

Best case ②

submitted 8/9/15.



Agility Ethics Care
Safety Diligence Respect



Case 182 of 2014

- Comprehensive Network Rollout Plan

08.09.2015



Agility Ethics Care
Safety Diligence Respect

Mumbai Suburban Area



Mumbai Suburban Area – Network Components



Network Components	Realistic Scenario		Optimistic Scenario	
	Network Projected	Capex Projected (Rs. Crore)	Network Projected	Capex Projected (Rs. Crore)
	d	f=d*e	a	c=a*b
DSS of 20 MVA	8	102	10	127
DSS of 40 MVA	4	102	5	127
33 kV Cable Network (km)	120	89	150	111
11 kV Cable Network (km)	256	211	320	264
CSS - 0.5 / 1 MVA	364	163	455	204
Additional Transformer for CSS	233	28	291	35
LT Cable Network (km)	320	117	399	146
Total		811		1014

Mumbai Suburban Area – Network Components Phasing



Network Components	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total
Number of DSS of 20 MVA	1 to 2	1	1	1	1 to 2	1	2	8 to 10
Number of DSS of 40 MVA	0	1	0 to 1	1	0 to 1	1	1	4 to 5
33 kV Cable Network (km)	10	20	10 to 15	25 to 40	10 to 15	20 to 25	25	120 to 150
11 kV Cable Network (km)	20 to 40	40 to 42	30 to 60	40 to 44	40 to 48	40	46	256 to 320
Number of CSS - 0.5 MVA	29 to 40	30	30 to 40	30 to 50	40 to 60	40 to 70	40	239 to 330
Number of CSS - 1 MVA or more	16	17	17	18	19	20	18	125
Additional Transformer for CSS	30	32	30 to 35	32 to 40	30 to 48	32 to 51	47 to 55	233 to 291
LT Cable Network (km)	40 to 45	43	40 to 52	62	42 to 72	48 to 81	45	320 to 399

Network Rollout Plan-Mumbai City Area



City Area

Network Components	Realistic Scenario			Optimistic Scenario			Earlier Submission	Capex
	Network Projected	Unit price	Capex Projected (Rs. Crore)	Network Projected	Unit price	Capex Projected (Rs. Crore)		
	d	e	f=d*e	a	b	c=a*b		
DSS of 20 MVA							3	102
DSS of 40 MVA	9	0	229	10	0	254	2	76
33 kV Cable Network (km)	90	0	67	100	0	74	70	82
11 kV Cable Network (km)	288	0	237	320	0	264	112	185
CSS - 0.5 / 1 MVA	365		215	409		241	159	38
LT Cable Network (km)	499	0	182	499	0	182	109	52
Additional CSS			0			0		4
Total			930			1015		537

Network Rollout Plan-Mumbai Suburban Area



Mumbai Suburbs

Network Components	Realistic Scenario			Optimistic Scenario			Earlier Submission	Capex
	Network Projected	Unit price	Capex Projected (Rs. Crore)	Network Projected	Unit price	Capex Projected (Rs. Crore)		
	d	e	f=d*e	a	b	c=a*b		
DSS of 20 MVA	8		102	10		127	3	114
DSS of 40 MVA	4	0	102	5	0	127	8	51
33 kV Cable Network (km)	120	0	89	150	0	111	150	82
11 kV Cable Network (km)	256	0	211	320	0	264	320	171
CSS - 0.5 / 1 MVA	364		163	455		204	581	259
Additional Transformer for CSS	233		28	291		35		31
LT Cable Network (km)	320	0	117	399	0	146	399	134
Total			811			1014		843

Comprehensive Network Rollout Plan – Licence Area

Network Components	Realistic Scenario			Optimistic Scenario			Earlier Submission	
	Network Projected	Unit price	Capex Projected (Rs. Crore)	Network Projected	Unit price	Capex Projected (Rs. Crore)	Total	Capex
	d	e	f=d*e	a	b	c=a*b		
DSS of 20 MVA	8	13	102	10	13	127	6	216
DSS of 40 MVA	13	25	331	15	25	381	10	127
33 kV Cable Network (km)	210	1	156	250	1	186	220	163
11 kV Cable Network (km)	544	1	448	640	1	527	432	356
CSS - 0.5 / 1 MVA	729	0	378	864	0	445	740	297
Additional Transformer for CSS	233	0	28	291	0	35		35
LT Cable Network (km)	819	0	299	898	0	328	508	186
Total			1741			2029		1380

