



Table F.4: Technical data for conventional generators, wind farms, demands and transmission lines

Conventional generators	1	2	3	4	5	6	7	8	9	10	11	12					
Location [node]	1	2	7	13	15	15	16	18	21	22	23	23					
Production cost [\$/MWh]	13.32	13.32	20.7	20.93	26.11	10.52	10.52	6.02	5.47	7	10.52	10.89					
Upward reserve cost [\$/MW]	1.68	1.68	3.30	4.07	1.89	5.48	5.48	4.98	5.53	8.00	3.45	5.11					
Downward reserve cost [\$/MW]	2.32	2.32	4.67	3.93	3.11	3.52	3.52	5.02	4.97	6.00	2.52	2.89					
Capacity [MW]	106.4	106.4	245	413.7	42	108.5	108.5	280	280	210	217	245					
Maximum upward reserve provision capability [MW]	48	48	84	216	42	36	36	60	60	48	72	48					
Maximum downward reserve provision capability [MW]	48	48	84	216	42	36	36	60	60	48	72	48					
Wind farms									1	2	3	4					
Location [node]									3	5	16	21					
Installed capacity [MW]									500	500	300	300					
Day-ahead forecast [MW]									120.54	115.52	53.34	38.16					
Demands	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location [node]	1	2	3	4	5	6	7	8	9	10	13	14	15	16	18	19	20
Consumption [MW]	84	75	139	58	55	106	97	132	135	150	205	150	245	77	258	141	100
Curtailement cost [\$/MWh]	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Transmission lines: From node	1	1	1	2	2	3	3	4	5	6	7	8	8	9	9	10	10
To node	2	3	5	4	6	9	24	9	10	10	8	9	10	11	12	11	12
Susceptance [per-unit]	0.0146	0.2253	0.0907	0.1356	0.205	0.1271	0.084	0.111	0.094	0.0642	0.0652	0.1762	0.1762	0.084	0.084	0.084	0.084
Capacity [MW]	175	175	350	175	175	175	400	175	350	175	350	175	175	400	400	400	400
Transmission lines: From node	11	11	12	12	13	14	15	15	15	16	16	17	17	18	19	20	21
To node	13	14	13	23	23	16	16	21	24	17	19	18	22	21	20	23	22
Susceptance [per-unit]	0.0488	0.0426	0.0488	0.0985	0.0884	0.0594	0.0172	0.0249	0.0529	0.0263	0.0234	0.0143	0.1069	0.0132	0.0203	0.0112	0.0692
Capacity [MW]	500	500	500	500	250	250	500	400	500	500	500	500	500	1000	1000	1000	500