 250 meter + Tower earthing (50 x 4) = 450Mtr.	M	450.00	48.47	21813.08	RC	TPCODL RC
9	Double tension Hardware Fittings	EA	24.00	5120.8	122899.20	CDB @ 48%	
10	Disc insulator (B&S)120 KN polymer	EA	48.00	2131.2	102297.60	CDB @ 48%	
11	Earth wire tension fittings	EA	4.00	2174.00	8696.00	RC	TPCODL RC
12	Vibration damper for earth wire	EA	4.00	545.00	2180.00	RC	TPCODL RC
13	Vibration damper for coductor	EA	24.00	600.00	14400.00	RC	TPCODL RC
14	Copper flexible bond	EA	2.00	424.00	848.00	RC	TPCODL RC
15	Phase Plate (R,Y,B)	Set	12.00	212.00	2544.00	RC	TPCODL RC
16	Tower Number Plate	EA	2.00	133.00	266.00	RC	TPCODL RC
17	Circuit Plate	EA	4.00	133.00	532.00	RC	TPCODL RC
18	40 mm Dia. 3TONr. long G.I Earthing device	EA	4.00	1554	6216.00	CDB @ 48%	
19	Flat(GI) 50 x 6 mm	kg	200.00	111	22200.00	CDB @ 48%	
20	Danger Board	EA	4.00	118.4	473.60	CDB @ 48%	
21	POLYCARBONATE BIRD GUARD	EA	48.00	29.40	1411.20	RC	TPCODL RC
22	Anticlimbing Device	kg	211.20	113.60	23992.32	RC	TPCODL RC
23	Loop Connector	EA	12.00	302.00	3624.00	RC	TPCODL RC
D	SUBTOTAL(D)	A+B+C			2564538.66		
E	Landing Cost on Materials	E	18%		461616.96		
F	Stock, Storage & Insurance @ 3% of D=E	F	3%		76936.16		
G	Sub Total (F)	G			2641474.82		
H	T&P @ 2% of F	H	2%		52829.50		
I	Contingency @ 3% of F	I	3%		79244.24		
J	Transportation @ 7.5% of F	J	7.5%		198110.61		
K	Erection Charges for PSC Pole (20% OF (A+A*3%))+ GST	K	20%		0.00		
L	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))+GST	L	5%		0.00		
M	Erection Charges for other materials for line & substations (10% of (C+C*3%))+GST	M	10%		311694.03		
N	Sub Total (M)	N=E+G+H+I+J+K+L+M			3744970.16		
O	Cost of Civil Works & Service Charges	O			19859628.20		
1	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of Flat(GI) around pipe .	EA	4	4,465.98	17863.93	RC	TPCODL RC
2	Detail Survey of lines profile plotting, spotting and marking, as per technical specification and scope of work.	EA	2	21,476.00	42952.00	RC	TPCODL RC
3	Soil Investigation, Design, Egg., Including Report submission and approval.	EA	2	60,634.64	121269.28	RC	TPCODL RC
4	Levelling and Backfilling to prepare required land. Excavation in all type soil and rocks and back filling (back filling shall be done in layers of 500mm sprinkling of water and compactionthereafter and disposed of excess quantity of excavated soil at suitable place after back filling), & if required for filling the foundation, borrowed earth/murrum/sand shall be brought for filling and compaction,including supply of sand, all T<(>&<)>P, labour as required.	CUM	2450	869.06	2129192.59	RC	TPCODL RC
5	Soft and loose soil	CUM	213.24	869.06	185317.97	RC	TPCODL RC
6	Boring for under reemed cast in situ piling with bentonite showing for stabilisation of bore:- Pile diameter (1200 MM) and approximate length of the bore is 15 (12mtr till FGL nad 3mtr above FGL) Mtrs BY DMC method as per approved drawing.	M	792	3563.60	2822371.20	RC	TPCODL RC
7	Supply of all materials like cement, steel- Supply of all materials like cement, steel, all coarse aggregates, fine aggregates and making pile foundations of the required Tower foundation, including supply of all materials,labours and T<(>&<)>P asper specification in the RCC :1:1:2 (Grade M-25.) (with cost of cement and without steel)	Cum	238	8830.58	2101677.37	RC	TPCODL RC
8	Steel of different size(as per design) -32mm pile & ring 12mm)with cutting,bending,binding in position of M.S.Rod for reinforcement of foundation concret of pile of towers including supply of binding wire.(With supply of steel rod (TATA/RINL/SAIL make)).Ring at every 200mm.	TON	33.5	87554.82	2933086.47	RC	TPCODL RC
9	Supply and putting of MS liner of 6mm thickness and 1000mm dia as per approved drawing and as per instruction of engineer in charge.	TON	72	105132.10	7569511.20	RC	TPCODL RC
10	Pile riser, cap, tie-beam with RCC: 1:1.5:3 (Grade M-20) , including supply of all materials like Cement,coarse and fine aggregates ,shutteringand supply of labours,de-watering,proper curing of the foundations/concrete and T<(>&<)>P in line with the Specification and as per direction of Engineer in Charge. (with cost of cement and without steel)	Cum	185	7845.64	1448227.24	RC	TPCODL RC
11	Steel of different size(as per design) with cutting,bending,binding in position of M.S.Rod for reinforcement of foundation concret of pile riser, cap and tie beam including supply of binding wire. (With supplyof steel rod (TATA/RINL/SAIL make))	TON	1	87554.82	87554.82	RC	TPCODL RC
12	Design, Engineering, Providing and laying of plain cement concrete (PCC 1:3:6) of grade M10 with approved quality coarse aggregates (Nominal size 12mm to 20mm), fine aggregates, cement in tower foundation asblind layer inclusive of labour charges for concrete mixing & curing. This includes supply of all labourers, T<(>&<)>P and dewatering wherever required as per Technical specification and instruction of	Cum	14.216	6192.02	88025.80	RC	TPCODL RC
13	Shoring And Shuttering required in wet or special locations with supply of all materials, T<(>&<)>P and Labour.(Required for riser works	Sq.Mtr	286	1094.77	312578.33	RC	TPCODL RC
P	Sub Total	P=N+O			23604598.36		
Q	Other Overheads (including supervision charges)	Q	0%		0.00		
R	Sub Total	R=P+Q			23604598.36		
S	Labour Cess @ 1% of S=T	S	1%		236045.98		
T	Grand Total	T=R+S			23840644.35		
				or say	23840644.00		
				In Cr	2,3841		
Note	TPCODL RC (RC-4600001535 M/S Emphoria)						

Annexure 166: Cost Analysis of 11 KV UG							
Sl No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)	Remarks	Ref
A	Cost of PSC Poles	A			0.00		
B	Cost of RS Joist Poles /Transformers	B			0.00		
C	Cost of materials for line	C			2065921.13		
1	11 KV 3C 300sqmm XLPE cable	Mtr	1000.00	1883.05	1883050.85	RC	6200006717
2	I/D Jointing Kit for 3C, 300 sqmm XLPE	Nos.	1.00	13428.04	13428.04	CDB @ 48%	
3	O/D Jointing Kit for 3C, 300 sqmm XLPE	Nos.	1.00	19565.60	19565.60	CDB @ 48%	
4	Straight Jointing Kit for 3C, 300 sqmm XLPE Cable	Nos.	4.00	37469.16	149876.64	CDB @ 48%	
D	SUBTOTAL	D=A+B+C			2065921.13		
E	Landing Cost on Materials	E	18%		371865.80		
F	Stock, Storage & Insurance @ 3% of D=E	F	3%		61977.63		
G	Sub Total	G=D+F			2127898.76		
H	T&P @ 2% of F	H	2%		42557.98		
I	Contingency @ 3% of F	I	3%		63836.96		
J	Transportation @ 7.5% of F	J	7.5%		159592.41		
K	Erection Charges for PSC Pole (20% OF (A+A*3%)) + GST	K	20%		0.00		
L	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))+ GST	L	5%		0.00		
M	Erection Charges for other materials for line & substations (10% of (C+C*3%))+ GST	M	10%		251092.05		
N	Sub Total	N=E+G+H+I+J+K+L+M			3016843.96		
O	Cost of Civil Works	O			3079746.59		
1	Making Trenchless ducts with 160 mm dia HDPE pipe casing using HDD machine including supply of HDPE pipe as per IS 4984, PN4 Class PE80	Mtr	800	3180.10	2544080.00	RC	6200006564
2	1052399 Excavation of cable trench length by providing all necessary tool, manpower, pump etc, suitable for HT & LT cable laying .BA will supply necessary barricades at the excavation site.	Cmtr.	96	844.92	81111.88	RC	6200006564
3	1052761 Sand work Supplying and spreading, filling other works with fine sand under floors, ground etc. as per EIC instruction. Scope of work also includes watering, ramming, consolidating and dressing complete and other works if required at site.	Cmtr.	48	1207.02	57937.06	RC	6200006564
4	1052762- Brick work Supply, laying and fixing of 1st class fly ash bricks for any type of works (cable layingetc.)Note : rate will be per brick.	No.	8000	15.34	122720.00	RC	6200006564
5	1052442- Backfilling with same earth BA will Back fill the cable excvation site with same earth.BA will provide necessary Tools,Machinery & Manpower for the activity.	Cmtr.	48	295.00	14160.00	RC	6200006564
6	Cable Route Marker along the cable route at an interval of 30mtrs with civil works	Nos.	33	1221.50	40309.52	RC	6200006564
7	Reconstruction of Road & other utilities after laying of Cable by Trench	M3	48	4571.42	219428.13	RC	TPCODL RC
P	Sub Total	P=N+O			6096590.55		
Q	Other Overheads (including supervision charges) @ 6% of P	Q	0%		0.00		
R	Sub Total	R=P+Q			6096590.55		
S	Labour Cess @ 1% of R	S	1%		60965.91		

T	Grand Total	T=R+S			6157556.46		
				or say	6157556.00		
				In Cr	0.615756		

Annexure 167: Cost Analysis of 33KV UG							
Sl No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)	Remarks	Ref
A	Cost of PSC Poles	A			0.00		
B	Cost of RS Joist Poles /Transformers	B			0.00		
C	Cost of materials for line	C			3650892.56		
1	33 KV 3C 400sqmm XLPE cable	Mtr	1000.00	3165.25	3165254.24	RC	6200006717
2	I/D Jointing Kit for 3C, 400 sqmm XLPE	Nos.	1.00	30344.44	30344.44	CDB @ 48%	
3	O/D Jointing Kit for 3C, 400 sqmm XLPE	Nos.	1.00	49217.40	49217.40	CDB @ 48%	
4	Straight Jointing Kit for 3C, 400 sqmm XLPE Cable	Nos.	4.00	101519.12	406076.48	CDB @ 48%	
D	SUBTOTAL	D=A+B+C			3650892.56		
E	Landing Cost on Materials	E	18%		657160.66		
F	Stock, Storage & Insurance @ 3% of D=E	F	3%		109526.78		
G	Sub Total	G=D+F			3760419.33		
H	T&P @ 2% of F	H	2%		75208.39		
I	Contingency @ 3% of F	I	3%		112812.58		
J	Transportation @ 7.5% of F	J	7.5%		282031.45		
K	Erection Charges for PSC Pole (20% OF (A+A*3%)) + GST	K	20%		0.00		
L	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))+ GST	L	5%		0.00		
M	Erection Charges for other materials for line & substations (10% of (C+C*3%))+ GST	M	10%		443729.48		
N	Sub Total	N=E+G+H+I+J+K+L+M			5331361.89		
O	Cost of Civil Works(Incl. tax)	O			3544124.61		
1	Making Trenchless ducts with 200 mm dia HDPE pipe casing using HDD machine including supply of HDPE pipe as per IS 4984, PN8 Class PE 80	Mtr	800	3504.60	2803680.00	RC	6200006564
2	1052399 Excavation of cable trench length by providing all necessary tool, manpower, pump etc, suitable for HT & LT cable laying .BA will supply necessary barricades at the excavation site.	Cmtr.	150	844.92	126737.31	RC	6200006564
3	1052761 Sand work Supplying and spreading, filling other works with fine sand under floors, ground etc. as per EIC instruction. Scope of work also includes watering, ramming, consolidating and dressing complete and other works if required at site.	Cmtr.	60	1207.02	72421.32	RC	6200006564
4	1052762- Brick work Supply, laying and fixing of 1st class fly ash bricks for any type of works (cable layingetc.)Note : rate will be per brick.	No.	8000	15.34	122720.00	RC	6200006564
5	1052442- Backfilling with same earth BA will Back fill the cable excvaton site with same earth.BA will provide necessary Tools,Machinery & Manpower for the activity.	Cmtr.	120	295.00	35400.00	RC	6200006564
6	Cable Route Marker along the cable route at an interval of 30mtrs with civil works	Nos.	33	1221.50	40309.52	RC	6200006564
7	Reconstruction of Road & other utilities after laying of Cable by Trench	M3	75	4571.42	342856.46	RC	RC TPCODL
P	Sub Total	P=N+O			8875486.50		
Q	Other Overheads (including supervision charges) @ 6% of P	Q	0%		0.00		
R	Sub Total	R=P+Q			8875486.50		
S	Labour Cess @ 1% of R	S	1%		88754.87		
T	Grand Total	T=R+S			8964241.37		
				or say	8964241.00		
				In Cr	0.896424		

Annexure 168: Cost Analysis of 33 KV New line (Covered)							
Sl No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)	Remarks	Ref
A	Cost of PSC Poles	A			0		
B	Cost of RS Joist Poles	B			1397978.40		
1	13 Mtr RS Joist Pole (GI)	Nos	28	49927.80	1397978.40	CDB @ 48%	
C	Cost of materials for line	C			1358156.76		
1	232 sqmm AAA Insulated Conductor	Km	3.15	306060.00	964089.00	RC	6200004476
2	GI Channel 100x50x6mm	Kg	161.00	111.00	17871.00	CDB @ 48%	
3	GI Channel 75x40x6mm	Kg	240.00	111.00	26640.00	CDB @ 48%	
4	GI Angle 50x50x6mm	Kg	108.00	111.00	11988.00	CDB @ 48%	
5	Fish Plate 50x6mm	Kg	12.00	111.00	1332.00	CDB @ 48%	
6	GI Flat 50x6mm	Kg	36.00	111.00	3996.00	CDB @ 48%	
7	GI Flat 25x6mm	Kg	56.00	111.00	6216.00	CDB @ 48%	
8	33 KV V- Cross Arm (GI)	No	22	2664.00	58608.00	CDB @ 48%	
9	Back Clamp for 'V' Cross Arm	No	22	222.00	4884.00	CDB @ 48%	
10	33 KV F Clamp	No	22	444.00	9768.00	CDB @ 48%	
11	33KV Disc Insulator (B & S), Polymer	No	18	2131.20	38361.60	CDB @ 48%	
12	33KV H/W Fitting (B & S type) for Disc Insulator	No	18	2486.40	44755.20	CDB @ 48%	
13	PG Clamp for 232Sqmm AAAC	No	18	1702.00	30636.00	CDB @ 48%	
14	33KV Pin Insulator, Polymer	No	75	710.40	53280.00	CDB @ 48%	
15	HT Stay set complete	No	15	1554.00	23310.00	CDB @ 48%	
16	HT Stay Insulator	No	15	74.00	1110.00	CDB @ 48%	
17	HT Stay Clamp	Pair	15	185.00	2775.00	CDB @ 48%	
18	7/8 SWG GI wire for stay	Kg	161.00	111.00	17871.00	CDB @ 48%	
19	No. 8 SWG GI wire for earthing	Kg	35	111.00	3885.00	CDB @ 48%	
20	Earthing of support (Coil Type)	No	22	245.68	5404.96	CDB @ 48%	
21	40mm nominal bore GI Pipe earthing device	No	3	1554.00	4662.00	CDB @ 48%	
22	GI Nuts Bolt & Washer	Kg	80	115.44	9235.20	CDB @ 48%	
23	GI Barbed wire for antilimbing	Kg	56	118.40	6630.40	CDB @ 48%	
24	Danger Plate	No	28	118.40	3315.20	CDB @ 48%	
25	Fabrication & Galvanisation	Kg	509.00	14.80	7533.20	CDB @ 48%	
D	SUBTOTAL(D)	D=A+B+C			2756135.16		
E	Landing Cost on Materials	E	18%		496104.33		
F	Stock, Storage & Insurance @ 3% of D=E	F	3%		82684.05		
G	Sub Total (F)	G= D+F			2838819.21		
H	T&P @ 2% of F	H	2%		56776.38		
I	Contingency @ 3% of F	I	3%		85164.58		
J	Transportation @ 7.5% of F	J	7.5%		212911.44		
K	Erection Charges for PSC Pole (20% OF (A+A*3%))	K	20%		0.00		
L	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	L	5%		84955.15		
M	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		165070.37		
N	Sub Total (M)	N=E+G+H+I+J+K+L			3939801.47		
O	Cost of Civil Works(Incl. tax)	O			160503.75		
1	Concreting ratio 1:1.5:3(M-20 Grade) (500mmX500mmX1800mm) = 0.45Cu.mtr(Per Pole)	M3	12.60	7845.64	98855.10	RC	6200006564
2	Couping ratio 1:1.5:3(M-20 Grade) with dimension (500X500X450)= 0.1125 Cu mtr(Per Pole)	M3	3.15	7845.64	24713.78	RC	6200006564
3	Stay Concreting ratio 1:1.5:3(M-20 Grade) (500mmX500mmX800mm) = 0.2Cu.mtr(Per Stay)	M3	3.00	7845.64	23536.93	RC	6200006564
4	Earthing pit for pipe earthing	No.	3	4465.98	13397.94	RC	6200006564
P	Sub Total (O)	O=M+N			4100305.22		
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	0%		0.00		
R	Sub Total (S)	S=O+P+Q+R			4100305.22		
S	Labour Cess @ 1% of S=T	T	1%		41003.05		
T	Grand Total (U)= S+T	U=S+T			4141308.27		
				or say	4141308.00		
				In Cr	0.414131		

Annexure 169: Cost Analysis of 33 KV 4-Pole							
Sl No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)	Remarks	Ref
A	Cost of PSC Poles	A			0		
B	Cost of RS Joist Poles	B			199711.20		
1	13 Mtr RS Joist Pole (GI)	Nos	4	49927.80	199711.20	CDB @ 48%	
C	Cost of materials for line	C			551735.00		
1	GI Channel 100x50x6mm	Kg	134.00	111.00	14874.00	CDB @ 48%	
2	GI Channel 75x40x6mm	Kg	300.00	111.00	33300.00	CDB @ 48%	
3	GI Angle 50x50x6mm	Kg	90.00	111.00	9990.00	CDB @ 48%	
4	Fish Plate 50x6mm	Kg	4.00	111.00	444.00	CDB @ 48%	
5	GI Flat 50x6mm	Kg	24.00	111.00	2664.00	CDB @ 48%	
6	GI Flat 25x6mm	Kg	75.00	111.00	8325.00	CDB @ 48%	
7	33 KV Isolator (800 A)	Set	2	125134.00	250268.00	CDB @ 48%	
8	232 sqmm AAAC covered conductor	Km.	0.030	306060.00	9181.80	RC	6200004476
9	Lightning Arrester(30KV,10KA) (Station Class,class-2)	Nos.	3	15318.00	45954.00	CDB @ 48%	
10	33KV Disc Insulator (B & S), Polymer	No	21	2131.20	44755.20	CDB @ 48%	
11	33KV H/W Fitting (B & S type) for Disc Insulator	No	21	2486.40	52214.40	CDB @ 48%	
12	PG Clamp for 232Sqmm AAAC	No	24	1702.00	40848.00	CDB @ 48%	
13	33KV Pin Insulator, Polymer	No	3	710.40	2131.20	CDB @ 48%	
14	HT Stay set complete	No	6	1554.00	9324.00	CDB @ 48%	
15	HT Stay Insulator	No	6	74.00	444.00	CDB @ 48%	
16	HT Stay Clamp	Pair	6	185.00	1110.00	CDB @ 48%	
17	7/8 SWG GI wire for stay	Kg	65.00	111.00	7215.00	CDB @ 48%	
18	No. 8 SWG GI wire for earthing	Kg	6	111.00	666.00	CDB @ 48%	
19	Aluminium Socket 240 mm	Nos.	12	66.60	799.20	CDB @ 48%	
20	40mm nominal bore GI Pipe earthing device	No	4	1554.00	6216.00	CDB @ 48%	
21	GI Nuts Bolt & Washer	Kg	20	115.44	2308.80	CDB @ 48%	
22	GI Barbered wire for anticlimbing	Kg	4	118.40	473.60	CDB @ 48%	
23	Danger Plate	No	4	118.40	473.60	CDB @ 48%	
24	Fabrication & Galvanisation	Kg	524.00	14.80	7755.20	CDB @ 48%	
D	SUBTOTAL(D)	D=A+B+C			751446.20		
E	Landing Cost on Materials	E	18%		135260.32		
F	Stock, Storage & Insurance @ 3% of D=E	F	3%		22543.39		
G	Sub Total (F)	G= D+F			773989.59		
H	T&P @ 2% of F	H	2%		15479.79		
I	Contingency @ 3% of F	I	3%		23219.69		
J	Transportation @ 7.5% of F	J	7.5%		58049.22		
K	Erection Charges for PSC Pole (20% OF (A+A*3%))	K	20%		0.00		
L	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))	L	5%		12136.45		
M	Erection Charges for other materials for line & substations (10% of (C+C*3%))	L	10%		67057.87		
N	Sub Total (M)	N=E+G+H+I+J+K+L			1085192.92		
O	Cost of Civil Works(Incl. tax)	O			44931.39		
1	Concreting ratio 1:1.5:3(M-20 Grade) (500mmX500mmX1800mm) = 0.45Cu.mtr(Per Pole)	M3	1.80	7845.64	14122.16	RC	6200006564
2	Couping ratio 1:1.5:3(M-20 Grade) with dimension (500X500X450)= 0.1125 Cu mtr(Per Pole)	M3	0.45	7845.64	3530.54	RC	6200006564
4	Stay Concreting ratio 1:1.5:3(M-20 Grade) (500mmX500mmX800mm) = 0.2Cu.mtr(Per Stay)	Nos.	1.20	7845.64	9414.77	RC	6200006564
5	Earthing pit for pipe earthing	No.	4	4465.98	17863.93	RC	6200006564
P	Sub Total (O)	O=M+N			1130124.32		
Q	Other Overheads (including supervision charges) @ 6% of (O)=Q	Q	0%		0.00		
R	Sub Total (S)	S=O+P+Q+R			1130124.32		
S	Labour Cess @ 1% of S=T	T	1%		11301.24		
T	Grand Total (U)= S+T	U=S+T			1141425.56		
				or say	1141426.00		
				In Cr	0.1141426		

Annexure 170: Cost Analysis of 11 KV new line (Covered)							
SI No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)	Remarks	Ref
A	Cost of PSC Poles	A			0.00		
B	Cost of RS Joist Poles /Transformers	B			1182904.80		
1	11mtr RSJ (GI) Pole	Nos.	28	42246.60	1182904.80	CDB @ 48%	
C	Cost of materials for line	C			693534.16		
1	100 sqmm AAAC (Covered) for 11 KV line	Km.	3.15	133200.00	419580.00	CDB @ 48%	
2	GI Channel 100x50x6mm	Kg	161	111.00	17871.00	CDB @ 48%	
3	GI Channel 75x40x6mm	Kg	240	111.00	26640.00	CDB @ 48%	
4	GI Angle 50x50x6mm	Kg	108	111.00	11988.00	CDB @ 48%	
5	Fish Plate 50x6mm	Kg	12	111.00	1332.00	CDB @ 48%	
6	GI Flat 50x6mm	Kg	54	111.00	5994.00	CDB @ 48%	
7	GI Flat 25x6mm	Kg	45	111.00	4995.00	CDB @ 48%	
8	11 KV V- Cross Arm (10.2 Kg each)	No.	22	1198.80	26373.60	CDB @ 48%	
9	11 KV F Clamp 2.9 Kg. each	No.	22	355.20	7814.40	CDB @ 48%	
10	11KV Disc Insulator (B & S), Polymer	No.	18	1702.00	30636.00	CDB @ 48%	
11	11KV H/W Fitting (B & S type) for Disc Insulator	No.	18	740.00	13320.00	CDB @ 48%	
12	PG Clamp for 100 sqmm AAAC	No.	18	858.40	15451.20	CDB @ 48%	
13	Mid Span Joint	No.	3	450.00	1350.00	RC	6200002733
14	11KV Pin Insulator, Polymer	No.	75	296.00	22200.00	CDB @ 48%	
15	HT Stay set complete	No.	16	1554.00	24864.00	CDB @ 48%	
16	HT Stay Insulator	No.	16	74.00	1184.00	CDB @ 48%	
17	HT Stay Clamp	Pair	16	185.00	2960.00	CDB @ 48%	
18	7/8 SWG GI wire for stay	Kg.	172	111.00	19092.00	CDB @ 48%	
19	No-8 GI wire (for earthing)	Kg.	28	111.00	3108.00	CDB @ 48%	
20	Earthing of support (Coil Type)	No.	22	245.68	5404.96	CDB @ 48%	
21	40mm nominal bore GI Pipe earthing device	No.	3	1554.00	4662.00	CDB @ 48%	
22	GI Nuts Bolt & Washer	Kg.	80	115.44	9235.20	CDB @ 48%	
23	GI Barbed wire for anticlimbing	Kg.	56	118.40	6630.40	CDB @ 48%	
24	Danger Plate	No.	28	118.40	3315.20	CDB @ 48%	
25	Fabrication & Galvanisation	Kg.	509.00	14.80	7533.20	CDB @ 48%	
D	SUBTOTAL	D=A+B+C			1876438.96		
E	Landing Cost on Materials	E	18%		337759.01		
F	Stock, Storage & Insurance @ 3% of D=E	F	3%		56293.17		
G	Sub Total	G=D+F			1932732.13		
H	T&P @ 2% of F	H	2%		38654.64		
I	Contingency @ 3% of F	I	3%		57981.96		
J	Transportation @ 7.5% of F	J	7.5%		144954.91		
K	Erection Charges for PSC Pole (20% OF (A+A*3%))+ Applicable taxes	K	20%		0.00		
L	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))+ Applicable taxes	L	5%		71885.12		
M	Erection Charges for other materials for line & substations (10% of (C+C*3%))+ Applicable taxes	M	10%		84292.14		
N	Sub Total	N=E+G+H+I+J+K+L+M			2668259.92		
O	Cost of Civil Works	O			162072.88		
1	Concreting ratio 1:1.5:3(M-20 Grade) (500mmX500mmX1800mm) = 0.45Cu.mtr(Per Pole)	No.	13	7845.64	98855.10	RC	6200006564
2	Couping ratio 1:1.5:3(M-20 Grade) with dimension (500X500X450)= 0.1125 Cu mtr(Per Pole)	No.	3.15	7845.64	24713.78	RC	6200006564
3	Stay Concreting ratio 1:1.5:3(M-20 Grade) (500mmX500mmX800mm) = 0.2Cu.mtr(Per Stay)	M3	3.20	7845.64	25106.06	RC	6200006564
4	Earthing pit for pipe earthing	No	3	4465.98	13397.94	RC	6200006564
P	Sub Total	P=N+O			2830332.80		
Q	Other Overheads (including supervision charges) @ 6% of P	Q	0%		0.00		
R	Sub Total	R=P+Q			2830332.80		
S	Labour Cess @ 1% of R	S	1%		28303.33		
T	Grand Total	T=R+S			2858636.13		
				or say	2858636.00		
				In Cr	0.2858636		

Annexure 171: Cost Analysis of 11 KV DP with AB Switch

SI No	Description of materials	Unit	Qty	Rate (Rs.)	Amount (Rs.)	Remarks	
A	Cost of PSC Poles	A			0.00		
B	Cost of RS Joist Poles /Transformers	B			84493.20		
1	11 Mtr RSJ (GI) Pole	Nos.	2	42246.60	84493.20	CDB @ 48%	
C	Cost of materials for line	C			108512.42		
1	11 KV AB Switch (400 A)	Set	1	17538.00	17538.00	CDB @ 48%	
2	100sqmm AAAC covered conductor	Km.	0.015	133200.00	1998.00	CDB @ 48%	
3	Top Channel 100x50x6 mm	Kg	54	111.00	5994.00	CDB @ 48%	
4	Bracing Channel 70x40x6 mm	Kg	120	111.00	13320.00	CDB @ 48%	
5	Bracing Angle 50x50x6 mm	Kg	36	111.00	3996.00	CDB @ 48%	
6	GI Flat 50x6 mm	Kg	32	111.00	3562.66	CDB @ 48%	
7	GI Flat 25x3 mm	Kg	45	111.00	4995.00	CDB @ 48%	
8	Fish Plate 50x6mm	Kg	4	111.00	444.00	CDB @ 48%	
9	Lightning Arrester(12KV,10KA) Station Class	Nos.	3	5254.00	15762.00	CDB @ 48%	
10	11 KV Disc Insulator (B & S), Polymer	No.	6	1702.00	10212.00	CDB @ 48%	
11	11 KV H/W Fitting (B & S type) for Disc Insulator	No.	6	518.00	3108.00	CDB @ 48%	
12	Aluminium Socket 120mm	Nos.	6	32.56	195.36	CDB @ 48%	
13	PG Clamp for 100 sqmm AAAC	No.	6	858.40	5150.40	CDB @ 48%	
14	HT Complpete Stay Set	Set	4	1554.00	6216.00	CDB @ 48%	
15	HT stay clamp GI (1.9Kg/pair)	Set	4	74.00	296.00	CDB @ 48%	
16	H.T. Stay Insulator (Type-C)	Nos.	4	185.00	740.00	CDB @ 48%	
17	7/8 SWG GI Stay Wire	Kg	43	111.00	4773.00	CDB @ 48%	
18	GI Pipe for earthing (40 mm)	Set	3	1554.00	4662.00	CDB @ 48%	
19	GI Nuts Bolt & Washer	Kg.	15	115.44	1731.60	CDB @ 48%	
20	GI Barbered wire for anticlimbing	Kg.	4	118.40	473.60	CDB @ 48%	
21	Danger Plate	No.	2	118.40	236.80	CDB @ 48%	
22	Fabrication & Galvanisation	Kg	210	14.80	3108.00	CDB @ 48%	
D	SUBTOTAL	D=A+B+C			193005.62		
E	Landing Cost on Materials	E	18%		34741.01		
F	Stock, Storage & Insurance @ 3% of D=E	F	3%		5790.17		
G	Sub Total	G=D+F			198795.78		
H	T&P @ 2% of F	H	2%		3975.92		
I	Contingency @ 3% of F	I	3%		5963.87		
J	Transportation @ 7.5% of F	J	7.5%		14909.68		
K	Erection Charges for PSC Pole (20% OF (A+A*3%))+ Applicable taxes	K	20%		0.00		
L	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))+ Applicable taxes	L	5%		5134.65		
M	Erection Charges for other materials for line & substations (10% of (C+C*3%))+ Applicable taxes	M	10%		13188.60		
N	Sub Total	N=E+G+H+I+J +K+L+M			276709.52		
O	Cost of Civil Works	O			28500.81		
1	Concreting ratio 1:1.5:3(M-20 Grade) (500mmX500mmX1800mm) = 0.45Cu.mtr(PerPole)	M3	0.9	7845.64	7061.08	RC	6200006564
2	Couping ratio 1:1.5:3(M-20 Grade) with dimension (500X500X450)= 0.1125 Cu mtr(Per Pole)	M3	0.225	7845.64	1765.27	RC	6200006564
3	Stay Concreting ratio 1:1.5:3(M-20 Grade) (500mmX500mmX800mm) = 0.2Cu.mtr(Per Stay)	M3	0.80	7845.64	6276.51	RC	6200006564
4	Earthing pit for pipe earthing	No.	3	4465.98	13397.94	RC	6200006564
P	Sub Total	P=N+O			305210.33		
Q	Other Overheads (including supervision charges) @ 6% of P	Q	0%		0.00		
R	Sub Total	R=P+Q			305210.33		
S	Labour Cess @ 1% of R	S	1%		3052.10		
T	Grand Total	T=R+S			308262.43		
				or say	308262.00		
In Cr.					0.0308		

Annexure 172: Cost Analysis of M+6 Tower							
Sl No	Description of materials	Unit	Qty	Rate (Rs)	Amount (Rs)	Remarks	Ref
A	Cost of PSC Poles	A					
B	Cost of RS Joist / Transformers	B			0.00		
C	Cost of materials for line	C			1064533.85		
1	M+6 Tower includes 150X150X12 mm , 130x130x10 mm , 100x100x8 mm , 75X75X8mm , 50x50x6 mm , 45x45x4 mm, & 10 mm, 8 mm, 6 mm, 4 mm plate	Kg	7724.00	97.60	753823.78	RC	TPCODL RC
2	Gi Nut Bolt & Washer with differnt sized (M16x60, M16x55, M16x50, M16x45, M16x40, M16x35, M16x3.5) & (M16x12, M16x10, M16x8, M16x6)	Kg	431.16	115.44	49773.11	CDB @ 48%	
3	Stub for PC type tower includes 150x150x16 mm (4 nos. & 143.2 Kg each)	Kg	538.25	97.60	52530.31	RC	TPCODL RC
4	100 Sq.mm. Conductor (AAAC)	Mtr	315.00	81.4	25641.00	CDB @ 48%	
5	Double tension Hardware Fittings	EA	12	5120.8	61449.60	CDB @ 48%	
6	Disc insulator (B&S)120 KN polymer	EA	24	2131.2	51148.80	CDB @ 48%	
7	Earth wire tension fittings	EA	4	2174.00	8696.00	RC TPCODL	
8	Earth wire 7/1.5, 100 meter + Tower earthing (50 x 4) = 300Mtr.	Mtr	300	48.47	14542.05	RC	TPCODL RC
9	Vibration damper for coductor	Nos	12	600.00	7200.00	RC	TPCODL RC
10	Vibration damper for earth wire	Nos	2	545.00	1090.00	RC	TPCODL RC
11	Copper flexible bond	Nos	2	424.00	848.00	RC	TPCODL RC
12	Phase Plate (R,Y,B)	Nos	6	212.00	1272.00	RC	TPCODL RC
13	Tower Number Plate	Nos	2	133.00	266.00	RC	TPCODL RC
14	Circuit Plate	Nos	2	133.00	266.00	RC	TPCODL RC
15	GI Flat 50 x 6 mm	Kg	200	111	22200.00	CDB @ 48%	
16	40 mm Dia. long G.I. Earthing device	Nos	4	1554	6216.00	CDB @ 48%	
17	Danger Plate	Nos	4	118.4	473.60	CDB @ 48%	
18	Anticlimbing Device	Kg	40	118.4	4736.00	CDB @ 48%	
19	PG Clamp for 100 sq.mm AAA conductor	EA	12	138.00	1656.00	RC	TPCODL RC
20	Poly Carbonate Bird Guard	Nos	24	29.40	705.60	RC	TPCODL RC
D	SUBTOTAL(D)	A+B+C			1064533.85		
E	Landing Cost on Materials	E	18%		191616.09		
F	Stock, Storage & Insurance @ 3% of D=E	F	3%		31936.02		
G	Sub Total (F)	G=D+F			1096469.87		
H	T&P @ 2% of F	H	2%		21929.40		
I	Contingency @ 3% of F	I	3%		32894.10		
J	Transportation @ 7.5% of F	J	7.5%		82235.24		
K	Erection Charges for PSC Pole (20% OF (A+A*3%))+ GST	K	20%		0.00		
L	Erection Charges for Transformer/Breaker/ Joist Pole (5% of (B+B*3%))+GST	L	5%		0.00		
M	Erection Charges for other materials for line & substations (10% of (C+C*3%))+GST	M	10%		129383.44		
N	Sub Total (M)	N=E+G+H+I+J+K+L+M			1554528.14		
O	Cost of Civil Works & Service Charges	O			669800.83		
1	Civil work (Excavation, Back Filling,PCC, RCC,etc.) for M+6 Tower	Nos	2	325968.5	651936.90	RC	TPCODL RC
2	Earthing pit for pipe earthing	No.	4	4465.98	17863.93	RC	TPCODL RC
P	Sub Total	P=N+O			2224328.97		
Q	Other Overheads (including supervision charges)	Q	0%		0.00		
R	Sub Total	R=P+Q			2224328.97		
S	Labour Cess @ 1% of S=T	S	1%		22243.29		
T	Grand Total	T=R+S			2246572.26		
				or say	2246572.00		
				In Cr	0.22466		

Note	RC-4600001535 M/S Emphoria
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Sl No.	Circle	District	ANNEXURE 173: DTR AUG					Existing DTR						Proposed DTR		Technical Justification
			Division	Sub-division	Section	Feeder Name	DTR NAME	DTR RATING (KVA)	Peak Load in (KVA)	%Loading(25-26)	LOAD GROWTH	Peak Demand after 1 years load growth (in KVA)	%Loading	DTR RATING AFTER AUGMENTATION (KVA)	% loading	
1	BALANGIR	BALANGIR	SED, SONEPUR	BINKA	CHERUPALI	11kv SUKHA	SUKHA (33/4KV)	100	125.1	125	6.79	133.55	134	250	53%	Due To Overloading
2	KALAHANDI	KALAHANDI	NED	NUAPADA	ESO NUAPARA	11kv NUAPADA TOWN 1	W_NPDD NUAPADA SURYA NAGAR DSS	100	141.3	141	5.62	149.00	149	250	60%	Due To Overloading
3	KALAHANDI	KALAHANDI	KEED BHAWANIPATNA	SDO-I BHAWANIPATNA	ESO-IV BHAWANIPATNA	11kv PASTIKUDI	LATAKA BAHLI-3	100	139.6	140	5.74	147.00	147	250	59%	Due To Overloading
4	BALANGIR	BALANGIR	BED BALANGIR	SDO-I, BALANGIR	ESO NO-III BALANGIR	11kv BALANGIR-2	W_BED BOLANGIR-03 KHARSELPADA DSS	250	277.4	111	6.81	296.00	119	500	59%	Due To Overloading
5	BALANGIR	BALANGIR	TED TITILAGARH	SDO-I TITILAGARH	ESO SINDHEKELA	11kv PARASARA	ADDA BAHAL 4	100	134.6	135	5.89	142.00	143	250	57%	Due To Overloading
6	ROURKELA	SUNDARGARH	RED	KOELNAGAR	KOELNAGAR	ADEB	HANUMAN TEMPLE	250	256.9	103	7.31	275.00	110	500	55%	Due To Overloading
7	ROURKELA	SUNDARGARH	RSED	SDO-1 INDUSTRIAL ESTATE	ESO CHHEND	11kv PANPOSH	REVENWOOD INTERNATIONAL SCHOOL	250	262.1	105	10.07	288.00	115	500	58%	Due To Overloading
8	BARGARH	BARGARH	BED BARGARH	BARGARH	ESO NO - IV BARGARH	11kv NADIKHANDI	W_BED BARGARH-IV NHDT DSS	250	269	108	8.28	291.00	116	500	58%	Due To Overloading
9	BALANGIR	BALANGIR	TED TITILAGARH	SDO-I TITILAGARH	ESO NO-II TITLAGARH	11kv PIPALPADAR CHARBHATA	BURDIPADA-2	100	134.3	134	5.89	142.00	142	250	57%	Due To Overloading
10	KALAHANDI	KALAHANDI	KEED BHAWANIPATNA	BHAWANIPATNA	ESO NO - IV BHAWANIPATANA	11kv LINK 3	W_KEED BPTN-4 KENDULEAF DSS	250	316.96	127	5.74	335.15	134	500	67%	Due To Overloading
11	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	SDO-II, SAMBALPUR (KHETRAJPUR)	ESO PHD SECTION	11kv BURLA	W_SED PHD FATAK MALIPARA DSS	500	562.5	113	7.09	602.00	120	1000	60%	Due To Overloading
12	SAMBALPUR	SAMBALPUR	DEOGARH	DEOGARH	ESO DEOGARH	11kv DEOGARH TOWN-2	W_DEOD DEOGARH MATHHASAHI DSS	100	123.2	123	6.41	131.00	131	250	52%	Due To Overloading
13	KALAHANDI	KALAHANDI	KEED BHAWANIPATNA	SDO-I BHAWANIPATNA	ESO-IV BHAWANIPATNA	11kv PASTIKUDI	ADHOMUNDA-7	100	137.3	137	5.74	145.00	145	250	58%	Due To Overloading
14	BARGARH	BARGARH	BED BARGARH	SDO-II, BARGARH	ESO BARHAGUDA	11kv KAMGAON	W_BED BARHAGUDA KAMGAON 5 DSS	100	124.9	125	8.28	135.22	135	250	54%	Due To Overloading
15	BARGARH	BARGARH	BED BARGARH	SDO-II, BARGARH	ESO BARHAGUDA	11kv KAMGAON	W_BED BARHAGUDA RUSHIPALI 3 DSS	100	127.7	128	8.28	138.25	138	250	55%	Due To Overloading
16	SAMBALPUR	SAMBALPUR	BRAJRAJNAGAR	BELPAHAR	ESO PANCHGAON	11kv CHARPALLI	W_BNED PANCHGAON KANDHIKELA-10 DSS	100	129.2	129	7.6	139.02	139	250	56%	Due To Overloading
17	SAMBALPUR	SAMBALPUR	BRAJRAJNAGAR	BELPAHAR	ESO GOMADERA	11kv TOWN	W_BNED GOMADERA KUDOPALI-3 DSS	100	124.4	124	7.6	133.85	134	250	54%	Due To Overloading
18	BARGARH	BARGARH	BWED BARGARH	SDO SOHELA	ESO NO-II SOHELA	11kv BISHIPALI	BISIPALI	100	130.1	130	8.86	141.60	142	250	57%	Due To Overloading
19	BARGARH	BARGARH	BWED BARGARH	SOHELA	ESO NO-II BIJEPUR	11kv SARANDAPALI M.GANDPALI	W_BWED BIJEPUR2 GANDAPALI 2 DSS	100	131.0	131	8.86	142.65	143	250	57%	Due To Overloading
20	BARGARH	BARGARH	BWED BARGARH	SOHELA	ESO NO-II BIJEPUR	11kv SAIPALI	W_BWED BIJEPUR2 KHUNTAPALI 1 DSS	100	135.2	135	8.86	147.18	147	250	59%	Due To Overloading
21	BARGARH	BARGARH	BWED BARGARH	SOHELA	ESO NO-II BIJEPUR	11kv SARANDAPALI M.GANDPALI	W_BWED BIJEPUR2 KHALIAPALE 3 DSS	100	139.4	139	8.86	151.79	152	250	61%	Due To Overloading
22	SAMBALPUR	SAMBALPUR	JHARSUGUDA	SDO-1	KACHERI	COLLECTORATE	LEFORCY COLONY 2	100	133.6	135	8.75	145.27	145	250	58%	Due To Overloading
23	SAMBALPUR	SAMBALPUR	JHARSUGUDA	JHARSUGUDA-I	ESO JED-3	11kv COLLECTORATE	W_JSGD BEHERAMAL ALLAHABAD BANK DSS	100	126.0	126	8.75	137.03	137	250	55%	Due To Overloading
24	SAMBALPUR	SAMBALPUR	JHARSUGUDA	KUCHINDA	ESO BAMRA	11kv GARPOSH	W_JSGD BAMRA GARPOSH MARKET DSS	100	147.0	147	8.75	159.91	160	250	64%	Due To Overloading
25	KALAHANDI	KALAHANDI	KEED BHAWANIPATNA	SDO-II BHAWANIPATNA	ESO-II BHAWANIPATNA	11kv N SAGADA	SARANSBAHALI	100	133.3	133	5.74	140.99	141	250	56%	Due To Overloading
26	KALAHANDI	KALAHANDI	KEED BHAWANIPATNA	SDO-I BHAWANIPATNA	ESO-IV BHAWANIPATNA	11kv PASTIKUDI	BORING PADAR-5	100	137.3	137	5.74	145.23	145	250	58%	Due To Overloading
27	KALAHANDI	KALAHANDI	KEED BHAWANIPATNA	BHAWANIPATNA	ESO NO - IV BHAWANIPATANA	11kv COLLEGE FEEDER	IRRIGATION CALONY LANE NO-17	100	136.6	137	5.74	144.40	144	250	58%	Due To Overloading
28	KALAHANDI	KALAHANDI	KEED BHAWANIPATNA	SDO-II, BHAWANIPATNA	ESO NO - II BHAWANIPATANA	11kv MEDICAL	W_KEED BPTN-2 KALIMANDIR PADA 1 DSS	100	134.9	135	5.74	142.62	143	250	57%	Due To Overloading
29	KALAHANDI	KALAHANDI	KEED BHAWANIPATNA	BHAWANIPATNA	ESO NO - IV BHAWANIPATANA	11kv COLLEGE FEEDER	W_KEED BPTN-4 SAKTINAGAR PADA 4 DSS	100	126.2	126	5.74	133.49	133	250	53%	Due To Overloading
30	KALAHANDI	KALAHANDI	KEED BHAWANIPATNA	SDO-II, BHAWANIPATNA	ESO NO - II BHAWANIPATANA	11kv HILL TOWN	W_KEED BPTN-3 GOSANIMUNDA VILL 1 DSS	100	135.2	135	5.74	142.96	143	250	57%	Due To Overloading
31	KALAHANDI	KALAHANDI	NED	KHARIAR	ESO NO-I KHARIAR ROAD	11kv KHARIAR ROAD TOWN	W_NED KHARIAR ROAD-1 POWER HOUSE-1 DSS	100	125.6	126	5.62	132.66	133	250	53%	Due To Overloading
32	KALAHANDI	KALAHANDI	NED	NUAPADA	ESO NUAPARA	11kv NUAPADA TOWN 2	W_NPDD NUAPADA MAHUL BHATA CHHAK DSS	100	133.5	134	5.62	141.02	141	250	56%	Due To Overloading
33	KALAHANDI	KALAHANDI	NED	KHARIAR ROAD	ESO NO-II KHARIAR	11kv KHUDPEJ	GODRAMUNDA 1	100	126.3	126	5.62	133.40	133	250	53%	Due To Overloading
34	KALAHANDI	KALAHANDI	NED	KHARIAR ROAD	ESO NO-I, KHARIAR	11kv KHARIAR TOWN	W_NED KHARIAR-1 KHARIAR PUBLICSCHOOL DSS	100	146.4	146	5.62	154.63	155	250	62%	Due To Overloading
35	ROURKELA	ROURKELA	RSED ROURKELA	SDO-5 PANPOSH	ESO PANPOSH	11kv PANPOSH	PANPOSH	100	132.16	132	10.07	145.47	145	250	58%	Due To Overloading
36	ROURKELA	ROURKELA	RAJGANGPUR	SDO-II,RAJGANGPUR	ESO KUTRA	11kv LENJIBERNA	W_RJPD KUTRA GIRLS SCHOOL DSS	100	128.84	129	9.5	141.08	141	250	56%	Due To Overloading
37	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	SDO-II, SAMBALPUR (KHETRAJPUR)	ESO BADABAZAR	11kv BADABAZAR	W_SED BADABAZAR NURSHING MANDIR 1 DSS	100	128.94	129	7.09	138.08	138	250	55%	Due To Overloading
38	ROURKELA	ROURKELA	RAJGANGPUR	RAJGANGPUR-2	KUTRA	11kv LENJIBERNA	KHATKURBAHAL 9	100	124.81	125	9.5	136.67	137	250	55%	Due To Overloading
39	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	AINTHAPALI	BAREIPALI	REMED	KTM GALI	100	126.07	126	7.09	135.00	135	250	54%	Due To Overloading
40	ROURKELA	ROURKELA	RAJGANGPUR	KALUNGA	KALUNGA-1	11kv VEDVYAS	PANDEYCOLONY	100	122.51	123	9.5	134.00	134	250	54%	Due To Overloading
41	ROURKELA	ROURKELA	RED, ROURKELA	SDO-4 KOEL NAGAR	ESO NO-II KOELNAGAR	11kv JHIRPANI	W_RED KOEL NAGAR 2 HALLU MUNDARY 1 DSS	100	131.84	132	7.31	141.48	141	250	57%	Due To Overloading
42	ROURKELA	ROURKELA	RAJGANGPUR	RAJGANGPUR-2	KUTRA	11kv LENJIBERNA	KHATKURBAHAL 5	100	121.80	122	9.5	133.38	133	250	53%	Due To Overloading
43	ROURKELA	ROURKELA	RAJGANGPUR	RAJGANGPUR-2	KUTRA	11kv LENJIBERNA	KHATKURBAHAL2	100	124.06	124	9.5	135.85	136	250	54%	Due To Overloading
44	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	HIRAKUD	ESO GOSALA	11kv DAIRY FARM	W_SED GOSHALA JD OFFICE DSS	100	125.84	126	7.09	134.76	135	250	54%	Due To Overloading
45	SAMBALPUR	SAMBALPUR	BRAJRAJNAGAR	BRAJRAJNAGAR	ESO LAMTIBAHAL	11kv LAMTIBAHAL	NUWAPADA	100	122.96	123	7.6	132.3	132	250	38%	Due To Overloading
46	SAMBALPUR	SAMBALPUR	SEED, SAMBALPUR	SDO-I BHUTAPADA, SEED, SAMBALPU	ESO BROOKS HILL	SUNAPALI	W_SEED BROOKSHILL LIYAQAT ALI S-S DSS	100	143.48	143	9.48	157.08	157	250	45%	Due To Overloading
47	SAMBALPUR	SAMBALPUR	DEOGARH	DEOGARH	ESO DEOGARH	TOWN THREE 11KV FDR	W_DEOD DEOGARH GURUSAHI DSS	250	241.84	97	6.41	257.34	103	500	55%	Due To Overloading
48	KALAHANDI	KALAHANDI	KEED BHAWANIPATNA	SDO-II, BHAWANIPATNA	ESO NO - II BHAWANIPATANA	11kv MEDICAL	SESSION COURT BHAWANIPATNA	250	257.60	103	5.74	272.39	109	500	58%	Due To Overloading
49	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	KHETRAJPUR	BADBAZAR	FARM ROAD	GURUDWARA	250	258.15	103	7.09	276.45	111	500	59%	Due To Overloading
50	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	SAMBALPUR (AINTHAPALI)	ESO AINTHAPALLI	11kv RAW WATER	W_SED AINTHAPALI ADARSH MARG-II DSS	250	284.32	114	7.09	304.48	122	500	65%	Due To Overloading

ANNEXURE 174: DTR NEW (Complete DSS with HT/LT lines)

Sl No.	Circle	District	Division	Sub-division	Section	Feeder Name	DTR NAME	Existing DTR						Additional DTR	
								DTR RATING (KVA)	Peak Load in (KVA) 2025-26	%Loading	Load Growth	Peak Demand after 1 years load growth (in KVA)	%Loading	DTR RATING (KVA)	% Proposed Loading
1	BALANGIR	BALANGIR	BED BALANGIR	SDO-II, BALANGIR	ESO CHHATAMAKHNA	11kv KUSUMEL	W_BED CHHATAMAKHNA BAGHAPALI-2 DSS	100	116.72	117	6.81	124.67	125	100	62%
2	BALANGIR	BALANGIR	BED BALANGIR	LOISINGHA	ESO SALEVATA	11kv LUPURSINGHA	W_BED SALEVATA MURSUNDA-2 DSS	100	114.24	114	6.81	122.02	122	100	61%
3	BALANGIR	BALANGIR	BED BALANGIR	SDO-II, BALANGIR	ESO CHHATAMAKHNA	11kv KUSUMEL	W_BED CHHATAMAKHNA RANIPALI(HRJNPAD) DSS	100	114.40	114	6.81	122.19	122	100	61%
4	BARGARH	BARGARH	BED BARGARH	BHATLI	ESO BHATLI	11kv BARTUNDA	W_BED BHATLI KANDHPADA DSS	100	119.04	119	8.28	128.90	129	100	64%
5	SAMBALPUR	SAMBALPUR	BRAJRAJNAGAR	BELPAHAR	ESO PANCHGAON	11kv BHIKAMPALI	W_BNED PANCHGAON JHARUPADA-1 DSS	100	130.48	130	7.6	140.40	140	100	70%
6	SAMBALPUR	SAMBALPUR	BRAJRAJNAGAR	BELPAHAR	ESO PANCHGAON	11kv JAMGAON	W_BNED PANCHGAON PALSADA-5 DSS	100	132.56	133	7.6	142.63	143	100	71%
7	SAMBALPUR	SAMBALPUR	DEOGARH	DEOGARH	ESO DEOGARH	11kv DEOGARH TOWN-1	W_DEOD DEOGARH BABUSAHI NEW COLONY DSS	100	126.24	126	6.41	134.33	134	100	67%
8	SAMBALPUR	SAMBALPUR	DEOGARH	DEOGARH	ESO DEOGARH	11kv DEOGARH TOWN-1	W_DEOD DEOGARH RAJAMUNDA NEW DSS	100	140.10	140	6.41	149.08	149	100	75%
9	SAMBALPUR	SAMBALPUR	JHARSUGUDA	JHARSUGUDA-I	ESO JED-3	11kv TALPATIA/OMP	W_JSGD KACHERY DURLAGA1 DSS	100	113.82	114	8.75	123.78	124	100	62%
10	KALAHANDI	KALAHANDI	NED	KHARIAR	ESO BODEN	11kv BODEN TOWN	BODEN SATNAM PADA	100	98.10	119	5.62	126.09	126	100	63%
11	ROURKELA	ROURKELA	RAJGANGPUR	RAJGANGPUR-2	KUTRA	11kv SONAKHAN	GORIA MUNDA ORAM PADA 2	100	114.01	114	9.5	124.84	125	100	62%
12	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	SAMBALPUR (AINTHAPALI)	ESO HOSPITAL	11kv FATAK	KENAL 2100 KV	200	118.16	118	7.09	126.00	127	250	28%
13	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	SAMBALPUR (AINTHAPALI)	ESO AINTHAPALLI	11kv INDUSTRIAL	W_SED AINTHAPALI BRUNDABAN VIHR-II DSS	200	114	114	7.09	122.00	122	250	27%
14	KALAHANDI	KALAHANDI	KEED BHAWANIPATN A	SDO KESINGA	ESO NUNMATH	11kv TUNDLA	LINGAON RIVER-2	250	300.8	120	8.75	327.07	131	250	65%
15	KALAHANDI	KALAHANDI	NED	NUAPADA	NUAPADA	11KV-TOWN-2	CIRCUIT HOUSE	250	241.3	97	9.5	264.20	106	250	53%
16	KALAHANDI	KALAHANDI	NED	KHARIAR	ESO BODEN	11kv BODEN TOWN	BODEN SATNAM PADA	250	310.9	124	9.5	340.41	136	250	68%
17	ROURKELA	ROURKELA	RAJGANGPUR	RAJGANGPUR-2	KUTRA	11kv SONAKHAN	GORIA MUNDA ORAM PADA 2	250	232.0	93	10.07	255.36	102	250	51%
18	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	SAMBALPUR (AINTHAPALI)	ESO HOSPITAL	11kv FATAK	KENAL 2100 KV	100	147.3	147	7.09	157.74	158	250	45%
19	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	SAMBALPUR (AINTHAPALI)	ESO HOSPITAL	11kv FATAK	KENAL 2100 KV	100	118.16	118	7.09	127.00	127	100	64%
20	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	SAMBALPUR (AINTHAPALI)	ESO AINTHAPALLI	11kv INDUSTRIAL	W_SED AINTHAPALI BRUNDABAN VIHR-II DSS	315	114	114	8.28	122.08	122	500	15%
21	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	SAMBALPUR (AINTHAPALI)	ESO HOSPITAL	11kv FATAK	W_SED HOSPITAL DORA BANDH DSS	500	498.2	100	7.09	533.57	107	500	53%
22	SAMBALPUR	SAMBALPUR	SEED, SAMBALPUR	SDO-II, DHANUPALLI, SEED, SAMBALPUR	ESO DHANUPALI	11kv MANESWAR	GOPAL VIHAR PALAC 3	250	343.7	137	9.48	376.26	151	500	50%
23	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	SAMBALPUR (AINTHAPALI)	ESO AINTHAPALLI	11kv INDUSTRIAL	W_SED AINTHAPALI BRUNDABAN VIHR-II DSS	100	114.00	114	7.09	122.08	122	100	61%
24	SAMBALPUR	SAMBALPUR	SED, SAMBALPUR	SAMBALPUR (AINTHAPALI)	ESO RENGALI	11kv RENGALI	W_SEED RENGALI GANESHNAGAR PP DSS	500	456.3	91	9.48	499.58	100	500	50%

Technical Justifcation
Due to Overloading
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