

Appendix A

Data for IEEE 13 node Radial Distribution System

Table A.1: Bus Data for IEEE 13 node Radial Distribution System

Renumbr of Buses	IEEE BUS Number	Active load per Phase in KW	Reactive load per phase in KW
1	650	0	0
2	632	66.66	38.17
3	645	170	125
4	646	230	132
5	633	0	0
5	634	160	110
6	671	385	220
7	684	0	0
8	652	128	86
9	611	170	80
10	680	0	0
11	692	170	151
12	675	281	90.66

Table A.2: Line Data for IEEE 13 node radial distribution system

from	to	Branch Number	Line length ft	R/mile ($r_0 + r_1 + r_m$)	x/mile
1	2	1	2000	0.6605	1.9432
2	3	2	500	1.536	1.8062
3	4	3	300	1.536	1.8062
2	5	4	500	1.066	2.1067
2	6	5	2000	0.6605	1.9432
6	7	6	500	1.536	1.8062
7	8	7	800	1.3425	0.5124
7	9	8	300	1.3292	1.3475
6	10	9	1000	0.6605	1.9432
2	11	10	2000	0.6605	1.9432
11	12	11	500	1.4023	0.4648