

# Bus

	ID	Zone	kV Base	V sol [pu]	Ang sol [deg]	Vmin [pu]	Vmax [pu]	P Gen [MW]
1	B1	0	345.00	1.001	-44.7	0.900	1.100	0.00
2	B10	0	345.00	0.897	-14.6	0.900	1.100	0.00
3	B11	0	345.00	0.885	-14.8	0.900	1.100	0.00
4	B12	0	138.00	0.866	-15.6	0.900	1.100	0.00
5	B13	0	345.00	0.891	-16.4	0.900	1.100	0.00
6	B14	0	345.00	0.887	-20.7	0.900	1.100	0.00
7	B15	0	345.00	0.906	-26.2	0.900	1.100	0.00
8	B16	0	345.00	0.933	-26.5	0.900	1.100	0.00
9	B17	0	345.00	0.942	-28.1	0.900	1.100	0.00
10	B18	0	345.00	0.939	-28.9	0.900	1.100	0.00
11	B19	0	345.00	0.962	-14.1	0.900	1.100	0.00
12	B2	0	345.00	0.989	-29.7	0.900	1.100	0.00
13	B20	0	230.00	0.965	-10.9	0.900	1.100	0.00
14	B21	0	345.00	0.944	-27.4	0.900	1.100	0.00
15	B22	0	345.00	0.972	-25.8	0.900	1.100	0.00
16	B23	0	345.00	0.939	-28.5	0.900	1.100	0.00
17	B24	0	345.00	0.938	-27.9	0.900	1.100	0.00
18	B25	0	345.00	1.008	-28.0	0.900	1.100	0.00
19	B26	0	345.00	0.991	-27.8	0.900	1.100	0.00
20	B27	0	345.00	0.962	-29.2	0.900	1.100	0.00
21	B28	0	345.00	1.005	-24.0	0.900	1.100	0.00
22	B29	0	345.00	1.011	-21.0	0.900	1.100	0.00
23	B3	0	345.00	0.939	-28.9	0.900	1.100	0.00
24	B30	0	16.50	1.048	-27.3	0.900	1.100	250.00
25	B31	0	16.50	0.982	0.0	0.900	1.100	898.94
26	B32	0	16.50	0.983	-6.3	0.900	1.100	650.00
27	B33	0	16.50	0.997	-8.8	0.900	1.100	632.00
28	B34	0	16.50	1.012	-0.2	0.900	1.100	1016.00
29	B35	0	16.50	1.049	-20.8	0.900	1.100	650.00
30	B36	0	16.50	1.064	-19.9	0.900	1.100	560.00
31	B37	0	16.50	1.028	-21.1	0.900	1.100	540.00
32	B38	0	16.50	1.026	-13.9	0.900	1.100	830.00
33	B39	0	345.00	1.030	-53.3	0.900	1.100	1000.00
34	B39 REC	0	100.00	1.016	-55.2	0.900	1.100	0.00
35	B4	0	345.00	0.872	-22.9	0.900	1.100	0.00
36	B5	0	345.00	0.856	-16.3	0.900	1.100	0.00
37	B6	0	345.00	0.864	-15.0	0.900	1.100	0.00
38	B7	0	345.00	0.829	-16.5	0.900	1.100	0.00
39	B8	0	345.00	0.818	-16.5	0.900	1.100	0.00
40	B9	0	345.00	0.719	1.8	0.900	1.100	0.00
41	B9 INV	0	100.00	0.707	5.8	0.900	1.100	0.00

# Bus

	Q Gen [MVAR]	P Load [MW]	Q Load [MVAR]	P motor [MW]	Q motor [MVAR]	P shunt [MW]	Q shunt [MVAR]
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	7.50	88.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	320.00	153.00	0.00	0.00	0.00	0.00
8	0.00	329.00	32.30	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	158.00	30.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	628.00	103.00	0.00	0.00	0.00	0.00
14	0.00	274.00	115.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	247.50	84.60	800.00	600.00	0.00	0.00
17	0.00	308.60	-92.20	0.00	0.00	0.00	0.00
18	0.00	224.00	47.20	0.00	0.00	0.00	0.00
19	0.00	139.00	17.00	0.00	0.00	0.00	0.00
20	0.00	281.00	75.50	0.00	0.00	0.00	0.00
21	0.00	206.00	27.60	0.00	0.00	0.00	0.00
22	0.00	283.50	26.90	0.00	0.00	0.00	0.00
23	0.00	322.00	2.40	0.00	0.00	0.00	0.00
24	338.16	0.00	0.00	0.00	0.00	0.00	0.00
25	561.62	9.20	4.60	0.00	0.00	0.00	0.00
26	453.07	0.00	0.00	0.00	0.00	0.00	0.00
27	241.26	0.00	0.00	0.00	0.00	0.00	0.00
28	309.07	0.00	0.00	0.00	0.00	0.00	0.00
29	578.33	0.00	0.00	0.00	0.00	0.00	0.00
30	519.91	0.00	0.00	0.00	0.00	0.00	0.00
31	106.24	0.00	0.00	0.00	0.00	0.00	0.00
32	108.42	0.00	0.00	0.00	0.00	0.00	0.00
33	592.95	1104.00	250.00	0.00	0.00	0.00	0.00
34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	0.00	500.00	184.00	0.00	0.00	0.00	0.00
36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	0.00	233.80	84.00	0.00	0.00	0.00	0.00
39	0.00	522.00	176.00	0.00	0.00	0.00	0.00
40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	0.00	0.00	0.00	0.00	0.00	0.00	0.00